INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

BLUE BOOK

VOLUME I – FASCICLE I.3

TERMS AND DEFINITIONS
ABBREVIATIONS AND ACRONYMS
RECOMMENDATIONS ON MEANS OF EXPRESSION (SERIES B) GENERAL TELECOMMUNICATIONS STATISTICS (SERIES C)

IXTH PLENARY ASSEMBLY
MELBOURNE, 14-25 NOVEMBER 1988

Geneva 1989

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PRELIMINARY NOTES

1 Part I contains the terms and their definitions as found in the Blue Book, and some definitions from the Red Book (1984) which are not cited in the Blue Book.

2 Each definition in Part I is accompanied by information giving its source.

The definition can be from:

a) a Recommendation, e.g. *Rec. G.702*;

b) a Supplement, e.g. Supplement No. 1 to Fascicle II.2, i.e. *Sup. No. 1 (II.2)*;

c) a Glossary, e.g. Glossary to Signalling System No. 6 in Fascicle VI.3, i.e. *Glos. (VI.3)*;

d) a Recommendation Series, e.g. *Series Q*, when the definition does not fall into the cases of a), b) or c).

If the same definition is found in several places in the Blue Book, it is listed only once in Part I, but its various sources are given, e.g. *Recs. G.702, M.640, Sup. No. 1 (II.2).*

Some Red Book definitions not quoted in the Blue Book but still considered active by the Study Group have their source information asterisked. The source refers to the Red Book Recommendation or, if the term does not appear in a Recommendation, the Recommendation Series in which it appears or is quoted, e.g. *Rec. E.200** or *Series X**.

3 The figures and tables which are referred to in the definitions are given in alphanumerical order in Part II.

4 Part III is a trilingual glossary of the English, Spanish and French equivalent terms, arranged in the English alphabetical order.

5 The Series B Recommendations found in Part IV is a group of Recommendations proposing a common usage of certain terminology shared by the ISO/IEC and CCITT. If for any given term there is a conflict between its definition in the list of Part I and in the Series B Recommendations of Part IV, the definition in Part I prevails.

6 Part V contains a list of abbreviations and acronyms as found in the Blue Book. Each entry is accompanied by source information within parentheses giving the Recommendation Series in which the entry was found.

7 The specialized computer language definitions from the CCITT High Level Language (CHILL) are not reproduced here, but can be found in Fascicle X.6.

8 In this fascicle, the expression "Administration" is used for shortness to indicate both a telecommunication Administration and a recognized private operating agency.

PART I

RÉPERTOIRE DES TERMES ET DÉFINITIONS

A

A condition; Z condition

Rec. R.140

The significant condition of a start element (stop element) in start-stop transmission.

Note – For other representations see the table of equivalence in Recommendation V.1.

A element; Z element

Rec. R.140

In a code combination, a unit element to which is assigned the A (Z) condition.

abandon

Rec. F.400

A directory operation to terminate a request. This operation is not guaranteed outside of the local scope.

Note – This directory system operation is considered to be an optional user facility in the service context.

abandoned call attempt

Rec. E.600

A call attempt aborted by the calling user.

abandoned traffic

See:
lost traffic; abandoned traffic.

abbreviated dialling (short-code selection) (prefix 23)

Recs. E.216, F.126

Abbreviated dialling (short-code selection) will allow the caller to make a connection by selecting a short special number (e.g. 2 or 3 digits) instead of a full international (or national) number.

abbreviated dialling prefix

Rec. E.131

The non-numerical code indicating that the information following is an abbreviated number.

abbreviated dialling services

Suppl. No. 1 (II.2)

The possibility for a subscriber to make a call by dialling a short code instead of the full telephone number.

abbreviated number

Rec. E.131

The numerical code sent by a caller using the Abbreviated Dialling Service which identifies the telephone number of the party to whom he wishes to be connected.

abnormal condition report

Recs. Z.337, Z.341

Information produced in the network management centre after detection of abnormal network status or performance.

absent subscriber service

Suppl. No. 1 (II.2)

The possibility for a subscriber who cannot answer his calls, because he is absent, to divert these calls to:

- a manual answering service,
- another subscriber's number or
- an announcement.

absent subscriber service (in telegraphy and data communication)

Suppl. No. 2 (II.4)

A facility that permits the calling *terminal* to be advised automatically by a *service signal* that, due to an action of the called subscriber, the latter's terminal is not available for calls.

absolute address

Rec. Q.9

An address in a computer language that identifies a storage or a device without the use of any intermediate reference.

absolute power level (dBm)

Rec. N.1

As a general rule, the dBm unit applies to the absolute power level. The unit is based on the ratio between measured power and the reference power of 1 mW.

$$L_m = 10 \log \frac{P}{P_0} \text{ dBm} = 10 \log \frac{(U^2/Z)}{(U_0^2/Z_0)} \text{ dBm} = \left(20 \log \frac{U}{U_0} - 10 \log \frac{Z}{Z_0}\right) \text{ dBm}$$

Absolute power level — Absolute voltage level — Impedance correction

Absolute voltage levels, for which terminal impedance is not defined, are more rarely used. As a correction, power level may be calculated for impedances other than 600 ohms, with respect to 1 mW.

The power level thus calculated would be equal to that measured in a correctly terminated system.

absolute priority

Suppl. No. 2 (II.4)

The possibility of setting up a call from a nominated *terminal* on a *private network* or *closed user group*, by assigning to it at each stage or certain stages of selection, priority over all other calls of lower priority that are established. The possibility may apply either to every call or only to nominated calls from such a privileged terminal.

absolute zero power level (dBm0); load level

Rec. N.1

In a transmission system based on power levels the absolute power level or load level (L_{m0}) with respect to 1 mW is referred to a point of zero relative level. That means that the absolute power level (L_m) minus the relative power level (L_r) will be

$$L_{m0} = L_m - L_r$$

This level indication is independent of the relative power level at the measurement point considered. For a given signal the load level is nominally the same along a transmission line. For this indication it is necessary to know to what extent the power at the zero relative point is greater or less than the reference power.

Note – The term "loal level" is used provisionally and is subject to further consideration.

abstract-association

Rec. X.413

An abstract binding between two communication partners; in Recommendation X.413 the binding between a UA and a MS for the provision of the MS abstract-service, or between a MS and a MTA for the provision of the MTS abstract-service.

abstract bind operation

Rec. X.407

A procedure whose successful performance binds one or more pairs of abstract ports. The object which invokes an abstract bind operation is said to be the initiator, that which performs it the responder.

abstract-bind-parameters

Rec. X.413

Parameters defined in this document which are contained in the abstract-bind operations.

abstract data type

Rec. Z.100

Abstract data type is a synonym for *data type.* All *SDL data types* are *abstract data types.*

abstract error

Rec. X.407

An exceptional condition that may arise during the performance of an abstract operation, causing it to fail.

abstract grammar

Rec. Z.100

The *abstract grammar defines the semantics* of *SDL.* The *abstract grammer* is described by the *abstract syntax* and the *well-formedness rules.*

abstract local primitive (ALP)

Rec. X.290

An abbreviation for a description of control and/or observation to be performed by the upper tester, which cannot be described in terms of ASPs but which relates to events or states defined within the protocol Recommendation(s) relevant to the IUT.

Note – The PIXIT will indicate whether or not a particular ALP can be realized within the SUT. The ability of the SUT to support particular ALPs as specified in the PIXIT will be used as a criterion in the test selection process.

abstract (N)-service-primitive ((N)-ASP)

Rec. X.290

An implementation independent description of an interaction between a service-user and a service-provider at an (N)-service boundary, as defined in an OSI service definition Recommendation.

abstract object; object

Rec. X.407

A functional entity, one of perhaps several which interact with one another. Objects are of different types which determine their function and behavior. An object of one type, e.g., might represent a system, multiple objects of another type its users. Objects interact by means of abstract ports.

abstract operation

Rec. X.407

A procedure that may be invoked in the context of two bound ports. Its failure has no effect upon the binding. If the ports are assymmetric, whether the invoker is the object having the consumer port, the object having the supplier port, or either is prescribed by the port. If the ports are symmetric, the invoker may be either object. Whether the ports are symmetric or asymmetric, the remaining object is the performer.

abstract port; port

Rec. X.407

A point at which an abstract object interacts with another abstract object. Ports are of different types which determine the kinds of interactions they enable. Ports of one type, e.g., might represent the means by which a directory system is accessed, ports of another type the means by which it is administered.

Port types are themselves of the following two varieties:

a) symmetric: All instances of a symmetric port type are identical;

b) asymmetric: Each instance of an asymmetric port type is of one of two kinds, supplier and consumer.

Note – A particular allocation of the terms "supplier" and "consumer" is often intuitive. One might naturally consider a file system, e.g., to present supplier ports to its users and administrators. Strictly speaking, however, the assignment of the two terms is arbitrary.

abstract procedure; procedure

Rec. X.407

A task that one object carries out at another's request. The making of the request and the carrying out of the task are called the invocation and performance of the procedure. The objects that issue and act upon the request are called the invoker and performer, respectively.

abstract service

Rec. X.407

The set of capabilities that one object offers to another by means of one or more of its ports. The former object is called an abstract service provider (provider), the latter an abstract service user (user). Each port in question may be either symmetric or asymmetric and, if the latter, either consumer or supplier.

An abstract service may have any number of users and providers.

abstract syntax

Rec. X.213

A notation which enables data types to be defined, and values of those types specified, without determining the way in which they will be represented (encoded) for transfer by protocols.

abstract syntax

Rec. X.216

The specification of Application Layer data or application-protocol-control-information by using notation rules which are independent of the encoding technique used to represent them.

abstract syntax

Rec. Z.100

The *abstract syntax* is the means to describe the conceptual structure of an *SDL specification* as compared with the *concrete syntaxes* which exist for each *concrete syntax* of *SDL*, this is *SDL/GR* and *SDL/PR*.

abstract syntax name

Rec. X.216

A name which unambiguously identifies an abstract syntax.

abstract test case

Rec. X.290

A complete and independent specification of the actions required to achieve a specific test purpose, defined at the level of abstraction of a particular abstract test method. It includes a preamble and a postamble to ensure starting and ending in a stable state (i.e., a state which can be maintained almost indefinitely, such as the "idle" state or "data transfer" state) and involves one or more consecutive or concurrent connections.

Note 1 – The specification should be complete in the sense that it is sufficient to enable a verdict to be assigned unambiguously to each potentially observable outcome (i.e., sequence of test events).

Note 2 – The specification should be independent in the sense that it should be possible to execute the derived executable test case in isolation from other such test cases (i.e., the specification should always include the possibility of starting and finishing in the "idle" state – that is without any existing connections except permanent ones). For some test cases, there may be pre-requisites in the sense that execution might require some specific capabilities of the IUT, which should have been confirmed by results of the test cases executed earlier.

abstract test method

Rec. X.290

The description of how an IUT is to be tested, given at an appropriate level of abstraction to make the description independent of any particular implementation of testing tools, but with enough detail to enable tests to be specified for this method.

abstract test suite

Rec. X.290

A test suite composed of abstract test cases.

abstract testing methodology

Rec. X.290

An approach to describing and categorizing abstract test methods.

abstract unbind operation

Rec. X.407

A procedure whose performance, successful or not, unbinds two ports. It is invoked by the object which invoked the corresponding abstract bind (i.e., the initiator) and performed by the responder.

abstract-unbind-parameters

Rec. X.413

Parameters defined in this document which are contained in the abstract-unbind operation.

a.c. signalling

See:
alternating current (a.c.)signalling; a.c. signalling.

accelerated test

Suppl. No. 6 (II.3)

A *test* in which the applied stress level is chosen to exceed that stated in the reference conditions in order to shorten the *time duration* required to observe the stress response of the *item*, or to magnify the responses in a given *time duration*.

Note – To be valid, an *accelerated test* shall not alter the basic *fault modes* and *failure mechanisms*, or their relative prevalence.

acceptable level (of a measure)

Suppl. No. 6

A level for a *measure* of a given performance which in a *test* plan corresponds to a specified but relatively high *probability of acceptance*.

acceptance input

Rec. Z.341

An *input* used to allow the *system* to *output* a high priority message, announced by a *message waiting indication*.

acceptance output

Rec. Z.341

An *output* message indicating that an *input* to the *system* is syntactically correct and complete and that the appropriate *system actions* will be initiated, or have already been carried out. In the latter case, this indication may take the form of the actual result.

accepting association control protocol machine

Rec. X.227

The association control protocol machine whose service-user is the acceptor for a particular association control service element service.

accepting-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the acceptor for a particular reliable transfer service element service.

accepting-remote-operation-protocol-machine

Rec. X.229

The remote-operation-protocol-machine whose service-user is the acceptor for a particular remote operation service element service.

accepting SS-user

See:

acceptor; accepting SS-user.

acceptor

Rec. X.216

The presentation-entity or presentation-service-user that accepts a particular action.

acceptor

Rec. X.217

The ACSE service-user which receives the indication primitive for a particular ACSE service. For a confirmed service, it also issues the response primitive.

acceptor

Rec. X.218

The part of an application-entity that receives the indication primitive, or issues a response primitive for a particular RTSE service.

acceptor

Rec. X.219

The part of an application-entity that receives the indication primitive for a particular ROSE service.

acceptor

Rec. X.226

The presentation protocol machine that accepts a particular action.

acceptor; accepting SS-user

Rec. X.215

An SS-user that accepts a particular action.

access

Rec. Z.100

Access is the operation applied to a *variable* which gives the *value* which was last assigned to it. If a *variable* is *accessed* which has an *undefined value*, then an *error* occurs.

access and storage system (AS/SYS)

Rec. X.402

Contains one UA, one MS, and neither a MTA nor a AU.

An AS/SYS is dedicated to a single user.

access and transfer system (AT/SYS)

Rec. X.402

Contains one or more UAs; one MTA; optionally, one or more AUs; and no MS.

An AT/SYS can serve multiple users.

access barred

Suppl. No. 2 (II.4)

A function of a telecommunication network that bars calls to or from certain subscribers, from or to certain services, routes or *terminals.*

access barred

*Series X**

The state in which the calling DTE is not permitted to make a call to the DTE identified by the *selection* signals.

access capability

Rec Q.1063

Defines possible access arrangements with respect to the number and type of channels that can be supported by an equipment. In this way an MS access capability is the set of possible channel configurations supported by the equipment. Similarly, the BS access capability may be considered to be a super-set with respect to the MS.

The access capability is thus a fixed attribute of an equipment.

access capability; ISDN access capability

Rec. I.112

The number and type of the access channels at an ISDN access interface that are actually available for telecommunication purposes.

access channel

Rec. I.112

A designated part of the information transfer capability having specified characteristics, provided at the user-network interface:

Note 1 – The term "transmission channel" is well understood to imply unidirectional working only, and then is commonly abbreviated to "channel". In the special case where the term "access channel" is used to encompass bidirectional working through the user-network interface, it must not be abbreviated to channel.

Note 2 – The term "access channel" may be qualified, for example by H, B or D in which case it is appropriate to abbreviate the term to "H-channel", to "B-channel" or to "D-channel".

Note 3 – Unless otherwise qualified, the access channel characteristics at the user-network interface are assumed to be bidirectional symmetric. When such characteristics are unidirectional, the term "unidirectional access channel" should be used.

access channel

Rec. Q.9

A designated part of the information transfer capability, having specified characteristics, provided at the user-network interface.

Note 1 – The term "transmission channel" is well understood to imply uni-directional working only, and then is commonly abbreviated to "channel". To avoid confusion with this usage, the term "access channel", which encompasses bi-directional working through the user-network interface, must not be abbreviated to "channel".

Note 2 – The term "access channel" may be qualified, for example, by H, B, or D in which case it is appropriate to abbreviate the term to "H-channel", "B-channel" or "D-channel".

access channel

See:

channel; access channel.

access channel and rate

Rec. I.140

This attribute describes the channels and their bit rate used to transfer the user information and/or signalling information at a given access point.

access channel rate

See:

access channel and rate.

access circuit section

Rec. X.134

The physical circuit or set of circuits connecting a DTE to the local DSE. It does not include any parts of the DTE or DSE. Recommendations X.134 to X.137 assume that X.25 procedures are used on an access circuit section.

access connection element

Recs. G.960, I.430

The equipment providing the concatenation of functional groups between and including the exchange termination and the NT1. The term should be qualified by the type of access supported. That is:

- basic access connection element
- primary rate access connection element.

access contention

Rec. I.112

A conflict between the demands made on a network termination in multipoint access.

access contention resolution

Rec. I.112

The arbitration of conflicting demands on a network termination in multipoint access.

access control

Rec. F.500

Method of controlling access to information held in the directory either for retrieval, managing or updating purposes.

access criteria

Rec. Z.331

The set of attributes that characterize the access to the system. Example attributes are user identity and terminal identity.

access delay

Rec. X.140

Access delay is the value of elapsed time between an access request and successful access.

An access request is any interface signal that notifies the network of a user's desire to initiate a data communication session.

access denial probability

Rec. X.140

Access denial probability is the ratio of total access attempts that result in access denial to total access attempts in a specified sample.

Note – This ratio is actually an *estimate* of the true probability value.

access network section

Rec. X.134

A network section connected to (at least) one access circuit section.

access parameters

Rec. X.140

Performance of the access function is described by three parameters: access delay, incorrect access probability, and access denial probability.

access point

Rec. X.501

The point at which an abstract service is obtained.

access protocol

Recs. I.112, Q.9

A defined set of procedures that is adopted at an interface at a specified reference point between a user and a network to enable the user to employ the services and/or facilities of that network.

access, storage, and transfer system (AST/SYS)

Rec. X.402

Contains one or more UAs; one or more MSs; one MTA; and optionally, one or more AUs.

An AST/SYS can serve multiple users.

access system (A/SYS)

Rec. X.402

Contains one UA and neither a MS, a MTA, nor a AU.

An A/SYS is dedicated to a single user.

access to maritime PAD (prefix 20)

Recs. E.216, F.126

Prefix 20 is used for gaining access to a packet assembly/disassembly (PAD) facility in a packet switched public data network. The PAD is accessed via telephone circuits in the INMARSAT system. The prefix is followed by two additional digits indicating the required data rate (see Recommendation X.351).

access to PSPDN (prefix 25)

Recs. E.216, F.126

Prefix 25 is used for obtaining access via INMARSAT telephone circuits to a maritime satellite data switching exchange (MSDSE) (see Recommendation X.350) for virtual call data services (Recommendation X.25). The prefix is followed by additional digits indicating data rate or other parameters associated with the call.

access to supplementary services

Rec. E.131

Information used to instruct the switching equipment that the associated information relates to a supplementary service.

access to the public telegram service

Suppl. No. 2 (II.4)

Provision for a *telex terminal* to send and receive *telegrams* to and from the *public telegram service.*

access transport

Rec. Q.762

Information generated on the access side of a call and transferred transparently in either direction between originating and teminating local exchanges. The information is significant to both users and local exchanges.

access unit (AU)

Recs. F.400, X.400

In the context of a message handling system the functional object, a component of MHS, that links another communication system (e.g., a physical delivery system or the telex network) to the MTS and via which its patrons engage in message handling as indirect users.

In the context of message handling services the unit which enables users of one service to intercommunicate with message handling services, such as the IPM service.

accessibility of a connection to be established

Rec. E.800

The *probability* that a switched *connection* can be established, within specified transmission tolerances, to the correct *destination,* within a given *time interval,* when requested by the *user.*

Note 1 – For user-originated calls, it could express the *probability* of a successful call establishment on the first attempt. For operator-handled calls, it could represent the *probability* of having a satisfactory *connection* established within a given *time duration.*

Note 2 – In general, the tolerances should correspond to a level of *transmission performance* which makes the connection unsatisfactory for *service* such that, for example, a substantial percentage of *users* would abandon the *connection.*

accessible field; input field

Rec. Z.341

A *field* for writing by the *user* and the *system.*

accounting authority

Rec. D.90

The Administration of the country that has issued the licence for a mobile station (or the recognized private operating agency or other entity/entities designated by the Administration in accordance with L1 to L6 of Recommendation D.90) to whom maritime accounts in respect of mobile stations licensed by that country may be sent.

accounting authority identification code (AAIC)

Rec. D.90

The discrete identification code of accounting authority responsible for the settlement of maritime accounts (see Annex A to Recommendation D.90).

accounting rate

Rec. D.000

The rate agreed between Administrations in a given relation that is used for the establishment of international accounts.

accounting rate share

Rec. D.000

The part of the accounting rate corresponding to the facilities made available in each country; this share is fixed by agreement among the Administrations.

accounting revenue division procedure

Rec. D.000

The procedure whereby accounting revenue is shared between terminal Administrations, and, as appropriate, between the Administrations of transit countries.

accounts for shared terminal

Suppl. No. 2 (II.4)

Provision of separate accounts to users of a *shared terminal.*

accumulated down time

Suppl. No. 6 (II.3)

The sum of the duration of *down times* over a given *time interval.*

accumulated time

Suppl. No. 6 (II.3)

The sum of *time durations* characterized by given conditions over a given *time interval.*

acknowledgement

Glos. (VI.7, VI.8, VI.9)

A service of the SCCP by which the receiver of the message informs the sender of the correct receipt.

acknowledgement

Rec. X.200

A function of the (N)-layer which allows a receiving (N)-entity to inform a sending (N)-entity of the receipt of an (N)-protocol-data-unit.

acknowledgement indicator

Rec. Q.255

Information indicating whether or not an error has been detected in a received signal unit.

acknowledgement signal unit (ACU)

Gloss. (VI.3)

The twelfth signal unit of a block, which carries information as to whether or not the signal units in the block indicated were received correctly.

acknowledgement window

Recs. T.62, T.62 bis

The maximum number or checkpoints that a sender can transmit without receiving an acknowledgement from the receiver.

acoustic artificial voice

Recs. P.10, P.50

Acoustic signal at the MRP (mouth reference point) of the artificial mouth. It complies with the same time and spectral specifications as the electrical artificial voice.

acoustic coupler (in telephonometry)

Rec. P.10

A cavity of defined shape and volume used for the testing of *telephone earphones* or *telephone transmitters* in conjunction with a calibrated microphone adapted to measure the pressure developed within the cavity.

acoustic hood

Rec. P.10

A hood lined with sound-absorbing material to facilitate the use of a *telephone station* by reducing the *ambient noise* level.

acoustic shock (in telephony)

Rec. P.10

Any temporary or permanent disturbance of the functioning of the ear, or of the nervous system, which may be caused to the user of a *telephone earphone* by a sudden sharp rise in the acoustic pressure produced by it.

Note – An acoustic shock usually results from the occurrence, in abnormal circumstances, of short-lived high voltages at the terminals of a *telephone set.*

acoustic shock suppressor (in telephony)

Rec. P.10

A device associated with a *telephone station* and intended to prevent *acoustic shocks*, by setting an upper limit to the absolute values of the instantaneous electrical voltage that can be applied to the *telephone earphone.*

ACSE-provider

Rec. X.218

The provider of the association control service element.

ACSE service-provider

Rec. X.217

An abstraction of the totality of those entities which provide ACSE services to peer ACSE service-users.

ACSE service-user

Rec. X.217

The part of the application-entity which makes use of ACSE services.

ACSE-user

Rec. X.219

The application-specific function that performs the mapping of the bind-operation and unbind-operation of the RO-notation onto ACSE.

action

Rec. Z.341

The process of performing an *MML function* ; usually represented by a verb.

action

Rec. Z.100

An *action* is an operation which is executed within a *transition string*, e.g., a *task, output, decision, create request* or *procedure call.*

action modifier

Rec. Z.341

A qualification of an *action.*

ACTIVATE

Rec. Z.333

Initiate a system process that requires preliminary data entry, or make a previously entered data set available to the system for its intended use.

activate

Rec. Z.341

An *action* to initiate a *system* process that requires preliminary data entry, or an *action* to make previously entered *data set* available to the *system* for its intended use; opposite of *deactivate.*

activation

Recs. G.960, I.430

A function which places a system, or part of a system, which may have been in a low power consumption mode during deactivation, into its fully operating mode.

active corrective maintenance time

See:
active repair time; active corrective maintenance time.

active maintenance time

Suppl. No. 6 (II.3)

That part of the *maintenance time* during which a *maintenance action* is performed on an *item*, either automatically or manually, excluding *logistic delays.* See Figure 3, Suppl. No. 6 (II.3)

Note – Active maintenance may be carried out while the *item* is performing a *required function.*

active position

Rec. T.61

The character position where the next character would appear if it were presented.

active position

Rec. T.411

The point at which the action specified by the next character is to be effected.

active position addressing (APA)

Rec. T.100

This code is followed by two characters. If these both range from 3/0 to 3/9, they represent in decimal form respectively the tens and units of the row address of the first character to be displayed. This first character will be displayed on the first character position of the addressed row. If they both range from 4/0 to 7/14, they represent respectively the row address and the column address, in binary form with 6 useful bits, of the first characters to be displayed.

active preventive maintenance time

Suppl. No. 6 (II.3)

That part of the *active maintenance time* during which actions of *preventive maintenance* are performed on an *item.* See Figure 3, Suppl. No. 6 (II.3)

active redundancy

Suppl. No. 6 (II.3)

That *redundancy* wherein all means for performing a *required function* are intended to operate simultaneously.

active repair time; active corrective maintenance time

Suppl. No. 6 (II.3)

That part of the *active maintenance time* during which actions of *corrective maintenance* are performed on an *item.* See Figure 3, Suppl. No. 6 (II.3)

active speech level

Rec. P.10

A quantity, expressed in decibels relative to a stated reference, e.g. volts or pascals formed by averaging the speech-signal's power over the active time.

active testing

Rec. X.290

The application of a test suite to an SUT, under controlled conditions, with the intention of observing the consequent actions of the IUT.

active time

Rec. P.10

Aggregate of all intervals of time when speech is deemed to be present according to the criterion adopted by CCITT (see Recommendation P.56) for the purpose of measuring.

active timer

Rec. Z.100

An *active timer* is a *timer* which has a *timer signal* in the *input port* of the owning *procedure* or is scheduled to produce a *timer signal* at some future time.

activity factor

Rec. P.10

Ratio of the active time to total timed elapsed during a measurement, usually expressed as a percentage.

actual parameter

Rec. Z.100

An *actual parameter* is an *expression* given to a *process* or *procedure* for the corresponding *formal parameter* when the *process* or *procedure* is *created* (or *called*). Note that in certain cases in a procedure call an *actual parameter* must be a *variable* (i.e. a particular type of *expression*; see the definition of the term *IN/OUT*).

actual parameter list

Rec. Z.100

An *actual parameter list* is the list of *actual parameters*. The *actual parameters* are matched by position with the respective elements of the corresponding *formal parameter list*.

actual recipient

Recs. F.400, X.400

In the context of message handling a potential recipient for which delivery or affirmation takes place.

actual recipient; recipient

Rec. X.402

A potential recipient for which delivery or affirmation takes place.

adaptive break-in echo suppressor

Rec. G.164

An echo suppressor in which the break-in differential sensitivity is automatically adjusted according to the attenuation of the echo path.

adaptive differential pulse code modulation (ADPCM)

Rec. G.701

A form of differential pulse code modulation that uses adaptive quantizing.

Note 1 – The predictor may be either fixed (time invariant) or variable.

Note 2 – When the predictor is adaptive, the adaption of its coefficients is made from the quantized difference signal.

adaptive predictor

Rec. G.701

A predictor whose estimating function is made variable according to the short term spectral characteristics of the sampled signal.

adaptive quantizing

Rec. G.701

Quantizing in which some parameters are made variable according to the short term statistical characteristics of the quantized signal.

ADD

Rec. F.500

A directory operation to add an object entry or an alias entry to the directory information tree (DIT).

Note – This directory system operation is considered to be an optional user facility in the service context.

additional header information

Rec. Z.341

Provides information supplementary to the actual *output header*, such as sequence number, processor number, *output* device, or day of the week.

additional information

Rec. Z.341

i) General information on how to proceed, e.g. how to select an item, a *form*, a *menu* or how to submit a *form* to the *system*.

ii) List of possible values to be associated with one or more *information entities* in *information structure diagrams*.

additional service controls

Rec. F.500

Function of a directory system to control certain additional performance criteria.

Note – These service controls are considered to belong to additional optional user facilities.

add/remove

Rec. I.140

When connection elements can be established and released while other connection elements of the same connections still exist, the configuration of this connection is described as add/remove.

address

Rec. Q.9

A name which indicates the source or destination of an intended instance of communication.

address

Rec. Q.9

A character or group of characters that identifies a storage or a device without the use of any intermediate reference.

address (in circuit switching)

Rec. U.140

The part of the selection signals which indicates the destination of a call.

address (in information processing)

Rec. U.140

A character or group of characters that identifies a storage or a device without the use of any intermediate reference.

address complete (network)

Rec. Q.9

A message sent in the backward direction indicating that all the address (number) signals required by the network for routing the call to the called party have been received.

address complete (alerting)

Rec. Q.9

A message sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received and that the called party is being alerted.

address complete message (ACM)

Rec. Q.762

A message sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received.

address-complete signal, charge

Rec. Q.254

A signal sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received, that no called-party's-line-condition signals (electrical) will be sent, and that the call should be charged on answer.

address-complete signal, coin-box

Rec. Q.254

A signal sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received, that no called-party's-line-condition signals (electrical) will be sent, that the call should be charged on answer, and that the called number is a coin (box) station.

address-complete signal, no charge

Rec. Q.254

A signal sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received, that no called-party's-line-condition signals (electrical) will be sent, and that the call should not be charged on answer.

address-complete signals (sent in the backward direction)

Rec. Q.400

Signals indicating that it is no longer necessary to send another address signal, and

- either cause immediate passage to the speech position to enable the calling subscriber to hear a tone or a recorded announcement of the national incoming network;
- or announce the transmission of a signal indicating the condition of the called subscriber's line.

address-complete, subscriber-free signal, charge

Rec. Q.254

A signal sent in the backward direction as an alternative to the address-complete, charge signal indicating that the called party's line is free, and that the call should be charged on answer.

address-complete, subscriber-free signal, coin-box

Rec. Q.254

A signal sent in the backward direction as an alternative to the address-complete, coin-box signal indicating that the called party's line is free, that the call should be charged on answer, and that the called number is a coin (box) station.

address-complete, subscriber-free signal, no charge

Rec. Q.254

A signal sent in the backward direction as an alternative to the address-complete, no charge signal indicating that the called party's line is free, and that the call should not be charged on answer.

address-incomplete signal

Rec. Q.254

A signal sent in the backward direction indicating that the number of address signals received is not sufficient for setting up the call. This condition may be determined in the incoming international exchange (or in the national destination network):

- immediately after the reception of an ST signal, or
- on time-out after the latest digit received.

address-incomplete signal

Rec. Q.9

A signal sent in the backward direction indicating that the number of address signals received is not sufficient for setting up the call.

address presentation restricted indicator

Rec. Q.762

Information sent in either direction to indicate that the address information is not to be presented to a public network user, but can be passed to another public network. It may also be used to indicate that the address cannot be ascertained.

address separator

Rec. Q.9

The character which separates the different addresses in the selection signals.

address signal

Rec. Q.254

A call set-up signal sent in the forward direction containing one element of information (digit 1, 2, ... 9 or 0, code 11 or code 12) about the called party's number or the end-of-pulsing (ST) signal.

For each call, a succession of address signals is sent.

address signal

Rec. Q.762

An element of information in a network number. The address signal may indicate digit values 0 to 9, code 11 or code 12. One address signal value (ST) is reserved to indicate the end of the called party number.

address signal

Rec. Q.9

A signal containing one element of the part of the selection signals which indicate the destination of a call initiated by a customer, network facility, etc.

address signal (sent in the forward direction)

Rec. Q.310

This register signal is sent to indicate one decimal element of information (digit 1, 2, ..., 9 or 0) about the called party's number. For each call a succession of address signals is sent.

address signal (sent in the forward direction)

Rec. Q.400

A signal containing one element of information (digit 1, 2, ..., 9 or 0, code 11, code 12 or code 13) about the called or calling party's number or the end of pulsing indication (code 15).

For each call a series of address signals is sent (see Recommendations Q.101 and Q.107).

address signal complete

Rec. Q.9

A signal sent in the backward direction indicating that signals required for routing the call to the called party have been received and that no called party's line condition signals will be sent.

adjacent signalling points

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Two signalling points that are directly interconnected by one or more signalling links.

Administration

Recs. F.400, X.400

In the context of CCITT an Administration (member of ITU) or a recognized private operating agency.

Administration

Rec. F.500

Denotes a public telecommunications Administration or recognized private operating agency (RPOA).

administration (A)

Rec. Q.791

The administration of the signalling network resources involves measurements that are used on a long-term basis and are in general retained external to the signalling network resources (see Recommendation Q.795, § 2.6).

Administration activities include planning and dimensioning (engineering) the signalling network resources, including determination of the resource quantities, e.g. number of links set, and resource configuration, e.g. routing.

Administration directory management domain (ADDMD)

Rec. F.500

A DMD which is managed by an Administration or RPOA.

Administration directory management domain (ADDMD)

Rec. X.501

A DMD which is managed by an Administration.

Note – The term "Administration" denotes a public telecommunications administration or other organization offering public telecommunications services.

Administration domain name

Recs. F.400, X.400

In the context of message handling, a standard attribute of a name form that identifies an ADMD relative to the country denoted by a country name.

Administration management domain (ADMD)

Recs. F.400, X.400, X.402

A management domain that comprises messaging systems managed by an Administration.

Administration of destination

See:

destination country.

Administration of origin
See:
origin country.

administration port

Rec. X.413

The port offering the administration (for MTS) set of abstract-service within the MS abstract-service.

Administration postal
See:
postal Administration.

Administration telecommunications
See:
telecommunications Administration.

Administration terminal
See:
terminal country.

Administration transit
See:
transit country.

administrative authority

Rec. X.501

An entity which has administrative control over all entries stored within a single Directory System Agent.

administrative delay (for corrective maintenance)

Suppl. No. 6 (II.3)

The *accumulated time* during which an action of *corrective maintenance* on a *faulty item* is not performed due to administrative reasons. See Figure 3, Suppl. No. 6 (II.3)

administrative system

Rec. Z.341

A *system* which supports Administration personnel in performing administrative *jobs*, e.g. billing, related to *SPC systems.*

advance preparation operating
See:
preparation operating.

adverse state

Recs. V.36, V.37

The presence of any one of certain repetitive patterns in the earlier transmitted bits.

advice of charge

Rec. I.250

A supplementary service allowing the user paying for a call to be informed of usage-based charging information.

This service may include one or more of the following cases:

1) Charging information at the end of the call.
2) Charging information during a call.

3) Charging information at call setup time.

advice of charge

Rec. Q.86

A service allowing the user paying for a call to be informed of usage-based charging information. This service is not meant to replace the charge meeting inside the network which is considered to be the correct one in all cases.

This service may include one or more of the following cases:

a) charging information at the end of a call;

b) charging information during a call;

c) charging information at call setup time.

aeronautical earth station

Rec. X.350

An *eart station* in the *fixed-satellite service*, or, in some cases, in the *aeronautical mobile-satellite service*, located at a specified fixed point on land to provide a *feeder link* for the *aeronautical mobile-satellite service*. (Article 1, § 4.20 of the Radio Regulations, ITU, Geneva, 1982).

aeronautical (ground) earth station (GES)

Recs. Q.9, Q.1100

An earth station in the fixed satellite service or, in some cases, in the aeronautical mobile-satellite service, located at a specified fixed point on land to provide a feeder link for the aeronautical mobile-satellite service (see Radio Regulations, Article 1, No. 77, § 4.20).

affected point code

Rec. Q.712

The "affected point code" identifies a signalling point where the affected subsystem is located.

affected subsystem number

Rec. Q.712

The "affected subystem number" parameter field identifies a subsystem which is failed, withdrawn, congested or allowed. In the case of SST messages, it also identifies the subsystem being audited. In the case of SOR or SOG messages, it identifies a subsystem requesting to go out of service.

ageing failure; wearout failure

Suppl. No. 6 (II.3)

A *failure* whose probability of occurrence increases with the passage of time, as a result of processes inherent in the *item*.

ageing fault; wearout fault

Suppl. No. 6 (II.3)

A *fault* resulting from an *ageing failure*.

aggregate signal

Rec. R.140

Signal transmitted over the common multiplex channel.

aircraft earth station (AES)

Recs. Q.9, Q.1100

A mobile earth station in the aeronautical mobile-satellite service located on board an aircraft (see Radio Regulations, Article 1, No. 79, § 4.22).

alarm

Rec. M.30

An alerting indication to a condition that may have immediate or potential negative impact on the state of the monitored NE.

alarm attributes

Rec. M.30

A collective reference to delaying, stretching and severity of alarm indications.

alarm call services

Suppl. No. 1 (II.2)

The possibility for a user to cause an alarm call or calls to be made to his line at a time or times specified in advance by him, and to hear an appropriate announcement when the call is answered.

alarm indication signal (AIS)

Rec. M.60

An alarm indication signal is a signal associated with a prompt maintenance alarm of a defective maintenance entity and is, when possible, transmitted in the direction affected (downstream direction) as a substitute for the normal signal, indicating to other non-effective entities that a failure has been identified and that other maintenace alarms consequent to this failure should be inhibited.

alarm indication signal (AIS)

Recs. F.701, M.300

A signal that is used to replace the normal traffic signal when a maintenance alarm indication has been activated.

alarm route

Rec. M.30

A path between an NE and a TMN for the transmission of alarm information.

alarm statement

Rec. Z.341

A statement providing information concerning an alarm condition, such as the degree (level) of alarm or the source of the alarm.

alert abstract-operation

Rec. X.413

An abstract-operation which allows the MS to signal, based on selection criteria, to the UA that messages or reports are waiting in the MS. Can only be issued on an existing abstract-association.

alerting delay at a single element boundary, B_i

Rec. I.352

The length of time that starts when a SETUP or the last address information message creates a message transfer event at B_i, and ends when the corresponding ALERTing message returns and creates its message transfer event at B_i.

Alerting delay observed at a single connection element boundary = $(t_2 - t_1)$

where

t_1 is the time of occurrence for the starting message transfer event,

t_2 is the time of occurrence for the ending message transfer event.

alerting delay between two connection element boundaries

Rec. I.352

Can be measured at one connection element boundary, B_i, and then measured at another boundary, B_j, further from the calling S/T interface. The difference in the values obtained is the alerting delay contributed by the connection elements between the two boundaries.

Alerting delay between two connection element boundaries = $(d_i - d_j)$

where

d_i is the alerting delay measured at B_i,

d_j is the alerting delay measured at B_j.

alerting sending delay for internal traffic

Rec. Q.543

For calls terminating on ANALOGUE SUBSCRIBER LINES, alerting sending delay is defined as the interval from the instant that the signalling information is available for processing in the exchange until ringing tone is applied to an ANALOGUE calling subscriber line or an ALERTING message is sent to a DIGITAL calling subscriber line signalling system.

For internal calls terminating on DIGITAL SUBSCRIBER LINES originating from ANALOGUE SUBSCRIBER LINES, alerting sending delay is defined as the interval from the instant that an alerting message is received from the signalling system of the called subscriber's line until ringing tone is applied to the calling subscriber line.

alerting sending delay for terminating traffic

Rec. Q.543

For calls terminating on ANALOGUE SUBSCRIBER LINES, alerting sending delay is defined as the interval from the instant when the last digit is available for processing in the exchange until the ringing tone is sent backwards toward the calling user.

For calls termining on DIGITAL SUBSCRIBER LINES, the alerting sending delay is defined as the interval from the instant that an ALERTING message is received from the digital subscriber line signalling system to the instant at which an ADDRESS COMPLETE message is passed to the interexchange signalling system or ringing tone is sent backward toward the calling user.

algorithm

Rec. Q.9

A prescribed finite set of well-defined rules or processes for the solution of a problem in a finite number of steps.

alias; alias name

Rec. X.501

A name for an object, provided by the use of one or more alias entries in the DIT.

alias entry

Rec. X.501

An entry of the class "alias" containing information used to provide an alternative name for an object.

alias (entry)

Rec. F.500

An entry of the class "alias" containing information used to provide an alternate name for an object. It *points* to the entry that actually contains the information.

alias name

Rec. F.500

A name for an object where at least one of whose relative distinguished names (RDNs) is that of an alias entry.

alias name
See:
alias; alias name.

aligned around

Rec. T.411

A tabulation alignment that positions the sequence of character images for a specified character string such that the position point of the character image of the first instance of a specified group of characters within that string is positioned at the tabulation stop.

alignment

Rec. T.416

This attribute specifies the method of character alignment (see Rec. T.416, § 5.2.2).

alignment error rate monitoring

Glos. (VI.7, VI.8, VI.9)

A procedure by which the error rate of signalling link is measured during the initial alignment.

alignment jitter

Rec. G.810

The short term variations between the optimum sampling instants of a digital signal and a sampling clock derived from it.

alignment signal (AS)

Rec. N.13

Sine-wave signal at 1020 Hz at a level of 0 dBm0s, which is used to align the international sound-programme connection.

allocated channel

Rec. R.140

A channel used in forming a subscriber line, a link or a circuit.

ALLOW

Rec. Z.333

Permit specified system actions, system responses or functions to occur. These functions may be inhibited by system design or by the INHIBIT system action defined below.

allow

Rec. Z.341

An *action* to permit specified *system actions*, responses, or *functions* to occur; these *functions* may be inhibited by *system* design or by use of the *inhibit action.*

alphanumeric keyboard

Rec. S.140

A device comprising an assembly of alphanumeric keys and function keys the operation of which controls the transmitter of a telegraph apparatus.

alternate code (deprecated)

See:
paired-disparity code.

alternate mark inversion code; AMI code

Rec. G.701

A line code that employs a ternary signal to convey binary digits, in which successive binary ones are represented by signal elements that are normally of alternating, positive and negative polarity but equal in amplitude, and in which binary zeros are represented by signal elements that have zero amplitude.

alternate mark inversion signal

Rec. G.701

The encoded signal produced by alternate mark inversion code.

alternate mark inversion violation

Rec. G.701

A non-zero signal element in an alternate mark inversion signal that has the same polarity as the previous non-zero signal element.

alternate recipient

Recs. F.400, X.400

In the context of message handling a user or distribution list to which the originator can (but need not) request that a message or probe be conveyed if and only if it cannot be conveyed to a particular preferred recipient.

alternate route

See:
alternative route; alternate route.

alternate speech/unrestricted information transfer

Rec. Q.71

The service provides the alternate transfer at either speech of 64 kbit/s unrestricted digital information with the same call.

The request for this alternate capability and the initial mode desired by the user must be identified at call set-up time.

This service must be provided for the support of multiple capability terminals or single capability terminals.

Note – Initially, this service will only be applicable to multiple capability terminals. The use of this service by, and the network support of, single capability terminals is for further study (e.g., how a user changes terminals). All references to single capability terminals reflect possible future enhancements and are subject to change and have only been included for information.

alternating code (deprecated)

See:
paired-disparity code.

alternating current (a.c.) signalling; a.c. signalling

Rec. Q.9

A signalling method in which the signalling information is represented by means of pulsed alternating current having a frequency below the telephone speech band.

alternative class

Rec. X.224

A protocol class that the initiator indicates in a CR TPDU as an alternative choice for use over the transport connection.

alternative hypothesis H_1

Suppl. No. 6 (II.3)

The hypothesis, usually composite, which is opposed to the *null hypothesis.*

alternative representation

Rec. T.412

This attribute specifies a sequence of characters that may be imaged in lieu of the attribute "content information" when a receiver of the document is not capable of decoding and/or imaging the content portion.

alternative route

Rec. F.600

The route normally used when the primary route is not available for any reason.

alternative route; alternate route

Rec. E.600

A second, or subsequent choice route between two switching centres usually consisting of two or more circuit groups in tandem.

alternative routing (of signalling)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The routing of a given signalling traffic flow in case of failures affecting the signalling links, or routes, involved in the normal routing of that signalling traffic flow.

alternative selection signals

Rec. U.140

The acceptance by the network of several different codes for selection signals, e.g. International Telegraph Alphabet No. 2 and International Alphabet No. 5, the choice of code being either fixed for a given subscriber, or variable at the subscriber's choice, for each call attempt.

alternative test method (ATM)

Rec. G.651

A test method in which a given characteristic of a specified class of optical fibres or optical fibre cables is measured in a manner consistent with the definition of this characteristic and gives results which are reproducible and relatable to the reference test method and to practical use.

alternative traffic route

Rec. X.110

Between two given points more than one *traffic route* may exist. The availability of the option of using one of several routes is referred to as alternative traffic route. (See Figure A-1/X.110.)

alternative traffic routing

Rec. U.140

Designating in accordance with given rules the set of circuits to be taken in the case where no circuit is available in the set of normal traffic routing circuits for a given call attempt.

AMI code

See:

alternate mark inversion code; AMI code.

amplitude- and phase-corrected echo

Rec. G.601

An *echo* observed, after processing has been made to correct the propagation effects on the amplitude and shape of the *echo.*

amplitude-corrected echo

Rec. G.601

An *echo* observed, after processing to carry out at least partial correction of propagation effects.

amplitude modulation

Rec. R.140

In telegraphy, modulation in which the significant conditions are represented by alternating currents of different amplitude.

amplitude quantized control

Rec. G.701

A method of controlling clocks in which the clock control signal is a quantized function of the phase difference between clocks.

Note – In practice this implies that the working range of phase errors is divided into a finite number of subranges and that a unique signal is derived for each subrange whenever the error falls within a subrange.

analogue channel

Rec. M.300

An analogue channel is a one-way transmission capability which is provided on audio pairs or analogue transmission systems, and which appears at voice frequency at both ends. Where an analogue channel is provided by an analogue transmission system, it will not have voice frequency appearances other than at its ends.

analogue control

Rec. G.701

A method of controlling clocks in which the clock control signal is a continuous (monotonic) function of the phase difference between clocks, at least over a limited range.

analogue repeater

Rec. G.601

A *repeater* for amplifying analogue signals or *digital signals* and capable of other functions, but excluding *regeneration* of *digital signals.*

analogue signal

Recs. G.701, I.112

A signal one of whose characteristic quantities follows continuously the variations of another physical quantity representing information.

analogue signalling data link

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A data link that provides an interface to signalling terminals and is made up of voice-frequency analogue transmission channels and modems.

anisochronous

Rec. G.701

The essential characteristic of a time-scale or a signal such that the time intervals between consecutive significant instants do not necessarily have the same duration or durations that are integral multiples of the shortest duration.

anisochronous

Rec. R.140

Pertaining to a signal or a time-varying phenomenon characterized by significant instants separated by time intervals having durations not constrained to be all equal to the duration of a unit interval or to an integral multiple of this duration.

annotation

Rec. Z.341

An aspect of the *drawing convention* of the *syntax and decomposition meta-language* indicating how descriptive or explanatory notes may be presented for clarification purposes.

annotation symbol

Rec. Z.341

A *symbol* (– – – – –[n where *n* is a number referencing a note) used in the syntax *meta-language* for *annotation* purposes.

anomaly

Rec. M.60

An anomaly is a discrepancy between the actual and desired characteristic of an item.

The desired characteristic may be expressed in the form of a specification.

An anomaly may or may not affect the ability of an item to perform a required function.

answer-back code

See:
call-sign; answer-back code.

answer bid radio (ABR)

Rec. E.600

On a route or a destination code basis and during a specified time period, the ratio of the number of bids that result in an answer signal, to the total number of bids.

answer bid ratio (ABR)

Recs. E.411, E.425

ABR gives the relationship between the number of bids that result in an answer signal and the total number of bids. ABR may be made on a circuit group or on a destination basis.

$$\text{ABR} = \frac{\text{Bids resulting in answer signal}}{\text{Total bids}} \times 100$$

ABR is expressed as a percentage and is a direct measure of the effectiveness of traffic onward from the point of measurement. It is similar to ASR except that it includes bids that do not result in a seizure.

answer message (ANM)

Rec. Q.762

A message sent in the backward direction indicating that the call has been answered. In semi-automatic working this message has a supervisory function. In automatic working this message is used in conjunction with charging information in order to:

- start metering the charge to the calling subscriber (see Recommendation Q.28), and
- start measurement of call duration for international accounting purposes (see Recommendation E.260).

answer seizure ratio (ASR)

Rec. E.411

ASR gives the relationship between the number of seizures that result in an answer signal and the total number of seizures. This is a direct measure of the effectiveness of the service being offered onward from the point of measurement and is usually expressed as a percentage as follows:

$$\text{ASR} = \frac{\text{Seizures resulting in answer signal}}{\text{Total seizures}} \times 100$$

Measurement of ASR may be made on a circuit group or on a destination basis.

answer seizure ratio (ASR)

Rec. E.425

ASR gives the relationship between the number of seizures that result in an answer signal and the total number of seizures. This is a direct measure of the effectiveness of the service being offered and is usually expressed as a percentage as follows:

$$\text{ASR} = \frac{\text{Seizures resulting in answer signal}}{\text{Total seizures}} \times 100$$

Measurement of ASR may be made on a route or on a destination code basis.

answer seizure ratio (ASR)

Rec. E.600

On a route or a destination code basis, and during a specified time interval, the ratio of the number of seizures that result in an answer signal, to the total number of seizures.

answer sending delay

Rec. Q.543

Answer sending delay is defined as the interval from the instant that the answer indication is received at the exchange to the instant that the answer indication is passed on by the exchange toward the calling user. The objective of this parameter is to minimize the possible interruption of the transmission path for any significant interval during the initial response by the called user.

For transit traffic connections involving circuits that use CCITT Signalling System No. 7 exclusively, the requirements of the appropriate signalling system Recommendations should apply, e.g., Recommendations Q.725 and Q.766 for T_{cu} value (case of a simple message).

For connections in a terminating exchange, exchange answer sending delay is defined as the interval from the instant that the off-hook condition is recognizable at the ANALOGUE SUBSCRIBER LINE interface on an incoming call or a CONNECT message is received from a DIGITAL SUBSCRIBER LINE signalling system until the instant that an answer indication is sent back toward the calling user.

For connections in an originating exchange, exchange answer sending delay is defined as the interval from the instant that the answer indication is received from the outgoing circuit signalling system or in the case of an internal call, from the called subscriber's line, until the instant that the answer indication is sent to the calling user. In the case of a call originated from a DIGITAL SUBSCRIBER LINE, the answer indication is a CONNECT message that is sent to the DIGITAL SUBSCRIBER LINE signalling system. If an ANALOGUE SUBSCRIBER LINE originated the call, the answer indication may not be sent.

answer signal

Rec. E.411

A signal sent in the backward direction indicating that the call is answered.

answer signal (sent in the backward direction)

Recs. Q.120, Q.140, Q.310

This signal is sent to the outgoing international exchange to show that the called party has answered the call.

In semi-automatic working, the signal has a supervisory function.

In automatic working, it is used:

- to start metering the charge to the calling subscriber,
- to start the measurement of call duration for international accounting purposes.

The Notes of Recommendation Q.120, § 1.8 also apply.

Note – See Recommendation Q.27 for the action to be taken to ensure that answer signals both national and international, are transmitted as quickly as possible.

answer signal (sent in the backward direction)

Rec. Q.400

A signal sent to the outgoing international exchange to indicate that the called party has answered the call (see Recommendation Q.27). In semi-automatic working this signal has a supervisory function.

In automatic working this signal is used:

- to start metering the charge to the calling subscriber, unless the register signal indicating no charge has been sent previously;
- to start measurement of the call duration for international accounting purposes.

answer signal, charge

Rec. Q.254

A signal sent in the backward direction indicating that the call is answered and subject to charge.

In semi-automatic working, this signal has a supervisory function.

In automatic working, the signal is used:

- to start metering the charge to the calling subscriber (see Recommendation Q.28), and
- to start the measurement of call duration for international accounting purposes..

answer-signal delay

Rec. E.600

Time interval between the establishment of a connection between calling and called users, and the detection of an answer signal at the originating exchange.

answer signal, no charge

Rec. Q.254

A signal sent in the backward direction indicating that the call is answered but is not subject to charge. It is used for calls to particular destinations only.

In semi-automatic working, this signal has a supervisory function.

In automatic working, the reception of this signal shall not start the metering to the calling subscriber.

answerback unit

Rec. S.140

That part of a telegraph terminal which transmits automatically its answerback code on receipt of the "Who are you" signal.

answerback unit simulator

Rec. S.140

A device or program routing, not a part of a teleprinter, but which performs the same function as the answerback unit on receipt of a specific §"§Who are you" signal.

answering TA

Rec. V.110

The terminal adaptor which is not responsible for initiating the next exchange of parameter information. Initially, the called TA takes on the role of the answering TA.

answering time of operators; request transmission time; delay time; setting-up times of an international call

Rec. E.100

At the outgoing international exchange, the *answering time of operators* is the interval between the end of the transmission of the calling signal and its answer by an operator at the distant international exchange.

At the incoming international exchange, the *answering time of operators* is the interval between the appearance of a calling signal on a position or group of positions at that exchange and its answer by an operator.

The request transmission time is the time interval $(t_1 - t_0)$ taken in passing the call request to the controlling operator.

The time interval $(t_2 - t_1)$ is the delay to which the call is subject at the controlling exchange.

The caller is generally informed of this delay.

The setting-up time of a station call is the time interval $(t_3 - t_1)$. The total setting-up time of a personal call is the time interval $(t_4 - t_1)$. These times include any delay at the outgoing international exchange. (For an explanation of the different time instants, see *successive phases of a call.*)

answering tone

Rec. V.25

The tone transmitted from the called end.

any type

Rec. X.208

A choice type whose component types are unspecified, but are restricted to the set of types which can be defined using ASN.1.

application

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The set of a user's requirements.

application

Rec. Z.341

A set of *functions* required to perform a *job.*

application-association ; association

Rec. X.217

A cooperative relationship between two application-entities, formed by their exchange of application-protocol-control-information through their use of presentation-services.

application comments

Rec. T.412

This attribute shall be used for application dependent comments.

application context

Rec. X.217

An explicitly identified set of application-service-elements, related options and any other necessary information for the interworking of application-entities on an application-association.

application-entity

Rec. X.200

The aspects of an application-process pertinent to OSI.

application entity (AE)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A set of Application Service Elements which together perform all or part of the communications aspects of an application process. The Application Entity is addressed through an SCCP subsystem number.

application in an ISDN

Rec. E.711

A sequence of teleservice and bearer service requests, predefined in order to satisfy a global communications need.

application interworking function

Rec. X.300

A collection of processes that intervenes in an information flow also associated with applications, relating protocol(s) that access this collection to protocol(s) that exit this collection.

An IWF, that also acts upon information related to that application.

application-management

Rec. X.200

Functions in the Application Layer (see Recommendation X.200, § 6.1) related to the management of OSI application-processes.

application-management-application-entity

Rec. X.200

An application-entity which executes application-management functions.

application message attributes

Rec. G.771

Application message attributes are the attributes that characterize the requirements of communication functions for application messages in the LCN and DCN.

application message characteristics

Rec. G.771

Application message characteristics are the application message attributes and information contents of the application messages.

application message information contents

Rec. G.771

Application message information contents provide the structure and the meaning of application messages in the LCN and in the DCN.

application messages

Rec. G.771

Application messages are the messages flowing on the local communication network (LCN) and the data communication network (DCN) to meet the needs of TMN application functions.

application process

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

An element which performs the information processing for a particular application.

application-process

Rec. X.200

An element within a real open system which performs the information processing for a particular application.

application-relay system

Rec. X.300

The functional abstraction of an application interworking function (IWF).

application-service-element

Rec. X.200

A part of an application-entity which provides an OSI environment capability, using underlying services where appropriate.

application service element (ASE)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A coherent set of integrated functions within an application entity which provides an OSI environment capability, using underlying services where appropriate.

applied and offerd load

Rec. P.84

The applied load consists of the speech bursts entering the DCME on the active circuits. Thus, applied load is a function of the number of active circuits and the speech activity on the circuits.

The offered load consists of the applied load plus any additional load (overhead) generated by the DCME messages and control information. The offered load is the load presented to the DCME bearer channels. If the offered load is less than the load-carrying capacity of the channels, then all the offered load is carried by the DCME. However, if the offered load exceeds the capacity of the bearer channels, then, depending upon the overload strategy of the DCME, some of the offered load will be lost through competitive clipping (sample dropping). The DCME may employ variable bit rate coding so that, should the freezeout fraction exceed some preset limit, the DCME can momentarily increase the load-carrying capacity of the bearer channels (creation of overload channels) in order to accommodate the extra load. Dynamic load control may also be used to limit the applied load.

applied data bit

Recs. V.36, V.37

The data bit which has been applied to the scrambler but has not affected the transmission at the time of consideration.

arc current

Rec. K.12

The current which flows after spark-over when the circuit impedance allows a current that exceeds the glow-to-arc transition current.

arc voltage

Rec. K.12

The voltage appearing across the terminals of the gas discharge tube during the passage of the arc current.

area

Rec. Z.100

An *area* is a two dimensional region in the *concrete graphical syntax. Area* often correspond to *nodes* in the *abstract syntax* and usually contain *common textual syntax.* In *interaction diagrams* areas may be connected by *channels* or *signal routes.* In *control flow diagrams areas* may be connected by *flow lines.*

arithmetic delimiter

Rec. Z.341

A *symbol* used to delimit an *arithmetical expression*: ((left parenthesis) for the opening *delimiter* and) (right parenthesis) for the closing *delimiter*

arithmetic expression (in MML)

Rec. Q.9

A combination of *arithmetic delimeters, numerals (decimal, hexadecimal, octal* or *binary)* and *identifiers* enclosed by parentheses.

arithmetic operator

Rec. Z.341

A *symbol* used to denote the arithmetic operation(s) to be performed in an *arithmetical expression.* Allowed operators are: + (plus sign), − (hyphen), / (solidus), * (asterisk).

arithmetical expression

Rec. Z.341

A combination of *arithmetic operators*, *numerals* (*decimal*, *hexadecimal*, *octal* or *binary*) and *identifiers* enclosed by *arithmetic delimiters*.

array

Rec. Z.100

Array is the predefined *generator* used to introduce the concept of arrays, easing the definition of arrays.

artificial ear

Rec. P.10

A device for the calibration of earphones incorporating an *acoustic* coupler and a calibrated microphone for the measurement of sound pressure and having an overall acoustic impedance similar to that of the average human ear over a given frequency band.

artificial mouth

Rec. P.10

A device consisting of a *loudspeaker* mounted in an enclosure and having a directivity and radiation pattern similar to those of the average human mouth.

artificial mouth excitation signal

Rec. P.10

A signal applied to the artificial mouth in order to produce the acoustic artificial voice. It is obtained by equalizing the electrical artificial voice for compensating the sensitivity/frequency characteristic of the mouth.

artificial mouth excitation signal

Rec. P.50

A signal applied to the artificial mouth in order to produce the acoustic artificial voice. It is obtained by equalizing the electrical artificial voice for compensating the sensitivity/frequency characteristic of the mouth.

Note 1 – The equalization depends on the particular artificial mouth employed and can be accomplished electrically or mathematically within the signal generation process.

artificial voice

Rec. P.10

A mathematically defined signal which reproduces human speech characteristics, relevant to the characterisation of linear and nonlinear telecommunication systems. It is intended to give a satisfactory correlation between objective measurements and tests with real speech.

artificial voice

Rec. P.10

A complex sound, usually emitted by an artificial mouth and having a power sound spectrum corresponding to that of the average human voice.

artificial voice

Rec. P.50

A signal, mathematically defined, which reproduces all human speech characteristics, relevant to the characterization of linear and nonlinear telecommunication systems. It is intended to give a satisfactory correlation between objective measurements and real speech tests.

ASN.1 character set

Rec. X.208

The set of characters, specified in Recommendation X.208, § 7, used in the ASN.1 notation.

ASN.1 encoding rules

Rec. X.208

Rules which specify the representation during transfer of the value of any ASN.1 type; ASN.1 encoding rules enable information being transferred to be identified by the recipient as a specific value of a specific ASN.1 type.

aspect ratio

Rec. T.411

The ratio of the dimension of a pel array in the direction of the pel path to the dimension on the direction of the line progression.

assemble

See:
to assemble.

assembler; assembly program

Rec. Q.9

A program used to assemble.

assembly language

Rec. Q.9

A low level language whose instructions are usually in one-to-one correspondence with computer instructions and that may provide facilities such as the use of macroinstructions.

assembly program

See:
assembler; assembly program.

assign

Rec. Z.100

Assign is the operation applied to a *variable* which associates a *value* to the *variable* replacing the previous *value* associated with the *variable.*

assignment map

Rec. G.763

A record, held in a memory of a DCME, of the interconnections required between trunk channels and bearer channels. This record is dynamically uptated in real time in accordance with the traffic demands made on the DCME.

assignment message

Rec. G.763

The message specifying the interconnections required between trunk channels and bearer channels.

assignment statement

Rec. Z.100

An *assignment statement* is a *statement* which assigns a *value* to a *variable.*

associated mode (of signalling)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The mode where messages for a signalling relation involving two adjacent signalling points are conveyed over a directly interconnecting signalling link.

associated mode of operation

Rec. Q.253

In the associated mode of operation, the signals are transferred between the two exchanges over a common signalling link which terminates at the same exchanges as the group of speech circuits to which the signalling link has been assigned. See Figure 4/Q.253.

associated signalling

Gloss. (VI.3)

A mode of operation of System No. 6 in which the signals carried by the system relate to a group of speech circuits which terminate in the same System No. 6 exchanges as the signalling system.

association

See:
application-association; association.

association area

Rec. Z.100

An *association area* is a connection between *areas* in an *interaction diagram* by means of an association *symbol.* There are five asociation areas: *channel substraction association area, input association area,* priority *input association area, continuous signal association area* and *save association area.*

association control protocol machine

Rec. X.227

The protocol machine for the association control service element specified in Recommendation X.227.

association control service element

Rec. X.217

The particular application-service-element defined in Recommendation X.217.

association-initiating-application-entity ; association-initiator

Recs. X.218, X.219

The application-entity that initiates the application-association.

association-initiating-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the association-initiator.

association-initiator

Rec. X.217

The ACSE service-user which initiates a particular association, i.e. the requestor of the A-ASSOCIATE service which establishes the association.

association-initiator

See:

association-initiating-application-entity; association-initiator.

association-responder

Rec. X.217

The ACSE service-user which is not the initiator of a particular association, i.e. the acceptor of the A-ASSOCIATE service which establishes the association.

association-responder

See:

association-responding-application-entity; association-responder.

association-responding-application-entity ; association-responder

Recs. X.218, X.219

The application-entity that responds to the initiation of an application-association by another AE.

association-responding-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the association-responder.

assured reproduction area

Rec. T.411

The rectangular area that remains on the nominal page after deducting an agreed allowance for edge losses.

asymmetric

Rec. X.402

Said of an ASE by means of which a UE supplies or consumes a service, but not both, depending upon how the ASE is configured. The ASE for message delivery, e.g., is asymmetric because only the open system embodying an MTA offers the associated service and only the other open system, which embodies a UA or MS, consumes it.

asymmetrical through connection

Rec. Q.9

The through connection of only one direction of transmission on a potential both-ways through connection.

(asymptotic) availability A ; (steady-state) availability

Suppl. No. 6 (II.3)

The limit, if this exists, of the *instantaneous availability* when the time tends to infinity.

Note – Under certain conditions, for instance constant failure rate and constant repair rate, the *asymptotic availability* may be expressed as:

$$A = \frac{MUT}{MUT + MDT}$$

where

MDT is the *mean down time*

MUT is the *mean up time.*

asymptotic mean availability $\overline{A}$

Suppl. No. 6 (II.3)

The limit, if this exists, of the *mean availability* over a *time interval* (t_1, t_2) when t_2 tends to infinity.

Note 1 – The *asymptotic mean availability* is related to the *mean availability* as

$$\overline{A} = \lim_{t_2 \to \infty} \overline{A}(t_1, t_2)$$

Note 2 – When such a limit exists it is not dependent on t_1.

asymptotic mean unavailability $\overline{U}$

Suppl. No. 6 (II.3)

The limit, if this exists, of the *mean unavailability* over a *time interval* (t_1, t_2) when t_2 tends to infinity.

Note 1 – The *asymptotic mean unavailability* is related to the *mean unavailability* as

$$\overline{U} = \lim_{t_2 \to \infty} \overline{U}(t_1, t_2)$$

Note 2 – When such a limit exists it is not dependent on t_1.

asymptotic unavailability U

Suppl. No. 6 (II.3)

The limit, if this exists, of the *instantaneous unavailability* when the time tends to infinity.

Note – Under certain conditions, for instance constant failure rate and constant repair rate, the *asymptotic unavailability* may be expressed as:

$$U = \frac{MDT}{MDT + MUT}$$

where

MDT is the *mean down time*

MUT is the *mean up time.*

asynchronous (deprecated)

See:

non-synchronous.

asynchronous time-division multiplexing

Rec. I.113

A multiplexing technique in which a transmission capability is organized in undedicated slots filled with **cells** with respect to each application's instantaneous real need. In this case, the terminal equipment – i.e. the customer application – defines the actual transmitted bit rate, whatever this rate is, possibly variable during the communication. This technique carries a **labelled interface structure** over a **frame** or a **self-delineating labelled interface**.

asynchronous transfer mode (ATM)

Rec. I.113

A **transfer mode** in which the information is organized into **cells**; it is asynchronous in the sense that the recurrence of cells depends on the required or instantaneous bit rate. **Statistical** and **deterministic** values may also be used to qualify the **transfer mode**.

ATM deterministic transfer mode

See:

deterministic; ATM deterministic transfer mode.

ATM statistical transfer mode

See:

statistical; ATM statistical transfer mode.

attenuation A (λ)

Recs. G.651, G.652

The attenuation A (λ) at wavelength λ between two cross-sections 1 and 2 separated by distance L of a fibre is defined as:

$$A(\lambda) = 10 \log \frac{P_1(\lambda)}{P_2(\lambda)} \qquad \text{(dB)}$$

where $P_1(\lambda)$ is the optical power traversing the cross-section 1 and $P_2(\lambda)$ is the optical power traversing the cross-section 2 at the wavelength λ.

attenuation coefficient

Rec. G.651

In an optical fibre it is the attenuation per unit length.

Note – The attenuation is the rate of decrease of average optical power with respect to distance along the fibre and is defined by the equation:

$$P(z) = P(0)\ 10^{-(\alpha z/10)}$$

where

$P(z)$ = power at distance z along the fibre,

$P(0)$ = power at $z = 0$,

α = attenuation coefficient in dB/km if z is in km.

From this equation the attenuation coefficient is

$$\alpha = - \frac{10 \log_{10} [P(z)/\ P(0)]}{z}$$

This assumes that α is independent of z.

attenuation frequency distortion; loss distortion

Rec. Q.551

Logarithmic ratio of output voltage at the reference frequency (nominally 1020 Hz), U(1020 Hz), divided by its value at frequency f, $U(f)$:

$$LD = 20 \log \frac{U(1020\ \text{Hz})}{U(f)}$$

attenuation/frequency distortion

Suppl. No. 1 (VI.5)

"Attenuation distortion" or "loss distortion" is the result of imperfect amplitude/frequency response and is generally specified in addition to the relative levels of a transmission section, from which the nominal transmission loss is derived. The definition of the attenuation/frequency distortion (LD) is well established: it is the difference between the actual response of voltage versus frequency $U(f)$ and the ideal (planned) response of voltage versus frequency $U^*(f)$, referred to the corresponding difference at 1000 Hz:

$$LD = \left[20 \log \left| \frac{E}{U(f)} \right| - 20 \log \left| \frac{E}{U^*(f)} \right| \right] - \left[20 \log \left| \frac{E}{U(1000\ \text{Hz})} \right| - 20 \log \left| \frac{E}{U^*(1000\ \text{Hz})} \right| \right] \quad (6)$$

Equation (6) can be rewritten as follows:

$$LD = 20 \log \left| \frac{U(1000\ \text{Hz})}{U(f)} \right| - 20 \log \left| \frac{U^*(1000\ \text{Hz})}{U^*(f)} \right| \quad (7)$$

For practical reasons the ideal response of voltage versus frequency, $U^*(f)$, is flat. Taking this into account, equation (7) reduces further to

$$LD = 20 \log \left| \frac{U(1000\ \text{Hz})}{U(f)} \right| \quad (8)$$

It should be noted that equation (8) is valid regardless of whether Z_{01} is equal to Z_{02} or not. However, impedance matching at input ($Z_{01}' \approx Z_{01}$) and output ($Z_{02}' \approx Z_{02}$) is assumed. A measurement in accordance with equation (8) is entirely in conformity with existing measuring techniques.

attribute

Recs. F.400, X.400, X.402

In the context of message handling, an information item, a component of an attribute list, that describes a user or distribution list and that can also locate it in relation to the physical or organizational structure of MHS (or the network underlying it).

attribute

Rec. F.500

The information of a particular type concerning an object and appearing in an entry describing that object in the directory information base (DIB).

Note – See X.500-Series of Recommendations for further details.

attribute

Rec. T.411

An element of a constituent of a document that has a name and a value and that expresses a characteristic of this constituent or a relationship with one or more constituents.

attribute

Rec. T.150

A particular property which applies to a presentation element or to a group of presentation elements.

Examples: line thickness, colour.

attribute

Rec. X.413

The information of a particular type appearing in an entry in an information-base.

attribute

Rec. X.501

The information of a particular type concerning an object and appearing in an entry describing that object in the DIB.

attribute list

Recs. F.400, X.400

In the context of message handling, a data structure, an ordered set of attributes that constitutes an O/R address.

attribute type

Recs. F.400, X.400, X.402

An identifier that denotes a class of information (e.g., personal names). It is a part of an attribute.

attribute type

Rec. F.500

That component of an attribute which indicates the nature of information given by that attribute.

attribute type

Recs. X.413, X.501

That component of an attribute which indicates the class of information given by that attribute.

attribute value

Recs. F.400, X.400, X.402

An instance of the class of information an attribute type denotes (e.g., a particular personal name). It is a part of an attribute.

attribute value

Rec. F.500

A particular instance of information indicated by an attribute type.

attribute value

Recs. X.413, X.501

A particular instance of the class of information indicated by an attribute type.

attribute value assertion

Recs. F.500, X.501

A proposition, which may be true, false, or undefined, concerning the values (or perhaps only the distinguished values) of an entry.

attribute-value-assertion

Rec. X.413

A proposition, which may be true, false, or undefined, concerning the values of attributes in an entry.

audible indication

Rec. E.182

An audible indication is understood to be a sound composed of frequencies within the range 300-3400 Hz which is used to inform the user about the state of a telephone call or supplementary service.

audiographic conference service

Rec. F.710

A type of TCS in which audiosignals are exchanged together with non-voice information (data, text, graphic, etc.), except video and signalling.

audit

Rec. M.30

A test of the validity of data and/or generic programs in the NE.

authentication

Rec. F.500

Method to establish security services by means of simple or strong authentication. There are two kinds of authentication: data origin authentication and peer entity authentication.

Note – See Recommendation X.509 for more information.

authentication mechanisms

Rec. F.500

Authentication mechanisms are used to provide for encryption, data integrity and digital integrity.

authentication token; token

Rec. X.509

Information conveyed during a strong authentication exchange, which can be used to authenticate its sender.

authority

Rec. Z.331

The relationship between access criteria and permissions.

auto-action

Rec. X.413

Actions, that can be performed automatically by the MS, based on previously registered information from the MS-owner via the UA.

auto-action-type

Rec. X.413

An auto-action-type is used to indicate the type of auto-action, e.g. alert.

auto-alert

Rec. X.413

Auto-alert is the auto-action within the MS, which triggers an alert abstract-operation or another action by the MS.

auto-forward

Rec. X.413

Auto-forward is the auto-action within the MS, which triggers a message to be auto-forwarded to another recipient (or other recipients) by the MS.

automatic alternative routing

Rec. F.68

A facility whereby a call, which cannot find a free circuit on the primary route at an international outgoing exchange, is automatically diverted to a secondary route.

automatic answering

Suppl. No. 2 (II.4)

Answering in which the called terminal automatically responds to the *calling signal* and the call may be established whether or not the called terminal is attended.

automatic booked call service

Suppl. No. 1 (II.2)

With prior information from a subscriber, a call may be made automatically from his telephone termination, to a particular number or service (excluding the alarm call service) at a specific date and time.

automatic calling

Suppl. No. 2 (II.4)

The sequence of operations required by the network procedure to set up a connection without manual intervention at the calling *terminal.*

automatic congestion level

Rec. Q.762

Information sent to the exchange at the other end of a circuit to indicate that a particular level of congestion exists at the sending exchange.

automatic credit card service

Suppl. No. 1 (II.2)

Payment of call charges is made by placing a credit card in a specially adapted telephone or by calling the credit number. A telephone bill will be sent to the credit card holder later.

automatic date and time indication

Suppl. No. 2 (II.4)

Automatic indication by the network of data and time of the commencement of a call either to the calling *terminal* or to both the calling and the called terminals.

automatic identification

Suppl. No. 2 (II.4)

The transmission without manual intervention of the identification of the calling *terminal* to the connected terminal or vice versa, or the identification of terminals to one another when a connection is established.

Note – The identification may be provided by the network or by the terminal.

automatic maintenance

Rec. M.60, Suppl. No. 6 (II.3)

Maintenance accomplished without human intervention.

automatic maintenance

See:

maintenance; automatic maintenance.

automatic numbering transmitter

Rec. S.140

An automatic transmitter in which provision is made for automatically transmitting a serial number before each message.

automatic observation

Rec. E.421

Monitoring of telephone calls without an observer.

automatic or semi-automatic transmission rerouting

See:

transmission restoration function: automatic or semi-automatic transmission rerouting.

automatic retransmitter

Rec. S.140

An apparatus which automatically retransmits telegraph signals in accordance with recorded incoming signals.

automatic retransmitter with controlled tape-feed mechanism

Rec. S.140

An automatic transmitter in which the movement of the perforated tape is controlled by pulses from an external synchronizing device, for example in the case of a time-division multiplex system.

automatic service

Rec. E.100

In the automatic service, the calling subscriber himself dials (or operates the key-set) the number necessary for connection with the called station.

automatic switching equipment

Rec. M.60

That part of an international exchange concerned with switching operations for routing the call in the desired direction.

automatic switching equipment

Rec. Q.9

Equipment in which *switching* operations are performed by electrically controlled apparatus without the intervention of operators.

automatic system

Rec. Q.9

A system in which the *switching* operations are performed by electrically controlled devices without the intervention of operators.

automatic test line (prefix 91)

Recs. E.216, F.126

Prefix 91 provides automatic test of the ship earth station in telex and telephony mode. In the maritime satellite service the coast earth station will automatically transmit a "QUICK BROWN FOX" test message for telex and provide a loop-around test line connection in accordance with Recommendation O.11 for telephony. Test lines for data transmission are for further study.

automatic transferred charge call service

Suppl. No. 1 (II.2)

With prior indication and mutual agreement between the two parties, the automatic debiting to a called subscriber's account of relevant charges for a call made to his telephone number.

No variants have been identified so far.

automatic transferred debiting of charges service

Suppl. No. 1 (II.2)

The automatic debiting to a subscriber's account of charges for calls made from any telephone by persons nominated by that subscriber and identified by the use of a secret code.

This is similar to the existing credit card service but does not involve an operator. It must be provided for troughout a network.

automatic transmitter

Rec. S.140

Telegraph transmitter in which the forming of the signals is not controlled by any operator, but is actuated from a signal recording medium.

automatic verbal announcement of charges applied service

Suppl. No. 1 (II.2)

The possibility for a user to request a verbal announcement of either total or individual call charges.

auxiliary system

Rec. Z.341

A *system* that supports *SPC systems* in performing their tasks. It may be either an *operation and maintenance system* or an *administrative system.*

availability

See:

(asymptotic) availability A; (steady-state) availability.

availability in analogue cable transmission systems

Rec. G.602

The availability of an analogue transmission system is defined as the ability of the system to be in a state to perform adequately (operating) at a given instant of time or at any instant of time within a given time interval. In Recommendation G.602, the availability of an analogue transmission system is quantified by the ratio of the time during which the system is operating to a specified total time.

availability parameters

Rec. X.140

Three parameters are defined to describe overall service availability: service availability, user information transfer denial probability, and service outage duration.

availability performance

Rec. M.60, Suppl. No. 6 (II.3)

The ability of an item to be in the state to perform a required function at a given instant of time or at any instant of time within a given time interval, assuming that the external resources, if required, are provided.

Note 1 – This ability depends on the combined aspects of the reliability performance, the maintainability performance and the maintenance support performance of an item.

Note 2 – In the definition of the item the external resources required must be delineated.

Note 3 – The term availability is used as an availability performance measure.

available area

Rec. T.411

The area determined by the document layout process into which the content portion is formatted by the content layout process.

available signalling link

Glos. (VI.7, VI.8, VI.9)

A signalling link which has successfully completed the initial alignment procedures and carries (or is ready to carry) signalling traffic.

average ... (deprecated)

See:

mean ...; average ....

average BER

Rec. G.763

The average BER, as measured on the receive control channel.

$$\text{Average BER} = \frac{\text{Count of No. of bit errors identified in the control channel}}{\text{Count of total No. of bits received in the control channel}} \times 100$$

average bits per sample

Rec. G.763

The average number of encoding bits per sample computed over a given time window for the ensemble of active interpolated bearer channels within a given interpolated pool. Only bearer channels carrying speech are included in this calculation.

average daily peak hour traffic

Rec. E.600

The average busy hour traffic of several days; it is usually not related to the same hour each day.

axiom

Rec. Z.100

An *axiom* is a special kind of *equation* with an implied equivalence to the *Boolean literal* True. "*Axioms*" is used as a synonym for "*axioms* and *equations.*"

B

babyphone service

Suppl. No. 1 (II.2)

A service providing for a call to be made to a telephone in the "off hook" condition for the purpose of audible supervision at the called subscriber's premises.

background

Rec. T.150

Presentation element being a rectangular area with the same size as the image area, acting as a reference area on which telewriting foreground information can be presented.

Backus Naur form (BNF)

Rec. Z.341

A syntactic *meta-language* for use in specifying the syntax structure of *inputs* and *outputs* of an actual *man-machine interface.*

Backus-Naur form (BNF)

Rec. Z.100

Backus-Naur Form *BNF* is a formal notation used for expressing the *concrete textual syntax* of a language. An extended form of *BNF* is used for expressing the *concrete graphical grammar.*

backward echo

Rec. G.601

An *echo* arriving at a defined point and having a direction of transmission opposite to that of the direct signal.

backward indicator bit (BIB)

Glos. (VI.7, VI.8, VI.9)

A bit in a signal unit requesting, by its status change, retransmission at the remote end when a signal unit is received out of sequence.

backward sequence number (BSN)

Glos. (VI.7, VI.8, VI.9)

A field in a signal unit sent which contains the forward sequence number of a correctly received signal unit being acknowledged.

backward signal

Rec. Q.9

A signal, used for the establishment, release or other control of a connection, sent in the opposite direction to call set-up.

balance

Rec. T.412

This attribute specifies that the leading edges of a set of immediately subordinate layout objects shall, as far as possible, be aligned along a line orthogonal to the direction of the layout path.

balance return loss

Rec. G.100

At a 4-wire terminating set ("hybrid"), that portion of the *semi-loop loss* which is attributable to the degree of match between the impedance, Z_2, connected to the 2-wire line terminals, and the balance impedance, Z_B. It is given approximately by the expression:

$$L_{BR} = 20 \log_{10} \left| \frac{Z_2 + Z_B}{Z_2 - Z_B} \right| \quad \text{dB}$$

Note – Under most circumstances the expression given is sufficiently accurate. However, for some worst case evaluations, the exact expression must be used. The exact expression is

$$L_{BR} = 20 \log_{10} \left| \frac{Z_0 + Z_B}{2Z_0} - \frac{Z_2 + Z_0}{Z_2 - Z_B} \right| \quad \text{dB}$$

where Z_0 is the 2-wire input impedance. (if $Z_0 = Z_B$, the two expressions become identical).

balanced code

Rec. G.701

A code that generates only groups of signal elements that have zero digital sum.

band number

Rec. Q.9

A subdivision of the address label, containing the most significant bits, used for routing the signal message and possibly for identifying the circuit group containing the traffic circuit concerned.

band sensation level

Rec. P.10

Difference, expressed in decibels, between the sound integrated over a frequency band and the sound pressure level in that band at the threshold of audibility, there being no other disturbing sound.

bandwidth (of an optical fibre)

Rec. G.651

That value numerically equal to the lowest frequency at which the magnitude of the baseband transfer function of an optical fibre decreases to a specified fraction, generally to −3 dB optical (−6 dB eletrical), of the zero frequency value.

Note – The bandwidth is limited by several mechanisms: mainly modal distortion and chromatic dispersion in multimode fibres.

barred signal

U.140

A service signal which indicates that a call cannot be established because access is barred.

base address

Rec. Q.9

A numeric value that is used as a reference in the calculation of addresses in the execution of a computer program.

base earth station

Rec. X.350

An *earth station* in the *fixed-satellite service* or, in some cases, in the *land mobie-satellite service,* located at a specified fixed point or within a specified area on land to provide a *feeder link* for the *land mobile-satellite service.* (Article 1, § 4.11A of the Radio Regulations, as modified by MOB-WARC 1987).

base level tasks

Rec. Q.9

Deferrable tasks that are performed when capacity is available (e.g., routine maintenance functions.)

base station (BS)

Recs. Q.9, Q.1001

The common name for all radio equipment located at one and the same place used for serving one or several *cells.*

base station area

Recs. Q.9, Q.1001

The area covered by all the cells served by a base station.

basic access; basic rate access

Rec. G.960, I.430, Q.9

A user-network access arrangement that corresponds to the interface structure composed of two B-channels and one D-channel. The bit rate of the D-channel for this type of access is 16 kbit/s.

basic component

Rec. T.411

A basic logical or layout object, or an object class from which basic logical or layout objects may be derived.

basic (error correction) method

Glos. (VI.7, VI.8, VI.9)

A non-compelled, positive/negative acknowledgement, retransmission error control system.

basic features

Rec. Q.300

The essential prime constituent characteristics on which a system is founded.

basic handover procedure

Recs. Q.1002, Q.1005

Procedure where the call is handed over from the controlling MSC (MSC-A) to another MSC (MSC-B).

basic interconnection test suite

Rec. X.290

A test suite for basic interconnection testing of one or more OSI* protocols.

basic interconnection testing

Rec. X.290

Limited testing of an IUT to determine whether or not there is sufficient conformance to the main features of the relevant protocol(s) for interconnection to be possible, without trying to perform thorough testing.

basic layout object

Rec. T.411

An object in the specific layout structure that has no subordinate.

basic logical object

Rec. T.411

An object in the specific logical structure that has no subordinate.

basic measurement unit (BMU)

Rec. T.411

A unit of linear measurement equal to 1/1200 of 25.4 mm.

Note – A locally defined scaling factor may be used to map the document to a particular imaging device.

basic rate access

See:

basic access; basic rate access.

basic requirement

Rec. F.710

A service feature defined by CCITT as essential for the basic operational mode, available in terminal or network on an international basis.

basic SDL

Rec. Z.100

Basic SDL is the subset of *SDL* defined in § 2 of Recommendation Z.100.

basic section of a virtual connection

Rec. X.134

A basic section of a virtual connection is either an access network section, a transit network section, an access circuit section, or an internetwork circuit section.

basic service

Recs. F.400, X.400

In the context of message handling, the sum of features inherent in a service.

basic service

Rec. Q.9

The fundamental type of service, or the most commonly provided service in a telecommunications network. It forms the basis upon which supplementary services may be added.

basic session reference

Rec. T.62

The basic session reference is used to identify a session. It consists of:

a) terminal identifier of the called terminal;
b) terminal identifier of the calling terminal;
c) date and time.

basic value

Rec. T.411

An attribute value, a control function parameter value or the value of any other capability that is unconditionally allowed in document interchange in the context of a given document application profile.

baud (Bd)

Rec. R.140

The unit of modulation rate; the number of bauds is equal to the reciprocal of the duration in seconds of the shortest signal element or of the unit interval in such signal.

Note – For example, if the duration of the unit interval is 20 ms, the modulation rate is 50 bauds.

Baudot telegraphy

Rec. R.140

Synchronous telegraphy, generally character interleaved telegraphy, using the International Telegraph Alphabet No. 1.

bearer

Rec. R.140

Common means of transmission e.g. common channel or bit stream used for a multiplexer.

bearer capability information

Rec. I.515

Specific information defining the lower layer characteristics of the network.

bearer channel (BC)

Rec. G.763

A bearer channel is a unidirectional, digital, transmission path from the transmit unit of one DCME to the receive unit of a second associated DCME and which is used to carry concentrated traffic between the two DCMEs.

Note 1 – A number of bearer channels in each direction of transmission form the both-way link required between two DCMEs. This link may be, for example, a 2048 kbit/s system.

Note 2 – A bearer channel may have any of the following instantaneous bit rates: 24, 32, 40 and 64 kbit/s.

bearer service

Recs. I.112, Q.9

A type of telecommunication service that provides the capability for the transmission of signals between user-network interfaces.

Note – The ISDN connection type used to support a bearer service may be identical to that used to support other types of telecommunication service.

bearer service

See:

service; bearer service.

behaviour; functional behaviour

Rec. Z.100

The *behaviour* or *functional behaviour* of a *system* is the set of sequences of responses to sequences of stimuli.

behaviour testing

Rec. X.290

Testing the extent to which the dynamic conformance requirements are met by the IUT.

BER excess

Rec. G.763

The percentage of time that the average BER exceeds $1 \cdot 10^{-3}$ when averaged over 1 minute. The value is given as an integer.

$$\text{BER excess} = \frac{\text{No. of 1 min periods in STI in which BER} > 1 \cdot 10^{-3}}{\text{No. of 1 min periods in STI}} \times 100$$

bias distortion

Rec. R.140

The telegraph distortion effecting a two-condition telegraph signal when the mean degrees of individual distortion are different from the two directions of change-over.

bid

Rec. E.411

An attempt to obtain a circuit in a circuit group or to a destination. A bid may be successful or unsuccessful in seizing a circuit in that circuit group or to that destination.

bid

Rec. E.600

A single attempt to obtain the use of a resource of the type under consideration.

Note – In a network management context, the absence of a qualification implies a bid to a circuit group, a route or a destination.

bidirectional

Rec. Q.9

A qualification which implies that the transmission of information occurs in both directions.

bidirectional

See:

two way; bidirectional.

bidirectional asymmetric

Rec. I.140

This value applies when the information flow characteristics provided by the service are different in the two directions.

bidirectional symmetric

Rec. I.140

This value applies when the information flow characteristics provided by the service are the same between two (or more) access points or reference points in the forward and backward directions.

bids per circuit per hour (BCH)

Rec. E.411

BCH is an indication of the average number of bids per circuit, in a specified time interval. It will therefore identify the demand and, when measured at each end of a both-way operated circuit group, will identify the direction of greater demand.

$$\text{BCH} = \frac{\text{Bids per hour}}{\text{Quantity of circuits available for service}}$$

It is not necessary to accumulate data for an hour to calculate BCH. However, the calculated BCH must be adjusted when data accumulation is less than hourly. For example, the bids should be doubled if 1/2 hour data is used. The result would be BCH for the data collection period.

bilateral control

Rec. G.701

Control between two synchronization nodes such that the frequency of the clock of each of these nodes is influenced by timing information derived from the clock of the other node.

billing error probability

Rec. E.800

The *probability* of an *error* when billing a *user* of a *service.*

billing integrity (probability)

Rec. E.800

The *probability* that the billing information presented to a *user* correctly reflects the type, destination and duration of the *call.*

binary digit; bit

Rec. G.701

A member selected from a binary set.

Note 1 – Bit is an abbreviation for binary digit.

Note 2 – In the interest of clarity, it is recommended that the term "bit" should not be used in two-condition start-stop modulation instead of "unit element".

binary figure

Rec. G.701

One of the two figures (that is, 0 or 1) used in the representation of numbers in binary notation.

binary numeral

Recs. Q.9, Z.341

A *numeral* in the binary (base 2) *numbering system,* represented by the characters 0 (zero), 1 (one) and optionally preceded by B' (B apostrophe).

binary rate

Rec. R.140

The aggregate rate in a transmission path expressed in bits per second.

Note 1 – The transmission rate is given by:

$$\sum_{i=1}^{i=m} \frac{1}{T_i} \log_2 n_i$$

where

m is the number of parallel transmission channels,

T_i is the shortest theoretical duration of signal element for the ith channel expressed in seconds, and

n_i is the number of significant conditions of the modulation in the ith channel.

For a single channel (serial transmission) it reduces to:

$$\frac{1}{T} \log_2 n;$$

with two-condition modulation ($n = 2$), it is $1/T$.

For a parallel transmission with equal minimum intervals and equal number of significant conditions on each channel, it is:

$$m \left(\frac{1}{T}\right) \log_2 n;$$

with two-condition modulation it reduces to m/T.

Note 2 – The symbol of the unit of binary rate is bit/s.

binary tariff system

Rec. D.000

The binary tariff system has two components:

a) a fixed component representing the costs involved in the acceptance and delivery of a telegram (fixed charge), and

b) a component proportional to the length of the telegram representing the costs involved in transmitting and receiving the telegram and the cost of using the telegraph network (charge per word).

In this binary tariff system, the accounting rate has the two components described in a) and b) above. No minimum rate for a certain number of words is applied.

binding

Rec. T.411

A pair comprising an identifier and a value, where the value may be of any type, may be specified by an expression, and is accessed through use of the binding identifier.

bindings

Rec. T.412

This attribute specifies a means for determining attribute values. The names specified by the parameter "binding name" are assigned by the application.

bipolar signal (deprecated)

See:
alternate mark inversion signal.

bipolar violation (deprecated)

See:
alternate mark inversion violation.

bit

See:
binary digit; bit.

bit combination

Recs. T.50, T.51, T.61

An ordered set of bits used for the representation of characters.

bit error ratio

Rec. Q.9

The ratio of the number of digital errors received in a specified period to the total number of digits received in the same period.

Note 1 – Numerical values of error ratio should be expressed in the form:

$$n \cdot 10^{-p}$$

where p is a positive integer.

Note 2 – Error ratio may be qualified for example by the term *bit* or *block*.

bit error ratio (BER)

Recs. E.800, M.60

The ratio of the number of bit errors to the total number of bits transmitted in a given time interval.

bit integrity

Rec. Q.551

The property of a digital half connection of a digital exchange in which the binary values and the sequence of the bits in an octet at the input of the half connection are reproduced exactly at the output.

Note – Digital processing devices such as A/μ law converters, echo suppressors and digital pads must be disabled to provide bit integrity.

bit integrity

Rec. Q.9

Exists when the values of the bits in each octet of a digital bit stream at the output of a device or system are unchanged from those at the input.

Note – Digital processing devices such as A/μ law converters, echo suppressors and digital pads must be disabled to provide bit integrity.

bit-interleaved transmission

Rec. R.140

Time-division multiplex telegraphy in which the signal elements of each character signal are transmitted on the common channel separated by signal elements belonging to other characters coming from different channels.

bit sequence independence

Rec. G.701

The property of a binary transmission channel, telecommunication circuit or connection, that permits all sequences of binary signal elements to be conveyed over it at its specified bit rate, without change to the value of any signal elements.

Note – Practical transmission systems that are not completely bit sequence independent may be described as quasi bit sequence independent. In such cases the limitations should be clearly stated.

bit timing

Rec. Q.9

Timing information sent from the Exchange Termination used by the Line Termination to recover information from the digital bit stream.

bits/sample for voice

Rec. G.763

The average number of encoding bits per sample for all TCs used for voice. The average should be calculated to two decimal places.

$$\text{Bits/sample for voice} = \frac{\sum_{N} \text{No. of bits within the BC used for voice}}{\sum_{N} \text{No. of non-preassigned TCs classified other than transparent, data or inactive.}}$$

bitstring type

Rec. X.208

A simple type whose distinguished values are an ordered sequence of zero, one or more bits.

Note – Encoding rules do not limit the number of bits in a bit-string.

block

Rec. I.113

A unit of information consisting of a **header** and an information field.

block

Gloss. (VI.3)

A group of 12 signal units on the signalling channel.

block

Rec. T.411

A type of basic layout component that corresponds to a rectangular area within a frame or a page.

block

Rec. Z.100

A *block* is part of a *system* or parent *block*. When used by itself, *block* is a synonym for a *block instance*. A *block* is a *scope unit* and provides a static interface.

block (data)

Rec. Q.9

A group of bits, or *n*-ary digits, transmitted as a unit over which an encoding procedure is generally applied for error-control purposes.

block (Signalling System No. 6)

Rec. Q.9

A group of 12 signal units on the signalling channel.

block-acknowledged counter

Gloss. (VI.3)

A cyclic counter provided within the signalling terminal to count the number of blocks acknowledged as received at the distant end.

block alignment

Rec. T.412

This attribute specifies the alignment of the block(s) used to present the content associated with this logical object within the available area(s) (see Rec. T.412, § 2.4.2), subject to satisfying constraints on placement specified by the attribute "offset" (see Rec. T.412, § 5.7.8). The alignment specified by this attribute is in the direction perpendicular to that specified by the attribute "layout path" of the lowest level frame(s) containing the block(s).

block area

Rec. Z.100

The *block area* is the definition of a *block* or a reference to a *block* in an *interaction diagram*.

block-completed counter

Gloss. (VI.3)

A cyclic counter provided within the signalling terminal to count the number of completed blocks transmitted.

block definition

Rec. Z.100

A *block definition* is the definition of a *block* in *SDL/PR.*

block diagram

Rec. Z.100

The *block diagram* is the definition of a *block* in *SDL/GR.*

block header

See:
header; block header.

block mode transmission

Rec. Z.341

A transmission characteristic in which all of the regular typewriter keys and some of the special purpose keys are only transmitted to the controlling processor, in a block, when a "send" key is activated.

block of parameters

Rec. Z.341

A set of *parameters* containing information necessary for the *system* to perform the *function* specified in the *command.*

block payload

Rec. I.113

The user information bits within a block.

block separation

Rec. E.131

Information indicating that the next character is the first character of a block of supplementary information.

block separator

Rec. E.131

The character indicating that the next character is the first of a block of supplementary information.

block substructure

Rec. Z.100

A *block substructure* is the *partitioning* of the *block* into *subblocks* and new *channels* at a lower *level of abstraction.*

block substructure definition

Rec. Z.100

A *block substructure definition* is the *SDL/PR* representation of a *block substructure* for a partitioned block.

block substructure diagram

Rec. Z.100

A *block substructure diagram* is the *SLD/GR* representation of a *block substructure* for a *partitioned block.*

block tree diagram

Rec. Z.100

A *block tree diagram* is an auxiliary document in *SDL/GR* representing the *partitioning* of a *system* into *blocks* at lower *levels of abstraction* by means of an inverted tree diagram (*i.e.*, parent *block* at the top).

blocked call attempt

Rec. E.600

A call attempt that is rejected owing to a lack of resources in the network.

blocked mode of operation

Rec. E.600

A mode of operation in which bids which find no suitable resources idle and accessible are not permitted to wait.

blocked traffic

Rec. E.600

The part of the overflow traffic that is not carried by subsequent pools of resources.

blocking

Rec. X.200

A function performed by an (N)-entity to map multiple (N)-service-data-units into one (N)-protocol-data-unit.

blocking acknowledgement message (BLA)

Rec. Q.762

A message sent in response to a blocking message indicating that the circuit has been blocked.

blocking-acknowledgement signal

Rec. Q.254

A signal sent in response to a blocking signal indicating that the speech circuit has been blocked.

blocking message (BLO)

Rec. Q.762

A message sent only for maintenance purposes to the exchange at the other end of a circuit, to cause an engaged condition of that circuit for subsequent calls outgoing from that exchange. When a circuit is used in the bothway mode of operation an exchange receiving the blocking message must be capable of accepting incoming calls on the concerned circuit unless it has also sent a blocking message. Under certain conditions, a blocking message is also a proper response to a reset circuit message.

blocking signal

Rec. Q.254

A signal sent for maintenance purposes to the exchange at the other end of a circuit to cause engaged conditions of that circuit for subsequent calls outgoing from that exchange. An exchange receiving the blocking signal must be capable of accepting incoming calls on that circuit unless it also has sent a blocking signal. Under conditions covered later, a blocking signal is also a proper response to a reset-circuit signal.

blocking signal (sent in the backward direction)

Rec. Q.120

This signal is sent, when required, to the outgoing end of the circuit to cause engaged conditions to be applied to the outgoing end of the international circuit.

The design of the signalling equipment at the outgoing end of international circuits should be such that the receipt of a blocking signal over a free circuit will cause that circuit to be engaged to operators or automatic equipment which would otherwise have access to it.

blocking signal (sent in the backward direction)

Rec. Q.400

A signal sent on an idle circuit to the outgoing exchange to cause engaged conditions (blocking) to be applied to this circuit, guarding it against subsequent seizure.

body

Recs. F.400, X.400

Component of a message. Other components are the heading and the envelope.

body part

Recs. F.400, X.400

Component of the body of a message.

booked call

Suppl. No. 2 (II.4)

A process whereby a subscriber may have his *terminal* called by the network at a given time, with or without an audible signal.

booking of telephone calls (prefix 17)

Recs. E.216, F.126

Prefix 17 will allow the caller to book a telephone call via the telex service.

This telex message will be routed to the relevant international (or national) telephone operator.

Boolean

Rec. Z.100

Boolean is a *sort* defined in a predefined *partial type definition* and has the *values* True and False. For the *sort Boolean* the predefined *operators* are NOT, AND, OR, XOR and implication.

Boolean type

Rec. X.208

A simple type with two distinguished values.

border

Rec. T.412

This attribute specifies a border, consisting of a border line and border freespace, for the edges of a frame or block component (see Rec. T.412, § 3.3.5).

border area

Rec. Z.341

That part of a *visible display* which is physically unavailable for displaying or entering data.

both-way

Rec. Q.9

A qualification applying to traffic which implies that call set-ups occur in both directions.

Note – The amount of traffic flowing in the two directions is not necessarily equal either in the short term or in the long term.

bottom edge

Rec. T.411

The edge of the positioning area of a basic layout object that is in the direction of the line progression.

bottom left corner

Rec. T.411

The corner of a layout object that is least progressed in the horizontal direction and most progressed in the vertical direction of this layout object.

bottom right corner

Rec. T.411

The corner of a layout object that is most progressed both in the horizontal and vertical directions of this layout object.

boundary

See:

section boundary; boundary.

BQ cycle; response cycle

Rec. R.140

The repetition cycle transmitted in an error detecting and feedback system when signal repetition is received.

Note – See CCIR Recommendation 342-2.

branch line multiplex

Rec. R.140

A multiplex whose capacity is a submultiple of that of a main multiplex and which gives the possibility to group a certain number of channels of the latter in order to extend or divert them into a specific direction with the aim, for example, to connect a small group of subscribers.

break-in hangover time

Rec. G.164

The time interval between the instant when defined test signals, applied to the send- and/or receive-in ports, are altered in a defined manner such as to restore suppression and the instant when suppression is restored. The hangover time for removal of loss in the receive path may be longer than that for restoration of suppression.

break of service

See:

interruption; break of service.

breakdown

See:
spark-over.

bridged tap

Recs. G.960, I.430

A length of unused open circuit line that is "T"ed to the customer line to provide flexibility in the local line distribution network.

Note – Bridged taps are not used in all local line distribution networks.

bridging loss

Rec. M.60

A term frequently used when a measuring instrument is connected (bridged) across a transmission path or telephone channel. The bridging loss is the resulting reduction in the signal level, and is usually expressed in dBs.

broadband

Rec. I.113

A service or system requiring transmission channels capable of supporting rates greater than the primary rate.

broadband access

Rec. I.113

An ISDN access able to contain at least one channel capable of supporting a rate greater than the primary rate, or supporting an equivalent information transfer rate.

broadband communication channel

Rec. I.113

A standard portion of the information payload capacity, available to the user for ISDN services. A broadband communication channel exists only during a call, as set-up by a signalling or administrative procedure. The throughput supported by the broadband communication channel may be deterministic or statistical.

broadband unrestricted bearer services

Rec. I.121

Bearer services which provide unrestricted end-to-end transfer of digital information without alteration between S_B/T_B reference points and require broadband channel rates. User information is transferred over standardized broadband channels for STM (circuit) services or a virtual channel of defined capacity for ATM based services; signalling is provided over a signalling channel.

broadband videotex services

Rec. I.121

Broadband Videotex services are interactive services which provide, through appropriate access by standardized procedures, for users of broadband videotex terminals to communicate with data bases via telecommunications networks.

broadcast

Rec. I.113

A value of the service attribute "communication configuration", which denotes unidirectional distribution to all subscribers.

Note – This term should not be confused with the term "broadcasting service" as defined in the ITU Radio Regulations.

broadcast call

Suppl. No. 2 (II.4)

A *multi-address call* in which signals are transmitted simultaneously by the calling *terminal* to all the called terminals.

broadcast communication

Rec. I.140

This value applies when more than two access points (see Note) are provided by the service. The information flows from a unique point (source) to the others (destination) in only one direction.

Note – The number of destination access points is undefined.

broadcast conference call

Suppl. No. 2 (II.4)

A *restricted conference call* in which only one nominated *terminal* can transmit to and receive from the other terminals.

broadcast repeater

Rec. R.140

A repeater connecting several channels, one incoming and the other outgoing.

broadcast videography; teletext

Suppl. No. 1 (II.4)

Videography in which information is broadcast in a structured sequence within the framework of a television signal, and the desired part of this information is selected by the user.

Note 1 – Information may be transmitted simultaneously with normal television pictures.

Note 2 – The terms "teletext" and "teletex" refer to two different concepts.

broadcasting

*Series X**

This optional user facility provides the user with the capability to establish a connection between $n + 1$ DTEs. One DTE, called the master DTE, transmits towards the n other tributary DTEs.

broadcasting organization

Recs. D.180, N.1, N.51

A broadcasting organization is an organization which is concerned with either or both sound and television broadcasting. Most of the customers ordering facilities for sound-programme and television transmission are broadcasting organizations; for convenience, the term broadcasting organization is used to denote the activity of any user or customer and, where so used, it is equally applicable to any other customer requiring sound-programme or television transmissions.

broadcasting organization (receive)

Rec. J.13

The broadcasting organization at the receiving end of the sound programme being transmitted over the international sound-programme connection.

broadcasting organization (receive)

Rec. N.1

The broadcasting organization at the receiving end of an international sound-programme transmission.

broadcasting organization (receive)

Rec. N.51

The broadcasting organization at the receiving end of an international television transmission.

broadcasting organization (send)

Rec. J.13

The broadcasting organization at the sending end of the sound programme being transmitted over the international sound-programme connection.

broadcasting organization (send)

Rec. N.1

The broadcasting organization at the sending end of an international sound-programme transmission.

broadcasting organization (send)

Rec. N.51

The broadcasting organization at the sending end of an international television transmission.

BROWSE

Rec. Z.333

Display sequentially the current values of items in a data set. The user may examine the data items in either the forward or backward direction.

browse

Rec. Z.341

An *action* to display sequentially the current values of items in a *data set*; the *user* may examine the data items in either the forward or backward direction.

bug

Suppl. No. 6 (II.3)

A software *defect* caused by a *mistake.*

bunched frame alignment signal

Recs. G.701, Q.9

A frame alignment signal whose signal elements occupy consecutive digit time slots.

bundle

See:
clique; bundle.

bureaufax

Suppl. No. 1 (II.4)

International public facsimile service between public bureaux (see Recommendation F.170). Administrations may adopt another more commercial name (for example, Publifax) for the Bureaufax service which they offer to their users.

burn-in

Suppl. No. 6 (II.3)

A process of *reliability improvement* of hardware, employing operation of every *item* in a prescribed environment, with successive *fault correction*, replacement or removal at every *failure*, during the steeply falling *failure intensity* period within the *early failure period.*

burst mode (deprecated)

See:

time compression multiplex.

bus

See:

highway.

business category

Rec. F.500

Attribute type which specifies the commercial activity of some common objects, e.g. people.

busy

Rec. I.221

An ISDN destination is considered to be busy if either a "network determined user busy" or a "user determined user busy" condition occurs, as described in Recommendation I.221, § 3.1.

busy

Rec. Q.9

Condition of a resource which is in use, following its seizure for the time until it is released.

busy (state)

Rec. E.600

Condition of a resource following its seizure.

busy-flash seizure ratio (BFSR)

Rec. E.411

BFSR gives the relationship between the number of seizures that result in a "busy-flash" signal (or its equivalent) and the total number of seizures. Measurement of BFSR is usually made on a circuit group basis.

$$\text{BFSR} = \frac{\text{Seizures resulting in a "busy-flash"}}{\text{Total seizures}} \times 100$$

Note – The source of "busy-flash" signals, or their equivalent, will vary with the signalling system used. Therefore, the calculated BFSR on individual circuit groups may naturally be different, and as a result, caution should be used when comparing BFSR among circuit groups.

busy-flash signal (sent in the backward direction)

Rec. E.411

This signal is sent to the outgoing international exchange to show that either the circuit group, or the called subscriber, is busy (Signalling Systems No. 4 and No. 5, see Recommendations Q.120 and Q.140).

busy-flash signal (sent in the backward direction)

Rec. Q.120

This signal is sent to the outgoing international exchange to show that either the route or the called subscriber is busy. The conditions of use of this signal are as follows:

a) An international transit exchange *must* send this signal to indicate that there is congestion at that exchange or on the appropriate outgoing routes.

b) An incoming international exchange *must* send this signal if there is congestion at that exchange or on the outgoing routes directly connected to it, but sending the signal is *optional* when there is congestion beyond that exchange (when there is congestion at a point in the national network of the incoming country or when the called subscriber's line is busy). This signal is optional because there are several countries that do not send it from their national networks.

Note – The receipt of the busy-flash signal at the outgoing exchange will cause:

– an appropriate indication to be given to the outgoing operator or to the calling subscriber; and

– in automatic working, the sending of the clear-forward by the outgoing exchange to release the international connection (except when otherwise arranged, for example, in the case of observations on circuits).

busy-flash signal (sent in the backward direction)

Rec. Q.140

This signal, which is sent only after the proceed-to-send signal, is sent to the outgoing international exchange to show that either the route, or the called subscriber, is busy. The conditions of use of this signal are as follows:

a) An international transit exchange *must* send this signal after register association, to indicate that there is congestion at that exchange or on the appropriate outgoing routes.

b) An incoming international exchange *must* send this signal, after register association, if there is congestion at that exchange or on the outgoing routes directly connected to it, but sending the signal is *optional* when there is congestion beyond that exchange (when there is congestion at a point in the national network of the incoming country or when the called subscriber's line is busy). This signal is optional because there are several countries that do not send it from their national networks.

Note – The receipt of the busy-flash signal at the outgoing exchange will cause:

– an appropriate indication to be given to the outgoing operator or to the calling subscriber; and

– the sending of the clear-forward signal by the outgoing exchange to release the international connection (except when otherwise arranged, for example, in this case of observations on circuits).

busy hour

Rec. E.600

The continuous 1-hour period lying wholly in the time interval concerned for which the traffic or the number of call attempts is greatest.

busy signal

See:

engaged; busy signal.

busy state

Suppl. No. 6 (II.3)

The state of an *item* in which it performs a *required function* for a user and for that reason is not accessible by other users.

busy test

Rec. Q.9

A procedure for determining whether a traffic carrying device is free and available for use.

busy test

See:

engaged test; busy test.

busy tone

Rec. E.182

A tone advising the caller that the telephone number is busy.

byte

Rec. T.51

A bit string that is operated upon as a unit and the size of which is independent of redundancy or framing techniques.

C

C-channel

See:
control channel; C-channel.

call

Rec. E.600

A generic term related to the establishment, utilization and release of a connection. Normally a qualifier is necessary to make clear the aspect being considered, e.g. call attempt.

call

Rec. P.10

The establishment and use of a *complete connection* following a *call attempt*

call

Rec. Q.9

In an automatic system, the action performed by a calling party in order to obtain communication with the wanted terminal equipment and by extension, the operations controlled by the action performed.

call

Rec. Q.9

The use, or the possible use, of a complete connection set up between a calling party and the called party or service (see Note 2 of the definition of the term *communication* from Recommendation Q.9).

call

Rec. T.62

The temporary connection (or apparent connection as perceived by the caller) of one terminal to another for the purpose of exchanging information.

(telex) call

U.140

The establishment and possible use of a complete connection by connected telex terminals.

call (in signalling)

Rec. Q.9

An association between two or more users, or between a user and a network entity, that is established by use of network capabilities. This association may have zero or multiple information exchange mechanisms established within this call, for example in connection-oriented or in connectionless modes.

call abandonment probability

Rec. E.800

The *probability* that a *user* abandons the *call attempt* to a telecommunication network.

call accepted signal

U.140

A signal sent over the return channel, indicating that the call can be accepted by a terminal.

call attempt

Rec. E.600

An attempt to achieve a connection to one or more devices attached to a telecommunications network.

Note – At a given point in the network a call attempt is manifested by a single unsuccessful bid, or a successful bid and all subsequent activity related to the establishment of the connection.

call attempt (by a user)

Rec. P.10

A sequence of operations made by a user of a telecommunication network trying to obtain the desired user or service.

Associated term: to *call*

call attempt (of a user)

Rec. Q.9

The sequence of operations made by a user of a telecommunication network to obtain another party or a service.

Note – Several call attempts may be required to establish a call.

call clear-down; connection release

Rec. Q.9

A sequence of events that follows initiation of a release condition by one or more of the parties or entities involved in a call, which leads to the disconnection of communication paths used for that call.

call clear failure probability

Rec. X.136

Call clear failure is defined with reference to events at the boundaries of a virtual connection section (B_i, B_j). A call clear attempt occurs when a clean request or clear indication packet enters the section creating a packet layer reference event at B_i. A call clear failure occurs when no corresponding clear indication packet layer reference event occurs at B_j within 180 seconds. The relevant PEs are listed in Table 10/X.136.

Call clear failure probability for a virtual connection section is the ratio of call clear failures to call clear atempts in a population of interest.

call clearing delay

Rec. U.140

The interval of time between the beginning of the sending of the clearing signal by a terminal and the appearance of the free circuit condition on the return line.

call collision at the DTE/DCE interface

*Series X**

The occurrence of the simultaneous transmission of a *call request* signal from the DTE and an *incoming call* signal from the DCE so that neither equipment receives the expected responses.

call-confirmation signal

Rec. U.140

A return switching signal, in response to a calling signal, to acknowledge the receipt of the calling signal.

call congestion

Rec. E.600

The probability that a bid to a particular pool or resources will not result in an immediate seizure.

call-connected signal

Rec. U.140

The switching signal returned over the backward signalling path to indicate that the call is extended to the called station.

call control procedure

Rec. U.140

The entire set of interactive signals necessary to establish, maintain and release a call.

call demand

Rec. E.600

A call intent that results in a first call attempt.

call establishment

*Series X**

The sequence of events for establishment of a data connection.

call establishment; connection establishment

Rec. Q.9

The sequence of events in an exchange and/or signalling system necessary to establishing a call, in reponse to a call attempt generated by a user.

call-failure signal

Rec. Q.254

A signal sent in the backward direction indicating the failure of a call set-up attempt due to the lapse of a time-out or a fault not covered by specific signals and where the congestion tone is the appropriate tone to be returned to the calling party.

call-failure signal

Rec. Q.9

A signal sent in the backward direction indicating the failure of a call set-up attempt due to the lapse of a time-out or a fault not covered by specific signals.

call forwarding busy (CFB)

Rec. I.250

A supplementary service which permits a served user to have the network send to another number all incoming calls for the served user's ISDN number (or just those associated with a specified basic service) which meet busy at the served user's ISDN number. The served user's originating service is unaffected.

call forwarding busy (CFB)

Rec. Q.82

Call forwarding busy (CFB) permits a served user to have the network send all incoming calls, or just those associated with a specific basic service, which meet busy and are addressed to the served user's ISDN number to another number. The served user's originating service is unaffected.

call forwarding busy service

Rec. Q.730

Permits a served user to have the network send all incoming calls, or just those associated with a specified basic service, addressed to the served user's ISDN number, to another Number if the served user is in the busy state (user busy, either Network Determined User Busy (NDUB) or User Determined User Busy (UDUB). Recommendation I.252 contains the definitions for busy in an ISDN environment (NDUB occurs when both B-channels are busy for example).

call forwarding may occur indicator

Rec. Q.762

Information sent in the backward direction indicating that call forwarding may occur, depending on the response received (or lack thereof) from the called party.

call forwarding no reply (CFNR)

Rec. I.250

A supplementary service which permits a served user to have the network send to another number all incoming calls for the served user's ISDN number which meet no reply (or just those associated with a specific basic service which meet no reply). The served user's originating service is unaffected.

call forwarding no reply (CFNR)

Rec. Q.82

Call forwarding no reply (CFNR) permits a served user to have the network send all incoming calls, or just those associated with a specific basic service, which meet no reply and are addressed to the served user's ISDN number to another number. The served user's originating service is unaffected.

call forwarding no reply service

Rec. Q.730

Permits a served user to have the network send all incoming calls, or just those associated with a specified bearer service, addressed to the served user's ISDN number to another Number if the served user does not respond to the alerting within a specified time period.

call forwarding unconditional (CFU)

Rec. I.250

A supplementary service which permits a served user to have the network send to another number all incoming calls for the served user's ISDN number (or just those associated with a specified basic service). The served user's originating service is unaffected. If this service is activated, calls are forwarded regardless of the condition of the termination.

call forwarding unconditional (CFU)

Rec. Q.82

Call forwarding unconditional (CFU) permits a user to have the network send all incoming calls, or just those associated with a specific basic service, addressed to the served user's ISDN number to another number. The served user's originating service is unaffected. If this service is activated, calls are forwarded no matter what the condition of the termination. Other call forwarding services provide call forwarding based on condition, e.g. call forwarding busy (CFB) and call forwarding no reply (CFNR).

call forwarding unconditional service

Rec. Q.730

Permits a served user to have the network send all incoming calls, or just those associated with a specified basic service, addressed to the served user's ISDN number to another number. This forwarding occurs regardless of the condition of the termination (busy or idle) and without the subscriber being given the opportunity to answer the call.

call hold

Rec. I.250

A supplementary service which allows a user to interrupt communications on an existing call/connection and then subsequently, if desired, reestablish communications.

call hold service

Rec. Q.83

A service allowing a user to interrupt communications on an existing call/connection may or may not be reserved after the communication is interrupted to allow the origination or possible termination of other calls. Reservation must be provided by the service provider as a user option. The Call Hold service includes the Retrieve operation which re-establishes communication on a B-Channel between the served user and the held party.

call identifier

*Series X**

A network utility which is an identifying name assigned by the originating network for each established or partially established virtual call and, when used in conjunction with the calling DTE address, uniquely identifies the virtual call over a period of time.

call identity

Rec. Q.762

Information sent in the call reference parameter indicating the identity of a call in a signalling point.

call in software; procedure call

Rec. Q.9

The use of a procedure name in an expression or statement which causes the execution of the procedure when encountered.

call information

Rec. E.182

Call information includes normal address information, control codes for supplementary services, and other information dialled or keyed by the subscriber.

call intent

Rec. E.600

The desire to establish a connection to a user.

Note – This would normally be manifested by a call demand. However, demands may be suppressed or delayed by the calling user's expectation of poor Quality of Service performance at a particular time.

call modification completed message (CMC)

Rec. Q.762

A message sent in response to a call modification request message indicating that the requested call modification (e.g. from voice to data) has been completed.

call modification reject message (CMRJ)

Rec. Q.762

A message sent in response to a call modification request message indicating that the request has been rejected.

call modification request message (CMR)

Rec. Q.762

A message sent in either direction indicating a calling or called party request to modify the characteristics of an established call (e.g. from data to voice).

call not accepted signal

U.140

A call control signal sent by the called terminal to indicate that it does not accept the incoming call.

call pattern

Rec. E.711

A specific sequence of events and inter-event times generated by a call demand and modelled by traffic variables as described in Recommendation E.711, § 3. Each teleservice class can be modelled by a mix of call patterns, each corresponding to a set of teleservice attributes.

call phases (Teletex service)

Rec. F.200

The five phases of a Teletex call that cover the activities between the calling terminal's call request signal and the disconnection of the terminals are:

a) call set-up;
b) pre-information sequence;
c) information transmission;
d) post-information sequence;
e) call clearing.

call processing tasks

Rec. Q.9

Functions performed in handling traffic.

call progress message (CPG)

Rec. Q.762

A message sent in the backward direction indicating that an event has occurred during call set-up which should be relayed to the calling party.

call progress signal

*Series X**

A *call control* signal transmitted from the DCE to the calling DTE to inform it about the progression of a call or the reason why the connection could not be established or any other network condition.

Additionally for packet services, a control signal:

- for the virtual call service to inform the calling and called DTEs the reason why the call has been cleared;
- for the permanent virtual circuit service, to inform the DTEs the reason why the permanent virtual circuit has been reset;
- for the datagram service, to inform the source DTE about the delivery or nondelivery of a specific datagram, or general operation of the DTE/DCE datagram interface or service.

Note 1 – Definitions of specific *call progress* signals can be found in Recommendation X.96.

Note 2 – The term *service signal* can be considered as a synonym for the term *call progress signal.*

call re-direction

Suppl. No. 2 (II.4)

A facility that permits a call to be redirected to a previously nominated alternative destination upon the request of the called subscriber with advice by a *service signal* to the calling terminal.

call reference

Rec. Q.762

Circuit independent information identifying a particular call.

call release delay

Rec. E.721

The time interval from the instant the DISCONNECT message is passed by the user terminal which terminated the call to the access signalling system, until the RELEASE message is received by the same terminal (indicating that the terminals can initiate/receive a new call).

call request

Rec. E.100

The first application made by the caller for a telephone call is called the call request.

In automatic service, the operation of the dial (or key-set) by the caller to obtain a call with his correspondent is comparable to the call request.

call request signal

*Series X**

A signal in the call establishment phase which alerts the DCE that the DTE wishes to make a call.

call rerouting

Rec. X.110

The action of changing a proposed *call route* during the attempted establishment of a *connection.* (See Figure A-1/X.110.)

call route

Rec. X.110

The sequence of circuits that is used to provide a *connection* between two points. (See Figure A-1/X.110.)

call routing

Rec. E.600

The selection of appropriate circuit subgroups or individual circuits for a particular call attempt.

call routing

Rec. X.110

The action taken by an exchange of selecting a given *call route* from a number of *traffic routes.* (See Figure A-1/X.110.)

call set-up

Rec. Q.9

The state reached in establishing a communications path between the calling and called parties, and/or network entities, when information can be passed.

call set-up delay

Rec. Q.543

Call set up delay is defined as the interval from the instant when the signalling information required for outgoing circuit selection is received from the incoming signalling system until the instant when the corresponding signalling information is passed to the outgoing signalling system.

For originating 64 kbit/s circuit switched connections (types I, II and III option a):

i) If overlap sending is used, the interval starts when the information message received contains a "sending complete" indication or the address information for call set up is complete.

ii) If en-bloc sending is used, the time interval starts when the SETUP message has been received from the user signalling system.

For transit 64 kbit/s circuit switched connections between circuits that use CCITT Signalling System No. 7, the requirements of Recommendations Q.725 and Q.766 should apply for T_{cu} value (case of a processing intensive message).

call set-up delay at a section boundary, B_i

Rec. X.135

It is the period of time that starts when either a call request or an incoming call packet creates a PE at B_i, and ends when the corresponding call connected or call accepted packet, accepting the virtual call, returns and creates its PE at B_i.

Call set-up delay at a section boundary = $\{t_2 - t_1\}$ where

t_1 = Time of occurrence for the first PE.

t_2 = Time of occurrence for the second PE.

call set-up delay between two section boundaries

Rec. X.135

For a particular virtual call, call set-up delay can be measured at one boundary, B_i, and measured at another boundary, B_j, further from the calling DTE. The difference in the values obtained is the call set-up delay contributed by the virtual connection section(s) between the two boundaries.

Call set-up delay between two section boundaries = $\{d_1 - d_2\}$ where

d_1 = Call set-up delay measured at B_i.

d_2 = Call set-up delay measured at B_j.

call set-up error probability

Rec. X.136

Call set-up error probability is the ratio of total call attempts that result in call set-up error to the total call attempts in a population of interest.

With reference to Figure 2/X.136, a call set-up error is defined to occur on any call attempt in which event (d) occurs, but event (c) does not occur within a 200-second timeout period.

call set-up failure probability

Rec. X.136

Call set-up failure probability is the ratio of total call attempts that result in call set-up failure to the total call attempts in a population of interest.

With reference to Figure 2/X.136, call set-up failure is defined to occur on any call attempt in which either one of the following outcomes is observed within a 200-second timeout period.

1) Both events (b) and (d) do not occur.

2) Events (b) and (c) occur, but event (d) does not.

Note – Recommendation X.96 places limits on the frequency at which a DTE can repeat call attempts to a given destination.

Call attempts that are cleared by the section as a result of incorrect performance or nonperformance on the part of an entity outside the section are excluded.

call set-up time

Rec. U.140

The interval of time between the sending of the calling signal by the calling party and the reception of the call-connect signal.

call-sign ; answer-back code

Rec. S.140

Unique sequence of *characters* identifying a particular *telegraph terminal* or *data station.*

call spill-over

Rec. Q.9

Receipt of an abnormally delayed signalling message from a previous call at a switching centre whilst a new call is being set up on that circuit.

call string

Rec. E.600

All the call attempts related to a single demand.

call transfer

Rec. I.250

A supplementary service which enables a user to transfer an established (i.e. active) call to a third party. For the original call, the served user may have been either the calling or called party (i.e. it may have been either an incoming or outgoing call).

call waiting

Rec. I.250

Asupplementary service which permits a subscriber to be notified of an incoming call (as per Basic Call procedures) with an indication that no interface information channel is available. The user then has the choice of accepting, rejecting or ignoring the waiting call (as per Basic Call procedures).

call waiting services

Suppl. No. 1 (II.2)

A subscriber engaged on an existing call is given an indication that a caller is attempting to obtain connection to his number.

call waiting supplementary service

Rec. Q.83

A service allowing a subscriber to be notified of an incoming call (as per basic call procedures) with an indication that no interface information channel is available.

The user then has the choice of accepting, rejecting or ignoring the waiting call (as per basic call procedures).

call waiting tone

Rec. E.182

A tone advising the user of the call waiting supplementary service who is engaged on a call that someone is attempting to call his number.

called NS-user

Rec. X.213

A NS user with whom a calling NS user wishes to establish an NC.

Note – Calling NS users and called NS-users are defined with respect to a single NC. A NS-user can be both a calling and a called NS-user simultaneously.

called/calling party address

Glos. (VI.7, VI.8, VI.9)

An address within an SCCP message, consisting of any combination of signalling point code, global title and subsystem number.

called party address

See:
calling/called party address.

called party number

Rec. Q.762

Information to identify the called party.

called party's category indicator

Rec. Q.762

Information sent in the backward direction indicating the category of the called party, e.g. ordinary subscriber or payphone.

called party's status indicator

Rec. Q.762

Information sent in the backward direction indicating the status of the called party, e.g. subscriber free.

called SS-user

Rec. X.215

An SS-user with whom a calling SS-user wishes to establish a session connection.

Note – Calling SS-users and called SS-users are defined with respect to a single connection. A SS-user can be both a calling and called SS-user simultaneously.

called TA

Rec. V.110

The TA terminal adaptor accepting the connection.

called terminal

Recs. F.200, T.62

That equipment to which a call is made.

called terminal

Rec. T.62 bis

A terminal with whom a calling terminal wants to establish a connection.

called TS-user

Rec. X.214

A Transport service user with whom a calling TS user wishes to establish a transport-connection.

Note – Calling TS users and called TS users are defined with respect to a single connection. A Transport service user can be both a calling and a called TS user simultaneously.

caller waiting tone

Rec. E.182

A tone advising a caller that a called station, though busy, has a call waiting service active.

calling line identification presentation (CLIP)

Recs. I.250, Q.81

A supplementary service offered to the called party which provides the calling party's ISDN-number, possibly with sub-address information, to the called party.

calling line identification restriction (CLIR)

Recs. I.250, Q.81

A supplementary service offered to the calling party to restrict presentation of the calling party's ISDN-number and sub-address to the called party.

calling NS-user

Rec. X.213

A NS-user that initiates an NC establishment request.

Note – Calling NS-users and called NS-users are defined with respect to a single NC. A NS-user can be both a calling and a called NS-user simultaneously.

calling number indication service

Suppl. No. 1 (II.2)

A service whereby the calling subscriber's number can be identified by means of a visual or verbal indication at the called terminal. No variants identified so far.

calling/called party address

Rec. Q.712

The "calling/called party address" parameter field contains enough information to uniquely identify the origination/destination signalling point and/or the SCCP service access point.

It can be any combination of a global title (dialled digits for example), a signalling point code, and a subsystem number. The subsystem number (SSN) identifies a SCCP user function when provided.

In order to allow the interpretation of this address, it begins with an address indicator indicating which information elements are present. The address indicator also includes a routing indicator specifying if translation is required, and a global title indicator specifying global title format.

The "calling/called party address" parameter field has two different meanings depending on whether it is included in a connection-oriented or connectionless message.

For a connection-oriented message, the significance of these fields is related to the direction of the connection setup (i.e. independent of the direction the message is going.

For a connectionless message, the significance of these fields is dependent on the direction the message is going (just as for OPC and DPC).

calling party address

See:

called/calling party address.

calling party address request indicator

Rec. Q.762

Information sent in the backward direction indicating a request for the calling party address to be returned.

calling party address response indicator

Rec. Q.762

Information sent in response to a request for the calling party address, indicating whether the requested address is included, not included, not available or incomplete.

calling party number

Rec. Q.762

Information sent in the forward direction to identify the calling party.

calling party number incomplete indicator

Rec. Q.762

Information sent in the forward direction indicating that the complete calling party number is not included.

calling party's category

Rec. Q.762

Information sent in the forward direction indicating the category of the calling party and, in case of semi-automatic calls, the service language to be spoken by the incoming, delay and assistance operators.

calling-party's-category indicator

Rec. Q.254

Information sent in the forward direction about the *category of the calling party* and, in case of semi-automatic calls about the *service language* to be spoken by the incoming, delay and assistance operators.

The following categories are provided:

- operator,
- ordinary calling subscriber,
- calling subscriber with priority,
- data call,
- test call.

calling party's category indicator

Rec. Q.9

Information sent in the forward direction denoting the category of the calling party which is used together with other call set-up information to select the appropriate call treatment.

calling party's category request indicator

Rec. Q.762

Information sent in the backward direction indicating a request for the calling party's category to be returned.

calling party's category response indicator

Rec. Q.762

Information sent in response to a request for the calling party's category, indicating whether or not the requested information is included in the response.

calling party's category signals (sent in the forward direction)

Rec. Q.400

A special group of signals providing, in addition to the information contained in the language or discrimination digit, supplementary information concerning the nature of the call (i.e. whether national or international) and its origin.

Typical categories are:

- operator capable of sending the forward-transfer signal;
- ordinary subscriber or operator with no forward-transfer facility;
- subscriber with priority;
- data transmission call;
- maintenance call.

calling rate

Rec. E.600

The number of call attempts at a given point, over a period of time, divided by the duration of the period.

calling signal

U.140

A forward switching signal retransmitted on a circuit or a subscriber's line to indicate that the setting up of a call is requested.

calling SS-user

Rec. X.215

A SS-user that initiates a session connection establishment request. *Note* – Calling SS-users and called SS-users are defined with respect to a single connection. A SS-user can be both a calling and a called SS-user simultaneously.

calling station response

Rec. V.25

A tone or signal transmitted from the calling data circuit terminating equipment (DCE) in response to its detection, as defined in Recommendation V.25, of answering tone.

calling TA

Rec. V.110

The terminal adaptor requesting connection to be established.

calling terminal

Recs. F.200, T.62

That terminal that initiates the procedures to establish a call.

calling terminal

Rec. T.62 bis

The terminal that initiates the procedures to establish a connection.

calling tone

Rec. V.25

The tone transmitted from the calling end. This may be 1300 Hz or any tone corresponding to binary 1 of the data circuit terminating equipment (DCE) in use.

calling TS-user

Rec. X.214

A Transport service user that initiates a transport connection establishment request. *Note* – Calling TS-users and called TS-users are defined with respect to a single connecion. A transport service user can be both a calling and a called TS user simultaneously.

camp-on : connect when free

Suppl. No. 2 (II.4)

The holding by the network of a call attempt that was unsuccessful due to the called *terminal(s)* being busy or due to network congestion, with subsequent automatic connection as soon as possible.

camp-on with recall

Suppl. No. 2 (II.4)

A *camp-on* with the release of the calling *terminal* and recall as soon as possible.

cancellation (A_{CANC})

Rec. G.165

The attenuation of the echo signal as it passes through the send path of an echo canceller. This definition specifically excludes any nonlinear processing on the output of the canceller to provide for further attenuation.

See Figure 4/G.165.

candidate MSC

Rec. Q.1001

A candidate MSC is a MSC which controls cells that could be candidates for receiving a call in case of a handover.

capabilities of an IUT

Rec. X.290

That set of functions and options in the relevant protocol(s) and, if appropriate, that set of facilities and options of the relevant service definition which are supported by the IUT.

capability

Rec. E.800

The ability of an *item* to meet a demand of a given size under given internal conditions.

Note 1 – Internal conditions refer, for example, to any given combination of *faulty* and not *faulty* sub-items.

Note 2 – This is also called *trafficability performance.*

capability testing

Rec. X.290

Testing to determine the capabilities of an IUT.

Note – This involves checking all mandatory capabilities and those optional ones that are stated in the PICS as being supported, but not checking those optional ones which are stated in the PICS as not supported by the IUT.

carriage return

Rec. S.140

A *format effector* that returns the printing or display position to the commencement point of the line.

carrier transmission

Rec. R.140

A transmission in which the telegraph signals from a transmitter modulate an alternating current.

case shift

Rec. S.140

The change over of the translating mechanism of a telegraph receiving apparatus from one case of *character* to the other case of character.

cataleptic failure

Suppl. No. 6 (II.3)

A *sudden failure* which results in a *complete fault.*

catastrophic failure (deprecated)

See:
cataleptic failure.

category of access

*Series X**

A method by which a data terminal equipment may gain access to the public data transmission services in which data signalling rate and DTE/DCE interface requirements are standardized. Defined methods include direct connection to public data networks or integrated services digital networks and a variety of switched connections to those networks via other public networks.

cause value

Rec. Q.762

Information sent in either direction indicating the reason for sending the message (e.g. release message).

CCITT service

Rec. X.300

Services defined in CCITT Recommendations, to be marketed to the users by Administrations. Different types of CCITT services may be marketed as follows:

a) Data transmission services, as defined in Recommendation X.1 and X.2 (i.e. circuit switched and packet switched data transmission services and leased circuit services);

b) Services involving additional functions, on top of those functions providing transmission capability (e.g. PAD, Telex, Teletex).

On top of data transmission service, users may establish a privately defined application.

This concept is assumed to be equivalent to telecommunication service.

cell

Rec. I.113

A block of fixed length identified by a label at layer 1 of the OSI reference model.

cell

Recs. Q.9, Q.1001

The area covered by a base station, or by a sub-system (sector antenna) of that base station corresponding to a specific logical identification on the radio path, whichever is smaller.

Every mobile station in a cell may be reached by the corresponding radio equipment of the base station.

central processing unit

Rec. Q.9

A processor which controls and coordinates the processing of traffic in an exchange.

centralized-clock interface

Rec. G.701

An interface across which, for both directions of transmission of the signals to be transferred, the associated timing signals of both the exchange terminal on the line side and the exchange terminal on the service side are supplied from a centralized clock.

Note – The timing of the centralized clock may be derived from a nominated incoming line signal.

centralized clock interface

Rec. Q.9

An interface wherein for both directions of transmission of the information signal, the associated timing signals of both the exchange terminal on the line side and the exchange terminal on the service side are supplied from a centralized clock, which may be derived for example from certain incoming line signals (see Figure 4/Q.9).

centralized multi-endpoint-connection

Rec. X.200

A multi-endpoint-connection where data sent by the entity associated with the central connection-endpoint is received by all other entities, while data sent by one of the other entities is only received by the central entity.

centralized multipoint

*Series X**

An optional user facility which enables a central DTE to transmit data simultaneously to two or more remote DTEs, and to receive data transmitted by the remote DTEs one at a time. Data transmitted by a remote DTE is not delivered to other remote DTEs.

centred

Rec. T.411

1) The result of a layout or imaging process that positions the sequence of character images for a line such that the distance from the line home position to the position point of the first character image is approximately equal to the distance from the escapement point of the last character image to the end edge of the positioning area.

2) A tabulation alignment that positions the sequence of character images for a specified character string such that the distance from the position point of the first character image to the tabulation stop is approximately equal to the distance from the tabulation stop to the escapement point of the last character image.

Note – The term "centred" is also used in the parameter "alignment" of the attribute "position" and in the attribute "block alignment".

centrex service

Suppl. No. 1 (II.2)

The provision to subscribers, by means of a specially equipped public telephone exchange, of services

normally available only in PABXs (e.g. automatic internal dialling, operators' desk, client access to network, direct dialling-in, transfer of calls).

certificate

See:

user certificate; certificate.

certificate serial number

Rec. X.509

An integer value, unique within the issuing CA, which is unambiguously associated with a certificate issued by that CA.

certification authority (CA)

Rec. X.509

An authority trusted by one or more users to create and assign certificates. Optionally the certification authority may create the user's keys.

certification path

Rec. X.509

An ordered sequence of certificates of objects in the DIT which, together with the public key of the initial object in the path, can be processed to obtain that of the final object in the path.

CF national number

Rec. F.201, Suppl. No. 1 (II.4)

In the two stage selection method of interworking, the "CF national number" is the national telex number of the CF, given to the called telex users at the beginning of the telex delivery phase of the teletex to telex exchange for further use of interworking with the teletex of the CF's country.

CF prefix

Rec. F.201, Suppl. No. 1 (II.4)

In the one-stage selection method of interworking, the "CF prefix" is the special number (up to 7 digits) to be put before the called teletex number, to indicate that the total telex selection is for reaching a teletex terminal.

chaining

Rec. F.500

A feature used by the directory system to communicate between directory system agents (DSAs) to satisfy the users request. To achieve this multiple DSAs must be able to intercommunicate as peers. This feature may be inhibited by the user or service provider through service control parameters that are supplied with the user's request.

Note – A set of agreements is required between the domains (DSAs) wanting to interact based on this method.

chaining

Rec. X.518

A mode of interaction optionally used by a DSA which cannot perform an operation itself. The DSA chains by invoking an operation of another DSA and then relaying the outcome to the original requestor.

chaining search

Rec. Q.9

A search in which each item contains means for locating the next item to be considered in the search.

CHANGE

Rec. Z.333

Modify specified data items in a data set via an input or inputs intended for that purpose.

change

Rec. Z.341

An *action* to modify specified data items in a *data set.*

change-over

Rec. R.140

A change from one significant condition to another.

changeback

Gloss. (VI.3)

The procedure of transferring signalling traffic from a reserve signalling link to the regular signalling link, when the regular link is again serviceable.

changeback

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The procedure of transferring signalling traffic from one or more alternative signalling links to a signalling link which has become available.

changeback code

Glos. (VI.7, VI.8, VI.9)

A field in the signalling network management messages used in the changeback procedure; it is used to discriminate messages relating to different changeback procedures performed at the same time towards the same signalling link.

changed address interception

Suppl. No. 2 (II.4)

Automatic advice provided by the network to a calling *terminal* of a called terminal's new address followed either by *call redirection* or by release of the calling terminal.

Note – It is also possible to simply send a *service signal* followed by release.

changeover

Gloss. (VI.3)

The procedure of transferring signalling traffic from one signalling link to another, when the link in use fails or is required to be cleared of traffic.

changeover

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The procedure of transferring signalling traffic from one signalling link to one or more different signalling links, when the link in use fails or is required to be cleared of traffic.

changeover signal

Rec. Q.255

A signal sent to indicate a failure on a synchronized signalling link. If this signal is sent on a link carrying signalling information, it also indicates that a changeover to the next reserve signalling link is required.

channel ; transmission channel

Recs. G.701, I.112

A means of unidirectional transmission of signals between two points.

Note 1 – Several channels may share a common path; for example each channel may be allocated a particular frequency band or a particular time slot.

Note 2 – The term may be qualified by the nature of the transmitted signals, by the bandwidth, by the digit rate, or by an arbitrary designation.

Note 3 – See also the definition of *access channel.*

channel

Rec. I.412

A specified portion of the information-carrying capacity of an interface.

channel ; transmission channel

Rec. Q.9

A means of unidirectional communication.

Note – Several channels may share a common path as in frequency division and time division systems; in these cases, each channel is allotted a particular frequency band or a particular time slot which is reserved for it.

channel

Rec Q.1063

A channel represents a specific portion of the information carrying capability of an interface.

Channels are classified by types according to common characteristics. Channel types appearing at the radio interface are identified in § 3 and 4 of Rec. Q.1063.

channel

Rec. Z.100

A *channel* is the connection conveying *signals* between two *blocks. Channels* also convey *signals* between a *block* and the *environment. Channels* may be unidirectional or bidirectional.

channel (deprecated)
See:
access channel.

channel (rate)

Rec. I.140

This attribute describes the channels and their bit rate used to transfer the user information and/or signalling information at a given access point.

channel ; access channel

Rec. M.60

A designated part, having specified characteristics, of the information transfer capability at the user-network interface.

Note 1 – The information transfer may be, and usually is, bi-directional.

Note 2 – See also the definition for transmission channel.

channel associated signalling

Rec. I.112

A method of signalling in which signalling information relating to the traffic carried by a single channel is transmitted in the channel itself or in a signalling channel permanently associated with it.

channel associated signalling

Rec. Q.9

A signalling method in which the signals necessary for the traffic carried by a single channel are transmitted in the channel itself or in a signalling channel permanently dedicated to it.

channel associated signalling

U.140

A signalling method in which the signals for the traffic carried by a single transmission channel are transmitted over that channel itself or over a signalling channel permanently associated with it.

Note – This term may also apply when the signals for a circuit are transmitted over the channel carrying the traffic.

channel definition

Rec. Z.100

A *channel definition* is the definition of a *channel* in *SDL/PR.*

channel definition area

Rec. Z.100

The *channel definition area* is the definition of a *channel* in *SDL/GR.*

channel gate

Recs. G.701, Q.9

A device for connecting a channel to a highway, or a highway to a channel, at specified times.

channel substructure

Rec. Z.100

A *channel substructure* is a *partitioning* of a *channel* into a set of *channels* and *blocks* at a *lower level of abstraction.*

channel substructure definition

Rec. Z.100

A *channel substructure definition* is the definition of the *channel substructure* in *SDL/PR.*

channel substructure diagram

Rec. Z.100

A *channel substructure diagram* is the definition of the channel substructure in *SDL/GR.*

channel switching

Rec. Q.9

The switching together of single channels to form a connection which is used for the duration of a call.

channel time-slot

Rec. G.701

A time slot occupying a specific position in a frame and allocated to a particular time-derived channel.

Note 1 – Where appropriate a description may be added, for example "telephone channel time slot".

Note 2 – In addition to its main function of transmitting a character signal, a channel time slot may also be used for in-slot signalling or for transmitting other information.

channel time slot

Rec. Q.9

A time slot starting at a particular phase in a frame and allocated to a channel for transmitting a character signal and possibly in-slot signalling or other information.

Note – Where appropriate a description may be added, for example "telephone channel time slot".

character

Rec. E.131

A single specific symbol, number or letter used to designate the diallable signal caused by a command.

character

Rec. Q.9

A member of the *character set* which is used for the organization, control or representation of data.

character

Rec. R.140

A member of a set of elements agreed upon to be used for organisation, representation or control of information.

Note – Characters may be letters, digits, punctuation marks or other symbols and, by extension, function controls such as space, shift, carriage return or line-feed contained in a message.

character

Recs. T.50, T.51

A member of a set of elements used for the organization, control or representation of data.

character

Rec. T.61

A member of a set of elements that is used for the organization control or representation of data. A character repertoire contains two types of elements: graphic characters and control functions.

character

Rec. T.411

A member of a set of elements used for the organization, control and representation of information.

character

Rec. Z.100

Character is a *sort* defined in a predefined *partial type definition* for which the *values* are the elements of the CCITT No. 5 alphabet, (e.g., 1, A, B, C, etc.). For the *sort character* the *ordering operators* are predefined.

character alignment

*Series X**

The identification of groups of contiguous bits which constitute characters.

character base line

Rec. T.411

A line across a character image, in the horizontal direction when the character image is in its intended viewing orientation.

character cycle

Rec. R.140

The period in which each tributory channel of a time-division multiplex has completed one character in the common channel.

character error rate

See:
element error rate; character error rate.

character fonts

Rec. T.416

This attribute designates up to 10 fonts which may be used within the basic component (see Rec. T.416, §§ 5.1.2 and 6.2). These fonts are referred to as the primary font, the first alternative font, the second alternative font etc. The fonts designated must be chosen from the fonts listed in the document profile (see Recommendation T.414).

character format

Rec. R.140

A general description of a character signal, indicating for example the number of unit elements it contains.

character image

Rec. T.411

The human perceptible rendering of a character on a presentation medium.

character-interleaved transmission

Rec. R.140

Time-division multiplex telegraphy in which characters are transmitted sequentially on a common channel, the characters coming from each independent channel in turn without separation of the unit elements of each character.

character interleaving

See:
element interleaving; character interleaving.

character length

Rec. R.140

Number of unit intervals contained in a character signal.

character mode transmission

Rec. Z.341

A transmission characteristic in which each and every character *input* at the keyboard is sent to the controlling processor one at a time.

character orientation

Rec. T.411

The direction of the character base line relative to the character path.

character orientation

Rec. T.416

This attribute specifies the character orientation (see Rec. T.416, § 5.1.3).

character path

Rec. T.411

The direction of progression of successive character images within a line box.

character path

Rec. T.416

This attribute specifies the character path (see Rec. T.416, § 5.1.2).

character rate

Rec. R.140

The average number of characters transferred per unit time between two points.

character sequence

Rec. T.411

A sequence of characters intended to be presented as one or more lines.

character set

Recs. Q.9, Z.341

The finite set of different characters used in *CCITT MML*.

character signal

Rec. Q.9

A set of signal elements representing a character, or in PCM representing the quantized value of a sample.

Note – In PCM, the term "PCM word" may be used in this sense.

character signal

Rec. R.140

A set of signal elements representing a character.

character signal (deprecated)

See:
code word; PCM word.

character spacing

Rec. T.416

This attribute specifies the character spacing which applies at the beginning of the basic component (see Rec. T.416, § 5.1.4).

character string type

Rec. X.208

A type whose values are strings of characters from some defined character set.

character switching

U.140

The temporary connection of two or more terminals upon request using a process of storing and transferring character by character from one line to another.

characteristic

Suppl. No. 6 (II.3)

A property which helps to differentiate between the individuals of a given population.

Note – The differentiation may be either quantitative (by variables) or qualitative (by attributes).

characteristic distortion

Rec. R.140

The telegraph distortion caused by transients which are produced by the transmission of the signal in a transmission channel of specific characteristics.

Note – Characteristic distortion is a function of the form of the input signal.

characteristic distortion compensation

Rec. R.140

Suppression of characteristic distortion on signal restitution by shifting the decision level of this restitution in accordance with the preceeding sampling result.

characteristic frequency

Rec. R.140

Frequency corresponding to a significant condition.

characters spacing (for constant spacing fonts only)

Rec. T.411

The distance between the position points of successive character images when the inter-character space equals zero.

charge indicator

Rec. Q.762

Information sent in the backward direction indicating whether or not the call is chargeable.

charge information message (CRG)

Rec. Q.762

Information sent in either direction for accounting and/or call charging purposes.

charge information request indicator

Rec. Q.762

Information sent in either direction requesting charge information to be returned.

charge information response indicator

Rec. Q.762

Information sent in response to a request for charge information indicating whether or not the requested information is included.

chargeable duration; charged duration

Rec. E.100

The time interval on which the charge for a call is based is called the chargeable duration.

The chargeable duration is equal to the duration of the call reduced in manual or semiautomatic service, if necessary, to make allowance for any interruptions or other difficulties which might have occurred during the call.

The duration of a call for which the charge is paid by the calling subscriber (or the called subscriber in the case of a collect call) in the case of manual or semiautomatic operation, is the chargeable duration rounded upwards to the next whole minute.

charged duration

See:
chargeable duration; charged duration.

charstring

Rec. Z.100

Charstring is a *sort* defined in a predefined *partial type definition* for which the *values* are *strings* of *characters* and the *operators* are those of the *string* predefined *generator* instantiated for *characters.*

check bit (CK)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A bit associated with a character or block for the purpose of checking the absence of error within the character or block.

check loop

Rec. Q.9, Glos. (VI.3, VI.7, VI.8, VI.9)

A device which is attached to interconnect the Go and Return paths of a circuit at the incoming end of a circuit to permit the outgoing end to make a continuity check on a loop basis.

check-out time

Suppl. No. 6 (II.3)

That part of *active repair time* during which *function check-out* is performed. See Figure 3, Suppl. No. 6 (II.3)

checkpoint

Recs. T.62, T.62 bis

A checkpoint is a numbered mark inserted by the sender in the text stream to provide a reference point for error recovery.

child-entry

Rec. X.413

An entry, other than the main-entry in an information-base. The parent-entry for a child-entry can be either the main-entry or another child-entry, depending on the number of entry levels in each case.

child-operation

Rec. X.219

An operation which might be invoked by the performer of the linked parent-operation during the execution of the parent-operation, and which is performed by the invoker of the parent-operation.

child-sequence-number

Rec. X.413

A sequence-number in a parent-entry pointing to a child-entry. A parent-entry can have more than one child-sequence-number value, depending on the number of child-entries.

CHILL

Rec. Q.9

A high-level programming language for programming SPC telephone exchanges, developed by CCITT and fully described in Recommendation Z.200.

Note – For details of the individual terms and definitions used in CHILL, see Recommendation Z.200.

choice type

Rec. X.208

A structured type, defined by referencing a fixed, unordered, list of distinct types; each value of the new type is a value of one of the component types.

chromatic dispersion

Rec. G.651

The spreading of a light pulse in an optical fibre caused by the different group velocities of the different wavelengths composing the source spectrum.

Note – The chromatic dispersion may be due to one or more of the following: material dispersion, waveguide dispersion, profile dispersion. Polarization dispersion does not give appreciable effects in circularly-symmetric fibres.

chromatic dispersion

Rec. G.652

The spreading of a light pulse per unit source spectrum width in an optical fibre caused by the different group velocities of the different wavelengths composing the source spectrum.

Note – The chromatic dispersion may be due to the following contributions: material dispersion, waveguide dispersion, profile dispersion. Polarization dispersion does not give appreciable effects in circularly-symmetric fibres.

chromatic dispersion coefficient

Recs. G.651, G.652

The chromatic dispersion per unit source spectrum width and unit length of fibre. It is usually expressed in ps/(nm · km).

circuit

Rec. E.411

A circuit connects two exchanges. A national circuit connects two exchanges in the same country. An international circuit connects two international exchanges situated in different countries.

circuit

Rec. E.600

A transmission means which allows communication between two points.

circuit ; telecommunication circuit

Recs. G.701, I.112

A combination of two transmission channels permitting bidirectional transmission of signals between two points, to support a single communication.

Note 1 – If the telecommunication is by nature unidirectional (for example: long distance television transmission), the term "circuit" is sometimes used to designate the single channel providing the facility.

Note 2 – In a telecommunication network, the use of the term "circuit" is generally limited to a telecommunication circuit directly connecting two switching devices or exchanges, together with associated terminating equipment.

Note 3 – A telecommunication circuit may permit transmission in both directions simultaneously (duplex), or not simultaneously (simplex).

Note 4 – A telecommunication circuit that is used for transmission in one direction only is sometimes referred to as a unidirectional telecommunication circuit. A telecommunication circuit that is used for transmission in both directions (whether simultaneously or not) is sometimes referred to as a bidirectional telecommunication circuit.

circuit ; telecommunication circuit

Recs. M.60, Q.9

A combination of two transmission channels permitting bidirectional communication between two points, to support a single call.

Note 1 – If the telecommunication is by nature unilateral, for example: long distance television transmission, the term "circuit" is sometimes used to designate the single channel providing the facility.

Note 2 – In telephony, use of the term "circuit" is generally limited to a telecommunication circuit with associated terminating equipment directly connecting two switching devices or exchanges.

Note 3 – A telecommunication circuit does not necessarily permit simultaneous transmission in both directions.

Note 4 – The "go" and "return" channels may be permanently associated together or may be selected from separate sets of associations together throughout the call.

Note 5 – The term circuit may be preceded by other qualifiers than telecommunication e.g. telephone, digital, etc.

circuit ; digital circuit

Rec. M.60

A circuit which transmits information signals in digital form between two exchanges. It includes termination equipment but not switching stages.

circuit

Recs. Z.335, Z.341

Connection between two exchanges for one call at a time, including the junctors that terminate the circuit.

circuit (specific function)

Rec. Q.9

Part of an installation forming (or able to form part of) an electric circuit traversed by a current having a definite function, specified in each case, (example: calling, speaking, feeding, etc.).

circuit

See:
(electric) circuit.

circuit access points

Recs. M.60, M.565

Four-wire access points so located that as much as possible of the international circuit is included between corresponding pairs of these access points at the two centres concerned. These points, and their relative level (with reference to the transmission reference point) are determined in each case by the Administration concerned. They are taken as the basic practical reference points of known relative level to which other transmission measurements will be related. In other words, for measurement and lining-up purposes, the level at the appropriate circuit access point is the relative level with respect to which other levels are adjusted.

circuit control station

Rec. M.1012

The circuit control station is that point within the general maintenance organization which fulfils the control responsibilities for leased and special circuits, for example circuits used for voice-frequency telegraphy, facsimile and phototelegraphy.

See Figure 2/M.1010.

circuit control station

Recs. M.60, M.723

The circuit control station is the point within the general maintenance organization for the international automatic and semi-automatic telephone service that fulfils the control responsibilities for the automatic circuits assigned to it.

circuit group

Recs. E.411, Z.337, Z.341

The set of all switched circuits which directly interconnect one exchange with another.

circuit group

Recs. E.600, Q.9

A group of circuits which are traffic engineered as a unit.

circuit group blocking acknowledgement message (CGBA)

Rec. Q.762

A message sent in response to a circuit group blocking message to indicate that the requested group of circuits has been blocked.

circuit group blocking message (CGB)

Rec. Q.762

A message sent to the exchange at the other end of an identified group of circuits to cause an engaged condition of this group of circuits for subsequent calls outgoing from that exchange. An exchange receiving a circuit group blocking message must be able to accept incoming calls on the group of blocked circuits unless it has also sent a blocking message. Under certain conditions, a circuit group blocking message is also a proper response to a reset circuit message.

circuit-group-congestion signal

Rec. Q.254

A signal sent in the backward direction indicating the failure of the call set-up attempt due to congestion encountered on an international circuit group or on the outgoing links of a terminal international exchange.

circuit group query message (CQM)

Rec. Q.762

A message sent on a routine or demand basis to request the far-end exchange to give the state of all circuits in a particular range.

circuit group query response message (CQR)

Rec. Q.762

A message sent in response to a circuit group query message to indicate the state of all circuits in a particular range.

circuit group reset acknowledgement message (GRA)

Rec. Q.762

A message sent in response to a circuit group reset message and indicating that the requested group of circuits has been reset. The message also indicates the maintenance blocking state of each circuit.

circuit group reset message (GRS)

Rec. Q.762

A message sent to release an identified group of circuits when, due to memory mutilation or other causes, it is unknown whether for example, a release or release complete message is appropriate for each of the circuits in the group. If at the receiving end a circuit is remotely blocked, reception of this message should cause that condition to be removed.

circuit group supervision message type indicator

Rec. Q.762

Information sent in a circuit group blocking or unblocking message, indicating whether blocking (unblocking) is maintenance oriented or hardware oriented.

circuit group unblocking acknowledgement message (CGUA)

Rec. Q.762

A message sent in response to a circuit group unblocking message to indicate that the requested group of circuits has been unblocked.

circuit group unblocking message (CGU)

Rec. Q.762

A message sent to the exchange at the other end of an identified group of circuits to cause cancellation in that group of circuits of an engaged condition invoked earlier by a blocking or circuit group blocking message.

circuit identification code

Rec. Q.762

Information identifying the physical path between a pair of exchanges.

circuit identification code (CIC)

Glos. (VI.7, VI.8, VI.9)

Information identifying a circuit between a pair of exchanges; for which signalling is being performed (14 bits in the international ISDN User Part).

circuit-mode, alternate speech/64 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides the alternate transfer of either speech or 64 kbit/s unrestricted digital information within the same call.

The request for this alternate capability and the intial mode desired by the user must be identified at call set-up time.

This bearer service category is provided for the support of multiple capability terminals or single capability terminals.

For the speech mode of this bearer service, the same applies as for the speech bearer service category. For the unrestricted mode of this bearer service category, the same applies as for the unrestricted bearer service category.

circuit-mode 2 × 64 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides the unrestricted transfer of two 64 kbit/s user information flows over two B-channels at the user network interface.

circuit-mode 64 kbit/s, 8 kHz structured bearer service category usable for 3.1 kHz audio information transfer

Rec. I.230

This bearer service category corresponds to the service which is currently offered in the PSTN. This bearer service category provides for the transfer of speech and of 3.1 kHz bandwidth audio information suh as voice-band data via modems and facsimile group 1, 2 and 3 information. The digital signal at the S/T reference point shall conform to Recommendation G.711 (A-law or μ-law).

Connections provided for these services should offer the transfer capability for the information indicated above. (This means that the network may include speech processing techniques provided they are appropriately modified or functionally removed prior to non-speech information transfer.) The control of echo control devices, speech processing devices, etc., is only made by use of disabling tones (see Recommendation V.25). Bit integrity is not assured. The network may use analogue transmission.

All Recommendations for the transfer of speech information in the network apply to this bearer service category.

circuit-mode 64 kbit/s, 8 kHz structured bearer service category usable for speech information transfer

Rec. I.230

This bearer service category is intended to support speech.

The digital signal at the S/T reference point shall conform to Recommendation G.711 (A-law or μ-law). The network may use processing techniques appropriate for speech such as analogue transmission, echo cancellation and low-bit rate voice encoding. Hence, bit integrity is not assured. This bearer service category is not intended to support modem derived voice-band data.

All Recommendations for the transfer of speech information in the network apply to this bearer service category.

circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides unrestricted information transfer between S/T reference points. It may, therefore, be used to support various user applications. Examples include:

- speech;
- 3.1 kHz audio;
- multiple subrate information streams multiplexed into 64 kbit/s by the user;
- transparent access to an X.25 public network [I.462 case a)].

User information is transferred over a B-channel, signalling is provided over a D-channel.

circuit-mode 1920 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides the unrestricted transfer of 1920 kbit/s user information over a H_{12} channel at the S/T reference point. The transfer of OAM information for reserved and permanent services may be provided over a D-channel.

circuit-mode 384 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides the unrestricted transfer of 384 kbit/s user information over a H_0 channel at the S/T reference point. The transfer of OAM information for reserved and permanent services may be provided over a D-channel in the same or in another interface structure.

circuit-mode 1536 kbit/s unrestricted, 8 kHz structured bearer service category

Rec. I.230

This bearer service category provides the unrestricted transfer of 1536 kbit/s user information over a H_{11} channel at the *S/T* reference point. The transfer of OAM information for reserved and permanent services may be provided via a D-channel in another interface structure.

circuit section

Rec. X.134

Is either an access circuit section or an internetwork circuit section.

circuit state indicator

Rec. Q.762

Information indicating the state of a circuit according to the sending exchange.

circuit sub-control station

Rec. M.1013

The circuit sub-control station is a point within the general maintenance organization that assists the circuit control station for international leased and special circuits with which it is concerned and fulfils the control responsibilities for one or more circuit sections assigned to it.

circuit sub-control station

Recs. M.60, M.724

The circuit sub-control station is a point within the general maintenance organization for the international automatic and semi-automatic telephone service that assists the circuit control station and fulfils the control responsibilities for a circuit section assigned to it.

circuit sub-group

Rec. Q.9

A number of circuits with similar characteristics (e.g. type of signalling, type of transmission path, etc.).

It is not engineered as a unit, but as a part of a circuit group. Circuit sub-groups are provided for reasons of service, protection, equipment limitation, maintenance, etc.

circuit sub-group

Recs. Z.335, Z.341

Group of circuits between two exchanges having the same traffic direction (incoming, outgoing, bidirectional), the same signalling characteristics and the same transmission medium characteristics.

circuit sub-group

Recs. E.411, Z.337, Z.341

A group of circuits within a circuit group which are uniquely identifiable for operational or technical reasons. A circuit group may consist of one or more circuit sub-groups.

circuit subgroup

Rec. E.600

A part of a circuit group with similar characteristics (e.g. type of signalling, type of transmission path, etc.).

circuit-switched connection

Rec. U.140

A temporary connection that is established on request between two or more stations in order to allow the exclusive use of that connection until it is released.

circuit-switched data communication service

*Rec. D.20, Series X**

A service requiring the establishment of a circuit-switched data connection before data can be transferred between data terminal equipments.

circuit switching

Rec. Q.9

The switching together of circuits to form a connection which is used for the duration of a call.

circuit switching

Rec. U.140

The temporary connection of two or more terminals upon request providing the exclusive use of a complete connection until it is released.

circuit switching exchange; switch (circuit)

Rec. U.140

A set of devices associated with a set of circuits intended to interconnect temporarily on request such circuits to constitute connections.

circuit test access point

Recs. G.101, Q.43

The CCITT has defined circuit test access points as being "4-wire test-access points so located that as much as possible of the international circuit is included between corresponding pairs of these access points at the two centres concerned". These points, and their relative level (with reference to the transmission reference point), are determined in each case by the Administration concerned. They are used in practice as points of known relative level to which other transmission measurements will be related. In other words, for measurement and lining-up purposes, the relative level at the appropriate circuit test access point is the relative level with respect to which other levels are adjusted.

circuit transfer mode

Rec. I.113

A transfer mode in which transmission and switching functions are achieved by permanent allocation of channels/bandwidth between the connections.

circuit validation test (CVT)

Glos. (VI.7, VI.8, VI.9)

A procedure used to ensure that two exchanges have sufficient and consistent translation data for placing a call on a specific circuit.

circular routing

Rec. Q.9

A situation where signal units destined to a particular signalling point (SP) are transferred in a never-ending loop.

CL channel

Rec. G.961

This channel is conveyed by the digital transmission system in both directions between LT and NT1. It is used to transfer information concerning operation, maintenance and activation/deactivation of the digital transmission system and of the digital section.

cladding

Rec. G.651

That dielectric material of an optical fibre surrounding the core.

cladding centre

See:

core centre; cladding centre.

cladding diameter

See:

core diameter; cladding diameter.

cladding diameter deviation

See:

core diameter deviation; cladding diameter deviation.

cladding mode stripper

Rec. G.651

A device that encourages the conversion of cladding modes to radiation modes.

cladding surface

Rec. G.652

The outer surface of the glass that comprises the optical fibre.

cladding surface centre

Rec. G.652

For a cross-section of an optical fibre, it is the position of the centre of the circle which best fits the locus of the cladding surface in the given cross-section.

Note – The best fit method has to be specified, and is currently under study.

cladding surface diameter

Rec. G.652

The diameter of the circle defining the cladding centre.

Note – For a nominally circular fibre, the cladding surface diameter in any orientation of the cross-section is the largest distance across the cladding.

cladding tolerance field

See:

core tolerance field; cladding tolerance field.

clarifying text

Rec. Z.341

A set of *information units* used to make the purpose and content of the *output* clearer.

class A function; MML function

Rec. Z.341

A *function* which provides the user with the means to control *system functions* via MML *inputs* and *outputs*; also known as an *MML function.* It can be viewed as an *action* upon an *object.*

class B function

Rec. Z.341

A *function* which can be controlled at least partially by the *user* by means of *class A* (or *MML*) *functions.*

class C function

Rec. Z.341

A *function* which is not controllable by the *user* in a given *system.*

Class I

Rec. F.184

Minimum requirement is a terminal able to send and receive documents containing facsimile encoded information (in accordance with Recommendations T.6, T.503 and T.400 series).

Class II

Rec. F.184

Minimum requirement is a terminal able to transmit documents that are facsimile encoded (in accordance with Recommendations T.6, T.503 and T.400 series). In addition, the terminal must be capable of receiving documents which are facsimile coded (in accordance with Recommendations T.6, T.503 and T.400 series), Teletex coded (in accordance with the basic coded character repertoire as defined in Recommendation T.61) and also mixed-mode documents (in accordance with Recommendations T.501 and T.400 series).

Class III

Rec. F.184

Minimum requirement is a terminal that is capable of generating, transmitting and receiving facsimile coded documents (in accordance with Recommendations T.6, T.503 and T.400 series), Teletex coded documents (in accordance with the basic coded character as defined in Recommendation T.61) and mixed-mode documents (in accordance with Recommendations T.501 and T.400 series – when defined).

class of operation

Glos. (VI.7, VI.8, VI.9)

A number indicating whether an operation reports success or failure, failure only, success only or neither.

class of SCCP service

Glos. (VI.7, VI.8, VI.9)

A number chosen by the user of the SCCP to select 1 out of 4 network services provided by the SCCP.

(user) class of service signal

Rec. U.140

A character or group of characters among the selection signals identifying the user's class of service of the calling party.

classified information

Rec. F.500

In the context of the directory, directories presently known as "white pages", "yellow pages", etc.

clear-back signal

Rec. Q.9

A signal sent in the backward direction indicating that the called party has cleared.

clear-back signal

See:

hang-up signal; clear-back signal (sent in the backward direction).

clear-back signal (sent in the backward direction)

Recs. Q.120, Q.140

This signal is sent to the outgoing international exchange to indicate that the called party has cleared. In the semi-automatic service, it performs a supervisory function. It must not permanently open the speech path at the outgoing international exchange.

In automatic working, arrangements must be made to clear the international connection, stop the charging and stop the measurements of call duration if, between one and two minutes after receipt of the clear-back signal, the calling subscriber has not cleared. Clearing of the international connection should preferably be controlled from the point where the charging of the calling subscriber is carried out.

The Notes of Recommendation Q.120, § 1.8 also apply.

clear-back signal (sent in the backward direction)

Rec. Q.400

A signal sent to the outgoing international exchange to indicate that the called party has cleared. In semi-automatic working, this signal has a supervisory function. In automatic working, arrangements must be made in accordance with Recommendation Q.118, and the Notes of Recommendation Q.120, § 1.8 also apply.

clear-back signals

Rec. Q.254

Signals sent in the backward direction, the first of which indicates that the called party has cleared. Subsequent clear-back signals indicate that the called party has cleared following a reanswer, e.g. switch-hook flashing.

In semi-automatic working, they perform a supervisory function. In automatic working, the arrangements specified in Recommendation Q.118 apply.

clear confirmation delay (CLCD)

Rec. X.130

The delay between transmission of a *DTE clear confirmation* signal and receipt of a *DCE ready* signal by the cleared DTE.

clear-forward signal

Rec. Q.254

A signal sent in the forward direction to terminate the call or call attempt and release the circuit concerned. This signal is normally sent when the calling party clears but also may be a proper response in other situations, as for example, when reset circuit is received.

clear-forward signal

Rec. Q.9

A signal sent in the forward direction to terminate the call or call attempt and release the circuit concerned. This signal is normally sent when the calling party clears.

clear-forward signal

See:

disconnect signal; forward-transfer signal (sent in the forward direction).

clear-forward signal (sent in the forward direction)

Rec. Q.120

This signal is sent in the forward direction at the end of a call when:

a) in semi-automatic working, the operator at the outgoing international exchange withdraws her plug from the jack, or when an equivalent operation is performed;

b) in automatic working, when the calling subscriber hangs up or otherwise clears (as in the case of a subscriber's installation with extension telephones).

In automatic working, this signal is also sent after receipt of a busy-flash signal by the outgoing international exchange, and when there is forced release of the connection; see §§ 4.3.1 and 4.3.2 in Recommendation Q.118 and Recommendation Q.131.

In semi-automatic working there may be forced release in the case of § 4.3.1 of Recommendation Q.118.

clear-forward signal (sent in the forward direction)

Rec. Q.140

This signal is sent in the forward direction at the end of a call when:

a) in semi-automatic working, the operator at the outgoing international exchange withdraws her plug from the jack, or when an equivalent operation is performed;

b) in automatic working, when the calling subscriber hangs up or otherwise clears (as in the case of a subscriber's installation with extension telephones).

This signal is also sent after receipt of a busy-flash signal by the outgoing international exchange, and when there is forced release of the connection (see Recommendation Q.118, §§ 4.3.1 and 4.3.2 for automatic working and § 4.3.1 for semi-automatic working). This signal may also be sent after an abnormal release of an outgoing register in the case indicated in Recommendation Q.156 under § 3.6.2 a) 1.

clear-forward signal (sent in the forward direction)

Rec. Q.400

A signal sent to terminate the call or call attempt and to release in the incoming exchange and beyond it all switching units held on the call.

The signal is sent when:

a) in semi-automatic working the operator of the outgoing international exchange takes the plug out or performs an equivalent operation;

b) in automatic working, the calling subscriber clears or performs an equivalent operation.

This signal is also sent by the outgoing international exchange upon receiving a backward register signal requesting the outgoing international R2 register to clear the connection, or in the case of forced release of the connection as mentioned in Recommendation Q.118. This signal may also be sent as the result of abnormal release of the outgoing international R2 register.

clear indication delay

Rec. X.135

Clear indication delay is the period of time that starts when either a clear request packet or a clear indication packet creates a PE at a boundary, B_i, and ends when the corresponding clear request or clear indication packet creates a later PE at another boundary, B_j. The specific X.134 PEs used in measuring clear indication delay at each section boundary are identified in Table 9/X.135.

Clear indication delay = $\{t_2 - t_1\}$ where

t_1 = Time of occurrence for the first PE.

t_2 = Time of occurrence for the second PE.

clear request delay (CLRD)

Rec. X.130

The delay between transmission of a *clear request* signal and receipt of the *DCE ready* signal by the clearing DTE.

clearing signal

U.140

The switching signal transmitted over a circuit to release a switched connection.

client

Rec. X.290

The organization that submits a system or implementation for conformance testing.

clipped pel array

Rec. T.411

The actual pel array to be imaged as determined by taking account of all clipping parameters.

clipping

Rec. P.84

An impairment occurring in DSI systems employing speech detectors whereby the detector, due to the time it takes to recognize that speech is present, can cut off ("clip") the start of the speech utterance. Competitive clipping is the impairment caused by the overload control strategy which allows freezeout to occur when bearer channels are temporarily unavailable. Another name for the competitive clipping overload control strategy is sample dropping.

clipping

Rec. T.417

This attribute determines the subregion of the pel array, as described by the content portion, which is to be considered by the content layout process and the content imaging process.

clique; bundle

Rec. G.763

A set of bearer channels which are associated with a set of trunk channels and which are independent in operation and control from other bearer channels. The set of trunk channels is directed to a single destination.

Note – An alternate term for clique is "bundle".

clock

Rec. G.701

Equipment that provides a timing signal.

Note – Where replicated sources are used for security reasons, the assembly of these is regarded as single clock.

clock

Rec. Q.9

Equipment providing a time base used in a transmission system to control the timing of certain functions such as the control of the duration of signal elements, the sampling, etc.

clock control signal

Rec. G.701

A signal that directly controls the phase or frequency of a clock.

closed area

Rec. T.150

Presentation element being an area enclosed within one trace which constitutes a closed line.

closed-circuit working

Rec. R.140

Single-current transmission in which a current flows in the circuit while the transmitting device is at rest.

closed private network

U.140

A private network that does not permit intercommunication other than between terminals connected to it.

closed user group

Suppl. No. 2 (II.4)

A user group on the public switched network whose *terminals* have the facility to communicate only with each other.

Note – A terminal may belong to more than one closed user group.

closed user group

Rec. U.12

A number of users of a public switched communication service who have the facility that they can communicate with each other but access is barred to and from all other users of the service.

closed user group (CUG)

Rec. I.250

A supplementary service which enables users to form groups, to and from which access is restricted. A specific user may be a member of one or more CUGs. Members of a specific CUG can communicate among themselves but not, in general, with users outside the group. Specific CUG members can have additional capabilities that allow them to originate calls outside the group, and/or to receive calls from outside the group. Specific CUG members can have additional restrictions that prevent them from originating calls to other members of the CUG, or from receiving calls from other members of the CUG.

closed user group call indicator

Rec. Q.762

Information indicating whether or not the concerned call can be set up as a closed user group call and, if a closed user group call, whether or not outgoing access is allowed.

closed user group interlock code

Rec. Q.762

Information uniquely identifying a closed user group within a network.

closed window

Rec. X.224

A transmit window which contains no sequence number.

CME gain

See:
LRE gain; DSI gain; DCME gain.

coast earth station

Recs. E.210, F.120

An earth station in the Fixed-Satellite Service or, in some cases, in the Maritime Mobile-Satellite Service, located at a specified fixed point on land to provide a feeder link for the Maritime Mobile-Satellite Service.

Note – In Recommendations E.210 and F.120, the term coast station is also intended to include, for simplicity, coast earth station.

coast earth station

Rec. X.350

An *earth station* in the *fixed-satellite service* or, in some cases, in the *maritime mobile-satellite service,* located at a specified fixed point on land to provide a *feeder link* for the *maritime mobile-satellite service.* (Article 1, § 4.14, of the Radio Regulations, ITU, Geneva, 1982).

See Figure 1/X.350.

coast earth station (CES)

Suppl. No. 3 (II.4)

Defined in Article 1, § 4.14 of the *Radio Regulations*, ITU, Geneva, 1982.

coast earth station (CES)

Rec. M.1100

In the Maritime Mobile-Satellite Service, an earth station, which provides a 4-wire analogue interface for connection of a *maritime satellite circuit* to the international public switched telephone network. It also provides circuit test access points and test facilities.

See Figure 1/M.1100.

coast earth station (CES)

Recs. Q.9, Q.1100

An earth station operating in the fixed satellite service frequency bands or, in some cases, in the maritime mobile-satellite service frequency bands located at a specified fixed point on land to provide a feeder link for the maritime mobile-satellite service (see also Radio Regulations, Article 1, No. 71, § 4.140).

coast earth station

See:
maritime centre.

coast earth station test position

Rec. M.1100

A position in a coast earth station that can be used to originate test calls over the maritime satellite system to the maritime test terminal and to receive test calls from the maritime test terminal.

See Figure 1/M.1100.

coast station

Recs. E.210, F.120

A land station in the Maritime Mobile Service.

coast station identity

Recs. E.210, F.120

The coast station identification X_1, X_2 ... X_k transmitted on the radio path.

Note – In Recommendations E.210 and F.120 the term coast station identity is intended to also include, for simplicity, coast earth station identity.

code

Rec. E.131

One character or a sequence of characters forming a part, or the whole, of a message with a specific meaning.

code

See:
code extension;
coded character set; code.

code character

Rec. R.140

The set of conventional elements established by the code to enable the transmission of a written character (letter, figure, punctuation sign, arithmetical sign, etc.) or the control of a particular function (spacing, shift, line-feed, carriage return, phase correction, etc.); this set of elements being characterized by the variety, the duration and the relative position of the component elements (or by some of these features).

Note – The French and English terms are not equivalent.

code combination

Rec. R.140

A combination of n-unit elements formed in accordance with an n-unit code which assigns a significant condition to each of the unit elements.

code conversion

Rec. G.701

The conversion of digital signals in one code to the corresponding signals in a different code.

code conversion

Rec. R.140

The conversion from a representation of coded information to another representation of the same information in accordance with another code.

Example: Conversion of character signals or groups of character signals in one telegraph code into corresponding signals or groups of signals in another code.

code converter

Rec. R.140

Telegraph repeater which can accomplish a code conversion.

code converter

Rec. S.140

Equipment which accomplishes a code conversion.

code dependent channel

Rec. R.140

A telegraph channel capable of transmitting telegraph signals only in a specified n-unit code format.

code division

Rec. Q.9

The separation of a plurality of transmission channels by using specific values of codes belonging to the same set.

code element

Rec. R.140

A unit element constituting part of a character signal from the arrangements of which a code combination is formed.

Note – Figure 1/R.140 shows an example of the use of this term.

code extension

Recs. T.50, T.51, T.61

The techniques for the encoding of characters that are not included in the character set of a given code.

code extension announcers

Rec. T.416

This attribute announces the code extension features used in the basic component.

code fifteen (15) (Signalling System No. 4)

See:

end-of-pulsing signal (sent in the forward direction); code fifteen.

code independent channel

Rec. R.140

Telegraph channel capable of transmitting telegraph signals irrespective of the code used.

code table

Recs. T.50, T.51, T.61

A table showing the character corresponding to each bit combination in a code. A code table is normally represented as a rectangular matrix of columns and rows.

code violation

Rec. M.60

Definition for code violation:

a) AMI – Two consecutive marks of the same polarity. This may not be the absolute number of errors.

b) HDB3 – Two consecutive bipolar violations of the same polarity. This may not be the absolute number of errors.

c) B6ZS – Two consecutive marks of the same polarity excluding violations caused by the zero substitution code. This may not be the absolute number of errors.

d) B8ZS – Two consecutive marks of the same polarity excluding violations caused by the zero substitution code. This may not be the absolute number of errors.

code word; PCM word

Rec. G.701

A set of signal elements representing the quantized value of a sample in PCM.

Note – In PCM, the term "PCM word" may be used in this sense.

codec

Rec. G.701

A combination of an encoder and a decoder operating in opposite directions of transmission in the same equipment.

Note – When used to describe an equipment the function of the equipment should qualify the title, for example: supergroup codec, hypergroup codec.

coded character set; code

Recs. T.50, T.51, T.61

A set of unambiguous rules that establishes a character set and the one-to-one relationship between the characters of the set and their bit combinations.

coded inband signalling

Rec. V.7

Inband signalling by which control signals are exchanged via data in the forward channel.

coder (deprecated)

See:

encoder.

coding (deprecated)

See:

encoding.

coding attributes

Rec. T.412

These attributes are related to the type of coding of the content portion and provide additional parametric information used in encoding/decoding the content portion.

coding in PCM (deprecated)

See:

encoding.

coding rectangle

Rec. T.150

Rectangular area representing the coding space in horizontal and vertical direction, available for coding of a telewriting image.

coding standard

Rec. Q.762

Information sent in association with a parameter (e.g. cause indicators) identifying the standard in which the parameter format is described.

codirectional interface

Rec. G.701

An interface across which the signals to be transferred and their associated timing signals are transmitted in the same direction.

codirectional interfaces

Rec. Q.9

An interface across which the information and its associated timing signal are transmitted in the same direction (see Figure 3/Q.9).

collect calls (prefix 35)

Recs. E.216, F.126

Prefix 35 should be used for calls, charges for which will be billed to the called party. The telephone operator will intervene in the call and should be provided with the information pertinent to the call. The prefix may be followed by the number of the called party.

collection charge

Rec. D.000

The charge established and collected by an Administration from its customers for the use of an international telecommunication service.

co-located exchange concentrator

Rec. Q.9

A concentrator in the same location as the exchange that controls it and to which its higher traffic volume circuits are connected. (See Figure 1/Q.9.)

colour

Rec. T.412

This attribute defines the colour of a page, frame or block.

combined delivery/non-delivery notification (CN)

Rec. U.82

A type of SMXU used to provide information on whether a message has been delivered or not delivered to a number of addresses.

combined link set

Glos. (VI.7, VI.8, VI.9)

A load sharing collection of one or more link sets.

combined local/transit exchange

Rec. Q.9

An exchange in which subscribers' lines terminate that also is used as a switching point for traffic between other exchanges. (See Figure 1/Q.9.)

combined loss (A_{COM})

Rec. G.165

The sum of echo loss, cancellation loss and nonlinear processing loss (if present). This loss relates L_{Rin} to L_{RET} by:

$$L_{RET} = L_{Rin} - A_{COM},$$

$$\text{where } A_{COM} = A_{ECHO} + A_{CANC} + A_{NLP},$$

where

L_{RET}	is the returned echo level
L_{Rin}	is the receive input signal level
A_{ECHO}	is the echo loss
A_{CANC}	is the cancellation
A_{NLP}	is the nonlinear processing loss.

comfort tone

Rec. E.182

A tone advising that the call is being processed and that the caller should wait.

command

Rec. E.131

A single specific manipulation at the subscriber set causing transmission of a signal which specifically indicates the manipulation to the exchange. For certain control procedures either one single command or a succession of commands are required.

command

Rec. T.62

A command is control information sent to another terminal to initiate execution of a specific function. Some commands require a response.

command

Rec. V.25 bis

An instruction issued by the data terminal equipment (DTE) to the data circuit terminating equipment (DCE) as part of the automatic calling procedure.

command

Rec. Z.341

The complete specification of a *function* that the *system* is required to perform. It comprises a *command code* followed generally (but not necessarily) by one or more *blocks of parameters.*

command (in MML)

Rec. Q.9

A specification of an expected action or function by the system.

command code

Rec. Z.341

A set of up to 3 *identifiers*, each separated by a - (hyphen), used to define the nature of the *command.*

command entry sequence

Rec. Z.317

A command entry sequence contains a single command code, together with an alternating sequence of one or more parameter blocks and an appropriate number of executions.

Any interactive operating sequence may be stopped prematurely by the user with the entry of a particular command entry sequence. The latter could consist of a certain command which is independent of any interactive operating sequence, e.g., EXIT, etc.

command entry sequence

Rec. Z.341

The sequence of operations required to input a *command* or a series of *commands.*

command identifier (CI); response identifier (RI)

Rec. T.62

The heading information that identifies the command or response concerned.

command language

Rec. Q.9

A source language consisting primarily of procedural operators that indicate the functions to be performed by an operating system.

command reference

Rec. Z.341

A reference to a previously given *command*, appearing in *output outside dialogue* and *dialogue procedures*, in the form of a *command sequence number* and, possibly, *clarifying text.*

command sequence number

Rec. Z.341

A reference number uniquely identifying a *command* recognized by the *system.*

comment

Rec. Z.100

A *comment* is information which is in addition to or clarifies the *SDL specification.* In *SDL/GR comments* may be attached by a dashed line to any *symbol.* In *SDL/PR comments* are introduced by the keyword *COMMENT. Comments* have no *SDL* defined meaning. See also the definition of the term *Note.*

comment (in MML)

Recs. Q.9, Z.341

A character string enclosed between the separator strings /* (solidus asterisk) and */ (asterisk solidus). It has no MML syntactical or semantical meaning.

comment (in SDL)

Rec. Q.9

Information which is in addition to or clarifies an SDL diagram. Comments may be attached by a single square bracket connected by a dashed line to a *symbol* or *flow line.* (See Recommendation Z.100, § 2.2.6.)

commissioning objective

Recs. G.100, G.102

The conditions encountered on real circuits and installed equipment may differ from the assumptions valid for the HR circuits and for the design of equipment. Therefore the performance to be expected at the time of commissioning cannot be deduced uniquely from Recommendations relating to HR circuits. Suitable allowances may have to be made for such matters as circuits being made up of equipments of different design, line systems differing substantially in length from a homogeneous section, etc. (see for example Recommendation G.226 for noise on real links).

Commissioning objectives are not normally the subject of CCITT Recommendations.

commissioning tests (prefix 92)

Recs. E.216, F.126

Prefix 92 is used in the maritime satellite service for conducting commissioning tests of ship earth stations.

common channel exchange

Gloss. (VI.3)

An exchange utilizing a common channel signalling system, which has the facilities of System No. 6 from an interworking standpoint.

common channel exchange, first

Gloss. (VI.3)

The exchange closest to the calling party in each common channel section of a connection where, unless it is the calling party's exchange, interworking with other signalling systems takes place.

common channel exchange, intermediate

Gloss. (VI.3)

A transit exchange where interworking between common channel signalling system takes place.

common channel exchange, last

Gloss. (VI.3)

The exchange closest to the called party in each common channel of a connection where, unless it is the called party's exchange, interworking with other signalling systems takes place.

common channel signalling

Rec. I.112

A method of signalling in which signalling information relating to a multiplicity of circuits or functions or for network management, is conveyed over a single channel by addressed messages.

common channel signalling

Gloss. (VI.3)

A signalling method, using a signalling link common to a number of speech circuits, for the transmission of all signals necessary for the traffic via these circuits.

common channel signalling

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A signalling technique in which signalling information relating to a multiplicity of circuits, and other information such as that used for network management, is conveyed over a single channel by addressed messages.

common channel signalling

Rec. U.140

A signalling method in which signalling information relating to a multiplicity of circuits is conveyed over a single channel by labelled messages.

common name

Recs. F.400, X.400

In the context of message handling, a standard attribute of an O/R address form that identifies a user or distribution list relative to the entity denoted by another attribute (e.g., an organizational name).

common name

Rec. F.500

In the context of directory systems:

An attribute type identifying an object that is named. It is the name by which the object is commonly named, and conforms to the naming conventions of the country or culture with which the object is associated.

In the context of message handling systems:

Standard attribute identifying a user or distribution list relative to the entity denoted by another attribute (e.g., an organization name). (See Recommendation X.402.)

common textual grammar

Rec. Z.100

The *common textual grammar* is the subset of the *concrete textual grammar* which applies to both *SDL/GR* and *SDL/PR.*

commonality

Rec. Q.300

The degree to which the basic features employed in two systems are identical.

communicated text area

Rec. T.60

Area with a size of one line spacing (4.23 mm) less than the defined maximum printable area.

communication

Rec. E.600

Transfer of information according to agreed conventions. The information flow need not be bidirectional.

communication

Rec. F.710

An exchange of information between two or more subscribers of a telecommunication network by agreed conventions.

communication

Rec. I.112

The transfer of information according to agreed conventions.

Note – In French and Spanish the corresponding terms "communications" and "comunicación" have additional specific meanings in telecommunication.

communication

Rec. Q.9

Information transfer according to agreed conventions.

Note 1 – In the context of the present vocabulary, the ordinary dictionary meaning of the term is appropriate and sufficient.

Note 2 – The French term "communication" and the Spanish term "comunicación" have the current meaning given in this definition, but they also acquire a more specific meaning in telecommunication (see the definitions of the terms *call, (complete) connection in telecommunication* and *connection*).

communication capability

Rec. X.300

A communication capability consists of the means of communication between systems, related to functions above transmission capability. A communication capability may be defined by CCITT, it may also be privately defined by users themselves.

communication configuration

Rec. I.140

This attribute describes the spatial arrangement for transferring information between two or more access points. It completes the structure associated with a telecommunication service as it associates the relationship between the access points involved and the flow of information between these access points.

communication path

Rec. Z.100

A *communication path* is a transportation means that carriers *signal instances* from one *process instance* or from the *environment* to another *process instance* or to the *environment.* A *communication path* comprises either *channel* path(s) or *signal route* path(s) or a combination of both.

compandor advantage

Rec. G.143

To define *compandor advantage* assume:

a) an international circuit not equipped with compandors and contributing N dBm0 of noise to the overall end-to-end connection (including typical national extensions) and meeting the noise objectives of Recommendation G.152 or Recommendation G.153, and

b) the same international circuit equipped with compandors and connected to typical national extensions, yielding the noise performance subjectively equivalent to or better than that of the circuit described in a), while contributing N' dBm0 of noise in between compressor and expander.

Then the compandor advantage for the international circuit of b) is defined as $(N' - N)$ dB.

comparability (of results)

Rec. X.290

Characteristic of conformance assessment processes, such that their execution on the same IUT, in different test environments, leads to the same overall summary.

compare

Rec. F.500

An operation of the directory system to compare a value (which is supplied as an argument of the request) with the value(s) of a particular attribute type in a particular object entry.

Note – This directory system operation is considered to be an optional user facility in the service context.

compatibility

Rec. Q.300

Compatibility with respect to interworking implies a degree of transparency sufficient to support an acceptable grade of service with respect to a connection which transits the interworking office. Full compatibility implies full transparency.

compelled signalling (general sense) :

Rec. Q.9

A signalling method in which, after one signal (or message) has been sent, the sending of any further signals (or messages) in the same direction is inhibited until the signal sent has been acknowledged in the opposite direction by the receiving terminal and the acknowledgement has been received.

compelled signalling; fully compelled signalling; continuous compelled signalling

Rec. Q.9

A signalling method in which the signal to be transmitted is applied continuously until acknowledged or until a timeout occurs. Upon recognition of the initial signal, the acknowledgement signal is applied continuously until the cessation of the initial signal or until a timeout occurs. The cessation of the aknowledgement signal may provoke the beginning of the next subsequent compelled cycle. In addition to the acknowledgement, the acknowledgement signal may carry other signalling information (e.g. concerning the next cycle).

compensation for frequency drift

Rec. R.140

Elimination of the effect of frequency drift on inherent telegraph distortion.

compile

See:
to compile.

compiler; compiling program

Rec. Q.9

A program used to compile.

compiling program

See:
compiler; compiling program.

complete connection

See:
(complete) connection;
(complete) connection in telecommunication.

complete fault; function preventing fault

Suppl. No. 6 (II.3)

A *fault* characterized by complete inability to perform all *required functions* of an *item.*

Note – The criteria for a *complete fault* have to be stated.

complete generator set

Rec. T.411

A constituent of a document consisting of a document root object class description and at least one level of subordinate object class descriptions which are used to control the creation and/or modification of the set of object descriptions representing a corresponding specific structure.

complete interface between a Base Station (BS) and its associated Mobile Stations (MS)

Rec Q.1063

Defined by the interface structure at a given point in time. This interface may change over time.

complete loopback

Recs. G.960, I.430

A physical layer 1 mechanism which operates on the full bit stream. At the loopback point, the receive bit stream shall be transmitted back towards the transmitting station without modification.

Note – The use of the term "complete loopback" is not related to implementation since such a loopback may be provided by means of active logic elements or controlled unbalance of a hybrid transformer, etc. At the control point only the information channels may be available.

complete loopback

Recs. M.60, M.125

A complete loopback is a physical layer (layer I of OSI) mechanism which operates on the full bit stream. At the loopback point, the received bit stream shall be transmitted back towards the transmitting station without modification.

complete telegraph channel

Rec. R.140

A telegraph channel between two terminal sets.

Note – A retransmitter with storage of signals is considered as a terminal set and terminates a complete channel.

complete valid input signal set

Rec. Z.100

The *complete valid input signal set* of a *process* is the union of the *valid input signal* set, the local *signals, timer signals* and the *implicit signals* of the *process.*

completed call attempt; effective call attempt

Rec. E.600

A successful call attempt that receives an answer signal.

completion of calls to busy subscribers service

Suppl. No. 1 (II.2)

The possibility for a subscriber who reaches a busy number to have the call completed when the line becomes free without generating a second call or waiting on the line.

completion ratio

Rec. E.600

The ratio of the number of completed call attempts to the total number of call attempts, at a given point of a network.

compliance test

Suppl. No. 6 (II.3)

A *test* used to show whether or not a *characteristic* of an *item* complies with the stated requirements.

component

Glos. (VI.7, VI.8, VI.9)

A protocol data unit exchanged between TC-users, via the component sublayer of transaction capabilities.

component

Rec. T.411

An object or an object class.

component

Rec. Z.341

A *decomposition meta-language* symbol for an *information entity* that cannot be divided further.

component correlation

Glos. (VI.7, VI.8, VI.9)

The association of operation invocations and replies.

component portion

Glossary

The part of a TC message containing the components.

component type

Rec. X.208

One of the types referenced when defining a structured type.

composite component

Rec. T.411

A composite logical or layout object, or an object class from which composite logical or layout objects may be derived.

composite gain

See:
composite loss or gain.

composite layout object

Rec. T.411

An object in the layout structure that has one or more subordinate objects.

composite logical object

Rec. T.411

An object in the logical structure that has one or more subordinate objects.

composite loss or gain

Recs. G.101, Q.43

The composite loss of a quadripole inserted between two impedances Z_E (of a generator) and Z_R (of the load) is the expression in transmission units of the ratio P_E/P_R, where

P_E is the apparent power that the generator Z_E would furnish to a load of impedance Z_E,

P_R is the apparent power that the same generator furnishes via the said quadripole to the load Z_R.

if the number thus obtained is negative, then there is a composite gain.

composite part

Rec. Z.341

A *decomposition meta-language* symbol for an *information entity* that can be divided into smaller parts.

compound parameter argument

Rec. Z.341

A *parameter argument* made up of more than one *information unit.* It is used to specify a multidimensional *object* or value, e.g. a date can be expressed as 1979-12-31.

compression

Rec. T.417

This attribute indicates if the code extension technique for uncompressed mode is present in the content portion.

computer language; machine language

Rec. Q.9

A low level language whose instructions consist only of computer instructions.

concatenation

Rec. T.412

This attribute specifies whether or not the content associated with a basic logical object to which it applies and the content associated with an earlier basic logical object in the sequencial logical order which has the same content architecture class, layout category and fill order, are to be concatenated. That is, the attribute indicates whether the content associated with the object and the earlier object are to be treated as an unbroken stream. There may be other logical objects between the two in the sequential logical order, but these must not specify the same content architecture class, layout category and fill order.

concatenation

Rec. X.200

A function performed by an (N)-entity to map multiple (N)-protocol-data-units into one (N – 1)-service-data-unit.

concealment

Rec. Z.341

A *video attribute* by which information is hidden, e.g. secret parts of a *password.*

concentration (in a switching stage)

Rec. Q.9

A configuration wherein the number of inlets into the switching stage is larger than the number of outlets.

concentrator; digital concentrator

Recs. G.960, I.430

Equipment containing the means to combine, in one direction, a number of basic accesses, and/or primary rate accesses into a lesser number of time-slots by omitting the idle channels and/or redundancy, and to perform the corresponding separation in the contra-direction.

concrete grammar

Rec. Z.100

A *concrete grammar* is the *concrete syntax* along with the *well-formedness rules* for that *concrete syntax*. *SDL/GR* and *SDL/PR* are the *concrete grammars* of *SDL*. The *concrete grammars* are mapped to the *abstract grammar* to determine their *semantics*.

concrete graphical grammar

Rec. Z.100

The *concrete graphical grammar* is the *concrete grammar* for the graphical part of SDL/GR.

concrete graphical syntax

Rec. Z.100

The *concrete graphical syntax* is the *concrete syntax* for the graphical part of *SDL/GR*. The *concrete graphical syntax* is expressed in Z.100 using an extended form of *BNF*.

concrete syntax

Rec. X.200

Those aspects of the rules used in the formal specification of data which embody a specific representation of that data.

concrete syntax

Rec. Z.100

The *concrete syntax* for the various representations of *SDL* is the actual *symbols* used to represent *SDL* and the interrelationship between *symbols* required by the syntactic rules of *SDL*. The two *concrete syntaxes* used in Z.100 are the *concrete graphical syntax* and the *concrete textual syntax*.

concrete textual syntax

Rec. Z.100

The *concrete textual syntax* is the *concrete syntax* for *SDL/PR* and the textual parts of *SDL/GR*. The *concrete textual syntax* is expressed in Z.100 using *BNF*.

concurrent

Rec. I.140

The configuration of a connection is described as concurrent when all of the connection elements involved are established simultaneously and released simultaneously.

condition

Rec. Z.341

An *identifier* and a (group of) *parameter argument(s)* separated by a *relational operator*. Used in data base queries.

conditional (parameter)

Rec. X.215

A parameter whose presence in a request or response depends on conditions defined in the text of Recommendation X.215; and whose presence in an indication or confirm is mandatory if that parameter was present in the preceding session service primitive, or absent if that parameter was absent in the preceding session service primitive.

conditional C component

Rec. X.413

A ASN.1 element which shall be present in an instance of its class as dictated by Recommendation X.413. See the definition of grade.

conditional expression

Rec. Z.100

A *conditional expression* is an *expression* containing a *Boolean expression* which controls whether the consequence *expression* or the alternative *expression* is interpreted.

conducted conference

Rec. F.710

A conference where the conductor handles the (electronic) signals such as grant floor request (as a reaction on a floor request) and where the conductor opens and closes microphones of participants.

conference

Rec. F.710

A meeting of a number of people in more than one location for discussion or consultation on subjects of common interest.

conference call

Suppl. No. 2 (II.4)

A *multi-address call* in which the signals which may be transmitted by any one of the terminals are received simultaneously by all other *terminals.*

Note – The order in which the terminals may transmit shall be mutually agreed.

conference call services

Suppl. No. 1 (II.2)

The service provides the possibility to connect a number of specified subscribers on the same telephone call.

conference calling

Rec. I.250

An ISDN supplementary service which allows a user to communicate simultaneously with multiple parties, which may also communicate among themselves.

conference conductor

Rec. F.710

One who sets up, chairs and clears the conference. If necessary he coordinates and manages Network and Terminal functions such as giving the floor. All functions have to be accomplished in such a way that can be easily controlled by an actual participant in the conference, without special training (e.g. Administration's personnel should not be required).

conference repeater

Rec. R.140

A telegraph repeater connecting several circuits, which receives signals from any one of the circuits and automatically retransmits them over all the others.

confidence coefficient; confidence level

Suppl. No. 6 (II.3)

The value $1 - \alpha$ of the *probability* associated with a *confidence interval* or a *statistical tolerance interval*, where α is the *significance level*.

confidence interval

Suppl. No. 6 (II.3)

The random interval limited by two *statistics* or by a single *statistic*, such that the *probability* that a parameter to be estimated is covered by this interval is equal to a given value $1 - \alpha$, where α is the *significance level*.

confidence level

See:
confidence coefficient; confidence level.

confidence limit

Suppl. No. 6 (II.3)

Each of the limits of a two-sided *confidence interval*, or the single limit of a one-sided *confidence interval*.

confirm (primitive)

Rec. X.210

A primitive issued by a service-provider to complete, at a particular service-access-point, some procedure previously invoked by a request at that service-access-point.

Note – Confirms can be positive or negative as appropriate to the circumstances.

confirmation of clearing signal

U.140

Return switching signal which indicates that the clearing signal has been executed.

confirmation time, T_c

Rec. M.495

The time from the occurrence of the potencial failure to the instant when the fault is confirmed as requiring a restoration: $T_c = T_1 + T_2$.

confirmed-service

Rec. X.210

A service which results in an explicit confirmation from the service-provider. There is not necessarily any relationship to a response from the peer service-user.

conformance assessment process

Rec. X.290

The complete process of accomplishing all conformance testing activities necessary to enable the conformance of an implementation or a system to one or more OSI* Recommendations* to be assessed. It includes the production of the PICS and PIXIT documents, preparation of the real tester and the SUT, the execution of one or more test suites, the analysis of the results and the production of the appropriate system and protocol conformance test reports.

conformance log

Rec. X.290

A record of sufficient information necessary to verify verdict assignments as a result of conformance testing.

conformance test suite

Rec. X.290

A test suite for conformance testing of one or more OSI* protocls. *Note* – It should cover both capability testing and behaviour testing. It may be qualified by the adjectives: abstract, generic or executable, as appropriate. Unless stated otherwise, an *abstract test suite* is meant.

conformance testing

Rec. X.290

Testing the extent to which an IUT is a conforming implementation.

conforming implementation

Rec. X.290

An IUT which is shown to satisfy both static and dynamic conformance requirements, consistent with the capabilities stated in the PICS.

confusion message (CFN)

Rec. Q.762

A message sent in response to any message (other than a confusion message) if the exchange does not recognize the message or detects a part of the message as being unrecognized.

confusion signal

Recs. Q.9, Q.254

A signal sent in the backward direction indicating that an exchange is unable to act upon a message received from the preceding exchange because the message is considered unreasonable.

congestion tone

Rec. E.182

A tone advising the caller that the groups of lines or switching equipment necessary for the setting-up of the required call or for the use of a specific service are temporarily engaged.

CONNECT

Rec. Z.333

Make a connection between two existing entities.

connect

Rec. Z.100

Connect indicates the connection of a *channel* to one or more *signal routes.*

connect message (CON)

Recs. Q.9, Q.762

A message sent in the backward direction indicating that all the address signals required for routing the call to the called party have been received and that the call has been answered.

connect seizing signal (sent in the forward direction)

Rec. Q.310

This line signal is transmitted at the beginning of a call to initiate circuit operation at the incoming end of the circuit to busy the circuit and to seize equipment for switching the call.

connected line identification presentation (COLP)

Recs. I.250, Q.81

A supplementary service offered to the calling party which provides the connected party's ISDN-number to the calling party.

connected line identification restriction (COLR)

Recs. I.250, Q.81

A supplementary service offered to the connected party to restrict presentation of the connected party's ISDN number to the calling party.

connected number

Rec. Q.762

Information sent in the backward direction to identify the connected party.

connection

Rec. E.600

An association of resources providing means for communication between two or more devices in, or attached to, a telecommunication network.

connection

Rec. I.112

A concatenation of transmission channels or telecommunication circuits, switching and other functional units set up to provide for the transfer of signals between two or more points in a telecommunication network, to support a single communication.

connection

Recs. M.60, Q.9

An association of transmission channels or circuits, switching and other functional units set up to provide a means of transfer of information between two or more points in a telecommunication network.

connection; digital connection

Rec. M.60

A concatenation of digital transmission channels or digital telecommunication circuits, switching and other functional units set up to provide for the transfer of digital signals between two or more points in a telecommunication network, to support a single communication.

connection; international connection

Rec. M.60

Whole of the means joining temporarily two subscribers and enabling them to exchange information.

connection; international telephone connection

Rec. M.60

A complete international telephone connection has three parts, as shown in Figure 1/M.560:

- an international chain;
- two national systems, one on each end.

connection

Rec. P.10

A temporary association of transmission channels or telecommunication circuits, switching and other functional units set up to provide the means of a transfer of information between two or more points in a telecommunication network.

(complete) connection

Rec. P.10

A *connection* between users' terminals.

connection

Rec. U.140

A temporary association of channels or circuits, switching and other functional units set up to provide for the transfer of information between two or more points in a telecommunication network.

(complete) connection

Rec. U.140

A temporary association of channels or circuits, switching and other functional units set up to provide for the transfer of information between terminals in a telecommunication network.

connection accessibility

Rec. E.800

The *probability* that a *connection* can be established within specified tolerances and other given conditions following receipt by the exchange of a valid code.

connection attribute; ISDN connection attribute

Rec. I.112

A specified characteristic of an ISDN connection.

Note – The value(s) assigned to one or more connection attributes may be used to distinguish that connection from others.

connection configuration

Rec. I.140

This attribute describes the spatial arrangement for transferring information on a given connection. It consists of two sub-attributes, topology and dynamics.

connection configuration

Rec. I.140,

This attribute describes the spatial arrangement for transferring information across a given connection element. It consists of two sub-attributes, topology and uniformity.

connection confirm (CC)

Rec. Q.712

A *connection confirm* message is sent by the called SCCP to indicate to the calling SCCP that it has performed the setup of the signalling connection. On reception of a *connection confirm* message, the calling SCCP completes the setup of the signalling connection, if possible.

It is used during connection establishment phase by connection-oriented protocol class 2 or 3.

connection control protocol; information transfer coding/protocol

Rec. I.140

These attributes characterize the protocol/coding on the signalling or user information transfer channel at a given access point or reference point.

connection element; ISDN connection element

Rec. I.112

A part of an ISDN connection which has stated values of one or more ISDN connection attributes.

connection end-point

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A signalling point which may be either originating or destination.

connection establishment

See:

call establishment; connection establishment.

connection identification

Glos. (VI.7, VI.8, VI.9)

A number which identifies unambiguously a certain connection at the interface between the SCCP and a user function.

(complete) connection in telecommunication

Rec. Q.9

An association of transmission channels or circuits, switching and other functional units set up to provide means for a transfer of information between terminals in a telecommunication network.

Note 1 – A connection is the result of a switching operation.

Note 2 – A connection which allows an end-to-end communication, e.g. a conversation, may be called a "complete connection".

Note 3 – The connection makes a communication possible but is not a communication.

connection integrity for telephone service

Rec. E.855

The degree to which an established telephone connection is offered without excessive transmission interruptions.

connection-oriented network service

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A network service that establishes logical connections between end users before transferring information.

connection pattern

Rec. E.711

A specific set of information transfer and general attributes which are significant for traffic engineering. Information transfer and general attributes are described in Recommendation I.210. Each call pattern can be served by one or more connection patterns.

connection refused (CREF)

Rec. Q.712

A *connection refused* message is sent by the called SCCP or an intermediate node SCCP to indicate to the calling SCCP that the setup of the signalling connection has been refused.

It is used during connection establishment phase by connection-oriented protocol class 2 or 3.

connection release

See:
call clear-down; connection release.

connection release delay

Rec. Q.543

Connection release delay is defined as the interval from the instant when DISCONNECT or RELEASE message is received from a signalling system until the instant when the connection is no longer available for use on the call (and is available for use on another call) and a corresponding RELEASE or DISCONNECT message is passed to the other signalling system involved in the connection.

connection request

Rec. Q.762

Information sent in the forward direction on behalf of the signalling connection control part requesting the establishment of an end-to-end connection.

connection request (CR)

Rec. Q.712

A *connection request* message is sent by a calling SCCP to a called SCCP to request the setting up of a signalling connection between the two entities. The required characteristics of the signalling connection are carried in various parameter fields. On reception of a *connection request* message, the called SCCP initiates the setup of the signalling connection if possible.

It is used during connection establishment phase by connection-oriented protocol class 2 or 3.

connection retainability

Rec. E.800

The *probability* that a *connection*, once obtained, will continue to be provided for a *communication* under given conditions for a given *time duration.*

connection section

Glos. (VI.7, VI.8, VI.9)

A section of an SCCP connection between endpoints or between an endpoint and an intermediate point or between intermediate points.

connection set-up delay at a single connection element boundary, B_i

Rec. I.352

Is defined using two call processing message transfer events (MTEs). Table 1/I.352 identifies the message transfer events and the resulting call states for I.451(Q.931) connection processing messages. Table 2/I.352 identifies the message transfer events and the resulting call states for the relating Signalling System No. 7 user-part

messages defined in Recommendation Q.762. Connection set-up delay is the length of time that starts when a SETUP or the last address information message creates a message transfer event at B_i; and ends when the corresponding CONNECT message returns and creates its message transfer event at B_i.

Connection set-up delay observed at a single connection element boundary = $(t_2 - t_1)$.

where

t_1 is the time of occurrence of the starting message transfer event

t_2 is the time of occurrence of the ending message transfer event.

connection set-up delay between two connection element boundaries

Rec. I.352

Can be measured at one connection element boundary, B_1, and then measured at another boundary, B_2, from the distant calling S/T interface. The difference in the values obtained is the connection set-up delay contributed by the connection elements between two boundaries.

Connection set-up delay between two boundaries = $(d_1 - d_2)$

where

d_1 is the connection set-up delay at B_1,

d_2 is the connection set-up delay at B_2.

connection through an analogue international exchange

Rec. Q.45 bis

A connection through an analogue international exchange comprises the 4-wire speechpath between the exchange boundaries denoted by points A and D of Figure 1/Q.45 *bis*. However with exception of crosstalk all transmission requirements are addressed to the 2-wire path of each direction. The GO direction is indicated by a heavy line in Figure 1/Q.45 *bis* and referred to as a typical section of transmission in the context of Recommendation Q.45 *bis*.

connection through an exchange

Rec. G.123

By "connection through an exchange" is to be understood the pair of wires corresponding to a direction of transmission and connecting the input point of a circuit incoming in the exchange to the output point of a different circuit outgoing from the exchange. These input or output points are those defined in Recommendation Q.45*bis* (points A and D of Figure 1/Q.45*bis*) and are not necessarily the same as the text access points defined in Recommendation M.640.

connection type, ISDN connection type

Rec. I.112

A description of a set of ISDN connections that consists of stated values of one or more ISDN connection attributes.

connectionless network service

Glos. (VI.7, VI.8, VI.9)

A network service that transfers information between end users without establishing a logical connection or virtual circuits.

connectionless service

Rec. I.113

A service which allows the transfer of information among service subscribers without the need for end-to-end call establishment procedures.

Note – Connectionless services may be used to support both interactive and distribution services.

connectionless (service)

Rec. Q.9

A mode of transferring information across a network, between users, without establishing a logical connection or a virtual circuit.

connectivity rules

Rec. Z.341

An aspect of the *drawing convention* of the *decomposition meta-language* indicating *symbol* interrelationship.

connector

Rec. Z.341

An aspect of the *drawing convention* of the *decomposition meta-language* indicating how *flowlines* may be broken.

connector

Rec. Z.100

A *connector* is an *SDL/GR symbol* which is either an *in-connector* or an *out-connector.* A *flow line* is implied from *out-connectors* to the associated *in-connector* in the same *process* or *procedure* identified by having the same *name.*

connector (in SDL)

Rec. Q.9

A connector (○) is either an *in-connector* or an *out-connector.* A *flow line* may be broken by a pair of *associated connectors*, with the flow assumed to be from the *out-connector* to its associated *in-connector.* (See Recommendation Z.100, § 2.6.6.)

consistent partitioning subset

Rec. Z.100

A *consistent partitioning subset* is a set of the *blocks* and *subblocks* in a *system specification* which provides a complete view of the *system* with related parts at a corresponding *level of abstraction.* Thus, when a *block* or *subblock* is contained in a *consistent partitioning subset*, its ancestors and siblings are too.

consistent refinement subset

Rec. Z.100

The *consistent refinement subset* is a *consistent partitioning subset* which contains all *blocks* and *subblocks* which use the *signals* used by any of the *blocks* or *subblocks.*

constant failure intensity period

Suppl. No. 6 (II.3)

That possible period in the life of a *repaired item* during which the *failure intensity* is approximately constant.

Note – In any particular case it is necessary to explain what is meant by "approximately constant".

constant failure rate period

Suppl. No. 6 (II.3)

That possible period in the life of a *non-repaired item* during which the *failure rate* is approximately constant.

Note – In any particular case it is necessary to explain what is meant by "approximately constant".

constant spacing

Rec. T.411

The characteristic of a font wherein the distance between the position point and the escapement point is the same for all character images.

constituent

Rec. T.411

A set of attributes that is one of the following types: a document profile, an object description, an object class description, a presentation style, a layout style or a content portion description.

constructed encoding

Rec. X.209

A data value encoding in which the contents octets are the complete encoding of one or more other data values.

consumer's risk (point)

Suppl. No. 6 (II.3)

A point on the *operating characteristic curve* corresponding to a predetermined and usually low *probability of acceptance.*

content

Recs. F.400, X.400, X.402

In the context of message handling, an information object, part of a message, that the MTS neither examines nor modifies, except for conversion, during its conveyance of the message.

content

Rec. T.411

The information conveyed by the document, other than the structural information, and that is intended for human perception.

content architecture

Rec. T.411

Rules for defining the internal structure and representation of the content of basic components in terms of a set of content elements, attributes and control functions, and guidelines for the presentation of the content.

content architecture class

Rec. T.411

The rules for defining the internal structure and representation of the content of basic components in one of a set of forms defined for each type of content element.

Note – Examples of content architecture classes are formatted form, processable form and formatted processable form in the case of character content elements.

content architecture class

Rec. T.412

This attribute specifies the content architecture class of the content associated with the basic component.

content architecture level

Rec. T.411

An identified subset of the features pertaining to a content architecture class.

content editing process

Rec. T.411

The process that creates new content or modifies previous content.

content element

Rec. T.411

A basic element of the content of a document.

content generator

Rec. T.412

The value of this attribute is a string expression, which, when evaluated, produces the content associated with the object. String expressions are defined in Rec. T.412, § 5.1.3.1.

content identifier – logical content identifier – layout

Rec. T.412

These attributes identify a content portion description uniquely within the context of the document and are used to refer to that content portion description.

These attributes are used in the context of relationships to content portions (see Rec. T.412, § 5.3.3.3).

content information

Rec. T.412

This attribute specifies that part of the content portion description which is composed of content elements (for example, graphic characters, pixels) governed by a content architecture.

content layout process

Rec. T.411

The process that, interacting with the document layout process, consists of the formatting of content portions into available areas and the determination of the sizes of blocks in accordance with information contained in the presentation styles.

content-length

Rec. X.413

An attribute which gives the length of the content of a delivered-message (or returned-content).

content portion

Rec. T.411

The result of partitioning the content of a document according to its logical and/or layout structure.

content portion description

Rec. T.411

A constituent of a document, representing a content portion that consists of content information and attributes to specify the properties of its content information.

content portions

Rec. T.412

This attribute specifies which content portions are associated with a component. If more than one content portion is associated with a component then this attribute specifies an ordering among these content portions.

content-returned

Rec. X.413

An attribute which signals that a delivered-report (or a delivered-message) contained a returned content.

content type

Recs. F.400, X.400

In the context of message handling, an identifier, on a message envelope, that identifies the type (i.e. syntax and semantics) of the message content.

content type

Rec. T.411

A category of content elements such as graphic characters, raster graphic elements and geometric graphic elements.

contents octets

Rec. X.209

That part of a data value encoding which represents a particular value, to distinguish it from other values of the same type.

context prefix

Rec. X.518

The sequence of RDNs leading from the root of the DIT to the initial vertex of a naming context, corresponds to the distinguished name of that vertex.

continental circuit

Rec. D.000

An international circuit between two international exchanges situated in two different countries in the same continent.

continental circuit

Rec. F.68

One established between two exchanges in the same continent.

continental connection

Rec. F.68

Connection established between stations within the same continent.

continental exchange

Rec. F.68

An international centre where the international circuits terminating there are solely continental circuits.

continuation character

Rec. Z.341

A special *execution character* implying a similar *command code* for the next *command* and hence allowing the *system* to *prompt* directly for the next *block of parameters.*

continuity check

Recs. M.60, Q.9, Glos. (VI.7, VI.8, VI.9)

A check made to a circuit or circuits in a connection to verify that an acceptable path (for transmission of data, speech, etc.) exists.

continuity check

Gloss. (VI.3)

A check made of the circuit or circuits in a connection to verify that a speech path exists.

continuity check indicator

Rec. Q.762

Information sent in the forward direction indicating whether or not a continuity check will be performed on the circuit(s) concerned or is being (has been) performed on a previous circuit in the connection.

continuity check message

Rec. Q.9

A type of message containing a continuity signal or a continuity-failure signal.

continuity check request message (CCR)

Rec. Q.762

A message sent by an exchange for a circuit on which a continuity check is to be performed, to the exchange at the other end of the circuit, requesting continuity checking equipment to be attached.

continuity check transceiver

Gloss. (VI.3)

A combination of the check-tone transmitter and receiver.

continuity check transponder

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A device which is used to interconnect the Go and Return paths of a circuit at the incoming end which on detection of a check tone, returns another check tone to the originating end to permit a continuity checking of a 2-wire circuit.

continuity indicator

Rec. Q.762

Information sent in the forward direction indicating whether or not the continuity check on the outgoing circuit was successful. A continuity check successful indication also implies continuity of the preceding circuits and successful verification of the path across the exchange with the specified degree of reliability.

continuity message (COT)

Rec. Q.762

A message sent in the forward direction indicating whether or not there is continuity on the preceding circuit(s) as well as of the selected circuit to the following exchange, including verification of the communication path across the exchange with the specified degree of reliability.

continuity signal

Rec. Q.254

A signal sent in the forward direction indicating continuity of the preceding No. 6 speech circuit(s) as well as of the selected speech circuit to the following international exchange, including verification of the speech path across the exchange with the specified degree of reliability.

continuous checking

Rec. M.60

At the time an item is active, it is being checked for good performance. If the item does not fulfill the test requirements, it is considered to have failed.

continuous compelled signalling

See:

compelled signalling; fully compelled signalling; continuous compelled signalling.

continuous signal

Rec. Z.100

A *continuous signal* is a means to define that when in a *state* the associated *Boolean* condition becomes True, the *transition* following the *continuous signal* is interpreted.

contradirectional interface

Rec. G.701

An interface across which the timing signals associated with both directions of transmission of the signals to be transferred, are directed towards the same side of the interface.

contradirectional interface

Rec. Q.9

An interface across which the timing signals associated with both directions of transmission are directed towards the service side (e.g., data or signalling) of the interface (see Figure 5/Q.9).

contribution; contribution application

Rec. I.113

Use of a broadband service or channel for transferring audio or video information to user for further post-production processing and subsequent distribution.

contribution application

See:

contribution; contribution application.

control

Rec. M.30

A modifier of the state of an NE.

control channel

Rec. G.763

A unidirectional transmission path from the transmit unit of one DCME to the receive unit of one or more associated DCMEs and which is dedicated primarily to carrying channel assignment messages. In addition, the control channel transmits other messages such as idle noise levels, dynamic load control, and alarm messages.

Note – An alternative name for "control channel" is "assignment channel".

control channel ; C-channel

Recs. G.960, I.430

Additional dedicated transmission capability provided at a reference point or interface, or transported by a digital transmission system, to support the execution of management functions.

Note – The control channel at a specific reference point, interface or type of transmission system is denoted by an appropriate suffix. For example:

- C_{V1} channel: the control channel at the V_1 interface
- C_L channel: the control channel at the line.

control character

Rec. S.140

A *character* whose occurrence in a particular context, initiates, modifies or stops an operation.

Note 1 – A control character may be recorded for use in subsequent action.

Note 2 – A control character is not a graphic character but may have a graphic representation in some circumstances.

control character

Recs. T.50, T.51, T.61

A control function the coded representation of which consists of a single bit combination.

control character

Recs. Q.9, Z.341

A character whose occurrence in a particular context initiates, modifies, or stops an *action* that affects the recording, processing or interpretation of data.

control circuit

Rec. D.180

A telephone-type circuit which may be used by a broadcasting organization for the supervision and/or coordination of a sound- or television-programme transmission.

Note – More than one such control circuit may be required for association with a single television circuit.

control circuit

Rec. M.495

A circuit used for the transmission of restoration control information.

control circuit

Rec. N.3

A telephone-type circuit between the point of origin of the programme and the point where it terminates (recording equipment, studio, switching centre, transmitter, etc.) used by a broadcasting organization for the supervision and coordination of a sound or television transmission.

More than one control circuit may be used in association with the different programme connections involved in a single transmission, such as:

a) the *television* connection;
b) the *international sound* connection (for supervising the programme effects circuit provided for transmitting, for example, the background noises of a programme);
c) the *commentary* connection (for supervising the sound-programme circuit transmitting a commentary in a given language);
d) the *complete programme* connection (for supervising the sound-programme circuit transmitting the whole of the sound part of a programme).

control equipment

Rec. M.495

An equipment that is used to implement the transmission restoration control function.

control flow diagram

Rec. Z.100

A *control flow diagram* is either a *process diagram*, a *procedure diagram*, or a *service diagram*.

control function

Recs. T.50, T.51

An action that affects the recording, processing, transmission or interpretation of data and that has a coded representation consisting of one or more bit combinations.

control function

Rec. T.61

An action that affects the recording, processing, transmission or interpretation of data. The coded representation of a control function consists of one or more bit combinations. A control function is not a graphic character, but may have a graphic representation in some circumstances (e.g. for record purposes). It must not, however, be transmitted with the specific intent of producing a graphic representation.

control function

Rec. T.411

An element of a character set that affects the recording, processing, transmission or interpretation of data, and that has a coded representation consisting of one or more bit combinations.

Note – Examples of control functions are Select Graphic Rendition (SGR) in character content architectures and Set Line Type in geometric graphics content architectures.

control functions

Rec. Z.341

Functions related to the *man-machine interface* that are applied by the *user* independently while in a *dialogue* with the *system* application *functions*. *Control functions* have no direct impact on the *system functions*.

control key

Rec. Z.341

A key which when pressed performs a *control function*.

control mechanism (deprecated)

See:

loopback control mechanism.

control point (deprecated)

See:

loopback control point.

control procedure

Rec. E.131

A method in which information is exchanged in a predetermined forward order and backward order between subscriber and exchange to effect control of a service.

control signalling rate

Rec. V.7

The transfer rate of the encoded and multiplexed control signalling (the equivalent of V.24 and V.25 interchange circuits, except the data and timing circuits, insofar as required for an application, with the possibility of adding other signalling).

control station

Recs. M.60, M.80

A control station is that point within a general maintenance organization which fulfills the control responsibilities for the circuit, group, supergroup, digital section, etc., assigned to it.

controlled maintenance

Rec. M.60, Suppl. No. 6 (II.3)

A method to sustain a desired quality of service by the systematic application of analysis techniques using centralized supervisory facilities and/or sampling to minimize preventive maintenance and to reduce corrective maintenance.

controlled rerouting

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure of transferring in a controlled way, signalling traffic from an alternative signalling route to the normal signalling route, when this has become available.

controlled slip

Rec. G.701

The irretrievable loss or gain of a set of consecutive digit positions in a digital signal, in which both the magnitude and instant of that loss or gain are controlled, to enable the signal to accord with a rate different from its own.

Note – Where appropriate the term may be qualified, for example: controlled octet slip, controlled frame slip.

controlled station

Rec. M.495

The station that has its systems, links and other maintenance elements supervised, where the information and commands for switching are sent to and received from, the control centre, and where the switching is effected.

controlling exchange

Rec. E.100

The exchange which is responsible for setting up calls and decides the order in which they are to be connected is called the controlling exchange.

The Administrations concerned shall agree among themselves to esignate the controlling exchange.

As a general rule, they shall select for this purpose:

1) when a single international circuit is used, the international exchange operating that circuit on the calling party side;
2) when two or more international circuits are used:
   a) either the international exchange which has access to the first international circuit on the calling party side, or
   b) the international transit exchange designated by joint agreement of the Administrations concerned.

Note – It may be that the international circuits are not operated exclusively by operators at the international exchange where they end; operators at other international or national exchanges may also have access to them by means of an automatic transit device. In such circumstances these international or national exchanges must be treated as though they were a controlling exchange, as far as setting up calls is concerned.

controlling MSC

See:

MSC-A (controlling MSC).

controlling operator

Rec. E.100

The controlling operator is the outgoing operator in the controlling exchange who operates the international circuit. The controlling position is the position used by the controlling operator.

Note – However, it may happen that the outgoing international circuit is also operated by an operator in an international or even a national exchange. If this is so, the latter operator is considered as controlling operator.

controlling operator

Recs. E.200, F.110

The first land-based operator handling the radiotelegram, radiotelex call or radiotelephone call in the direction from mobile station.

controlling station (on a circuit)

Rec. R.140

A station located on the circuit and having the responsibility for the quality of transmission on the circuit.

convenor

Rec. F.710

A person who arranges and reserves the conference facilities.

conventional degree of distortion

Rec. R.140

The degree of individual distortion which has a very small assigned probability of being exceeded over a prolonged period of time.

convergence

Rec. G.165

The process of developing a model of the echo path which will be used in the echo estimator to produce the estimate of the circuit echo.

convergence protocol

Rec. X.300

A protocol that is used on top of a subnetwork service (transparent for the related subnetwork), in order to construct another subnetwork service. This protocol may be active during all, or only some of the call related to the constructed subnetwork service.

convergence time

Rec. G.165

For a defined echo path, the interval between the instant a defined test signal is applied to the receive-in port of an echo canceller with the estimated echo path impulse response initially set to zero, and the instant the returned echo level at the send-out port reaches a defined level.

conversation time

Rec. D.150

A minute of conversation time is the traffic unit that is recommended for use in the traffic unit price procedure. Conversation time is the interval that elapses between:

- the moment when the reply condition (answer signal in the backward direction) is detected at the point where the recording of the call duration takes place, and
- the moment when the clear forward condition (clear forward signal) is detected at the same point.

conversation time

See:

duration of a call (conversation time).

conversational mode

Rec. Q.9

A mode of operation of a data processing system in which a sequence of alternating entries and responses between a user and the system takes place in a manner similar to a dialogue between two persons.

conversational service

Rec. I.113

An interactive service which provides for bidirectional communication by means of real-time (no store-and-forward) end-to-end information transfer from user to user or between user and host.

conversational services

Rec. I.121

Conversational services in general provide the means for bidirectional dialogue communication with real-time (no store-and-forward) end-to-end information transfer from user to user or between user and host (e.g. for data processing). The flow of the user information may be bidirectional symmetric, bidirectional asymmetric and in some specific cases (e.g. such as video surveillance), the flow of information may be unidirectional. The information is generated by the sending user or users, and is dedicated to one or more individual communication partners at the receiving site.

Examples of broadband conversational services are videotelephony, video conference and high speed data transmission.

See Figure 1/I.121

conversion

Recs. F.400, X.400

In the context of message handling, a transmittal event in which an MTA transforms parts of a message's content from one encoded information type to another, or alters a probe so it appears that the described messages were so modified.

conversion facility (CF)

Rec. F.201, Suppl. No. 1 (II.4)

Fully automatic system performing the necessary conversion between the Teletex service and the telex service.

converted EITs

Rec. X.413

An attribute identifying the encoded-information-types of the message content after conversion.

coordinated test method

Rec. X.290

An external test method for which a standardized test management protocol is defined as the realization of the test coordination procedures, enabling the control and observation to be specified solely in terms of the lower tester activity, including the control and observation of test management PDUs.

Coordinated Universal Time (UTC)

Rec. X.208

The time scale maintained by the Bureau Internationale de l'Heure (International Time Bureau) that forms the basis of a coordinated dissemination of standard frequencies and time signals.

Note 1 – The source of this definition is Recommendation 460-2 of the Consultative Committee on International Radio (CCIR). CCIR has also defined the acronym for Coordinated Universal Time as UTC.

Note 2 – UTC is also referred to as Greenwich Mean Time and appropriate time signals are regularly broadcast.

copy information

Rec. F.500

Replicated information.

core

Rec. G.651

The central region of an optical fibre through which most of the optical power is transmitted.

core area

Rec. G.651

For a cross section of an optical fibre the area within which the refractive index everywhere (excluding any index dip) exceeds that of the innermost homogeneous cladding by a given fraction of the difference between the maximum of the refractive index of the core and the refractive index of the innermost homogeneous cladding.

Note 1 – The core area is the smallest cross-sectional area of a fibre excluding any index dip, which is contained within the locus of points where the refractive index n_3 is given by

$$n_3 = n_2 + k(n_1 - n_2)$$ (see Figure A-1/G.651)

where:

n_1 = maximum refractive index of the core,

n_2 = refractive index of the innermost homogenous cladding,

k = a constant.

Note 2 – Unless otherwise specified, a k value of 0.05 is assumed.

core centre; cladding centre

Rec. G.651

For a cross-section of an optical fibre it is the centre of that circle which best fits the outer limit of the core area (cladding).

Note 1 – These centres may not be the same.

Note 2 – The method of best fitting has to be specified.

core/cladding concentricity error

Rec. G.651

The distance between the core centre and the claddling centre divided by the core diameter.

core diameter; cladding diameter

Rec. G.651

The diameter of the circle defining the core (cladding) centre.

core diameter deviation; cladding diameter deviation

Rec. G.651

The difference between the actual and the nominal values of the core (cladding) diameter.

core tolerance field; cladding tolerance field

Rec. G.651

For a cross-section of an optical fibre it is the region between the circle circumscribing the core (cladding) area and the largest circle, concentric with the first one, that fits into the core (cladding) area. Both circles shall have the same centre as the core (cladding).

corrected equivalent resistance error

Rec. G.601

Equivalent resistance error evaluated by an echometric measurement comprising echo correction. The correction may be effected in amplitude or in amplitude and phase or according to other criteria (e.g. in energy).

Note – The corrected equivalent resistance error may be evaluated in terms of one kilometre, as the ratio Δ_k between corrected equivalent resistance error Δ_e as measured on a cable section, and the square root of the length L of this section, in km.

$$\Delta_k = \Delta_e / \sqrt{L\Omega} \cdot \text{km}^{-1/2}$$

corrected reference equivalents

Rec. P.10

Values of sending or receiving *reference equivalent* converted by a defined, nonlinear, transformation into corresponding values that obey the laws of algebraic addition.

Note – The conversion is performed to avoid some of the difficulties experienced in applying *reference equivalents.* It is defined in Annex C to Recommendation G.111.

correction character

Rec. Z.341

A character used to invoke correction facilities prior to analysis of *input* by the *system.*

corrective maintenance

See:
maintenance; corrective maintenance.

corrective maintenance; repair

Rec. M.60, Suppl. No. 6 (II.3)

The maintenance carried out after fault recognition and intended to restore an item to a state in which it can perform a required function.

corrective maintenance time

See:
repair time; corrective maintenance time.

correspondent (N)-entities

Rec. X.200

(N)-entities with an (N – 1)-connection between them.

country code

Recs. E.160, Q.10

The combination of one, two or three digits characterizing the called country.

Examples:

7 USSR;
54 Argentina;
591 Bolivia.

Note 1 – In the case where a country uses different international prefixes, abbreviated dialling can be used. In this case, for calls to one country of a defined group of countries, a regional country code, composed of fewer digits than the normal country code, may be used.

Examples:

For traffic between Latin American countries, the following regional country codes might be used:

1 Argentina;
2 Brazil;
3 Chile, etc.

Note 2 – In the case where several countries are included in one integrated numbering plan, no country code need be dialled for the traffic from one of these countries to another. For access by other countries, these countries:

- may be included under one common country code, or
- may have separate country codes,

always keeping in mind the necessity to avoid exceeding the recommended maximum number of digits in the international number.

country-code indicator

Recs. Q.9, Q.254

Information sent in the forward direction indicating whether or not the country code is included in the address information.

country-code indicator; echo-suppressor indicator (sent in the forward direction)

Rec. Q.400

Signals indicating:

- whether or not the country-code is included in the address information (international transit or terminal call);
- whether or not an outgoing half-echo suppressor should be inserted in the first international exchange reached;
- whether or not an incoming half-echo suppressor should be inserted (an outgoing half-echo suppressor having already been inserted in the connection).

country name

Recs. F.400, X.400

In the context of message handling, a standard attribute of a name form that identifies a country. A country name is a unique designation of a country for the purpose of sending and receiving messages.

Note – In the context of physical delivery additional rules apply (see also physical delivery country name and Recommendation F.415).

country name

Rec. F.500

An attribute type that identifies a country. A country name is a unique designation of a country. When used as a component of a directory name, it identifies the country in which the named object is physically located or with which it is associated in some other important way. In the context of directory systems a value from ISO 3166 (Alpha-2 country codes) is used.

coupled reperforator and tape reader; fully automatic reperforator transmitter distributor (FXRD)

Rec. S.140

A perforated tape retransmitter which ensures the retransmission of all the signals recorded by perforation including the last one.

coupling

Glos. (VI.7, VI.8, VI.9)

An SCCP function which provides an association between connection sections at a relay point.

CREATE

Rec. Z.333

Establish in the system a new data set.

create

Rec. Z.341

An *action* to establish in the *system* a new *data set*; opposite of *delete.*

create

See:

create request; create.

create line area

Rec. Z.100

The *create line area* in a *block diagram* connects the *process area* of the *creating (PARENT) process* with the *process area* of the *created (OFFSPRING) process*

create request; create

Rec. Z.100

A *create request* is the *action* causing the creation and starting of a new *process instance* using a specified *process type* as a template. The *actual parameters* in the *create request* replace the *formal parameters* in the *process*

creation-time

Rec. X.413

An attribute which gives the creation-time (by the MS) of an entry.

credit

Rec. Q.712

The "credit" parameter field is used in the acknowledgements to indicate to the sender how many messages it may send, i.e., window size. It is also used in the CR and CC message to indicate the proposed and selected credit, and in the IT message to audit the consistency of this connection data at both ends of a connection section.

credit

Rec. Q.762

Information sent in a connection request, indicating the window size requested by the signalling connection control part for an end-to-end connection.

credit card calls (prefix 36)

Recs. E.216, F.126

Arrangements can be made with the Administration of certain coast stations or coast earth stations for payments for communication services to be made by a credit card. The arrangement is valid only for the services of the station with which it is made.

An operator will intervene in the call and should be provided with details of the credit card. The prefix may be followed by the number of the called party.

critical defect

Suppl. No. 6 (II.3)

A *defect* that is assessed likely to result in injury to persons or significant material damage.

critical defective item

Suppl. No. 6 (II.3)

An *item* which contains one or more *critical defect.*

critical failure

Suppl. No. 6 (II.3)

A *failure* which is assessed likely to result in injury to persons or significant material damage.

critical fault

Suppl. No. 6 (II.3)

A *fault* which is assessed likely to result in injury to persons or significant damage to material.

critical region

Suppl. No. 6 (II.3)

The set of possible values of the *statistic* used such that, if the value of the *statistic* which results from the *observed values* belongs to the set, the *null hypothesis* will be rejected, whereas it will not be rejected (accepted) if the opposite is the case.

critical state

Suppl. No. 6 (II.3)

A state of an *item* assessed likely to result in injury to persons or significant material damage.

Note – A *critical state* may be the result of a *critical fault,* but not necessarily.

critical values

Suppl. No. 6 (II.3)

The given value(s) which limit the *critical region.*

cross-exchange check (cross-office)

Rec. Q.9

A check made across the exchange to verify that a speech path exists.

cross-office check

Gloss. (VI.3)

A check made across the exchange to verify that a speech path exists.

cross-office check

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A check made of a circuit across the exchange to verify that a transmission path exists.

cross-office check

See:

cross-exchange check (cross-office)

cross-office (transit) delay

Glos. (VI.7, VI.8, VI.9)

The time a message will take to pass through an exchange.

cross-office (transit) delay

Rec. Q.9

The time a signalling message will take to pass through an exchange.

cross-office transfer time, T_{cu}

Recs. X.61, Q.725, Q.741, Q.766

T_{cu} is the period which starts when the last bit of the signal unit leaves the incoming signalling data link and ends when the last bit of the signal unit enters the outgoing signalling data link for the first time. It also includes the queueing delay in the absence of disturbances but not the additional queueing delay caused by retransmission. (See Figures 1/Q.725 and 19/X.61.)

cross reference

Rec. X.518

A knowledge reference containing information about the DSA that holds an entry. This is used for optimisation. The entry need have no superior or subordinate relationship.

crossbar switch

Rec. Q.9

A *switch* having a plurality of vertical paths, a plurality of horizontal paths, and electromagnetically-operated mechanical means for interconnecting any one of the vertical paths with any of the horizontal paths.

crossbar switches

See:

crossbar system.

crossbar system

Rec. Q.9

An automatic switching system in which the selecting mechanisms are *crossbar switches.*

crosstalk

Recs. G.960, I.430

A phenomenon by which an unwanted signal is introduced into a line through coupling to one or more other lines.

crosstalk

Rec. Q.9

Electrical interference between non-connected components.

cryptographic system; cryptosystem

Rec. X.509

A collection of transformations from plain text into ciphertext and vice versa, the particular transformation(s) to be used being selected by keys. The transformations are normally defined by a mathematical algorithm.

cryptosystem

See:
cryptographic system; cryptosystem.

current layout position

Rec. T.411

The identification of a lowest level frame which is maintained during the layout process for each layout stream which occurs.

current turnoff time

Rec. K.12

The time required for the gas discharge tube to return itself to a nonconducting state following a period of conduction.

cursor

Rec. Z.341

The item in the *display area* which identifies the position appropriate to the task at hand, e.g. where the next character will appear.

cursor control functions

Rec. Z.341

Functions influencing the position or movement of the *cursor.*

cursor off (COF)

Rec. T.100

The cursor off (COF) causes the active position to be displayed in the same way as other character positions.

cursor on (CON)

Rec. T.100

The cursor on (CON) causes the active position to be visualized as a marker.

customer

Rec. D.000

The individual or entity who, or which, obtains an international service/facility from an Administration and is responsible for payment of all charges and rentals due to that Administration.

customer

Rec. D.1

The individual or entity who, or which, leases an international circuit from an Administration and is responsible for payment of all charges or rentals due to that Administration.

customer dialled operator assisted call service

Suppl. No. 1 (II.2)

With prior indication from a subscriber, an operator may be associated with an automatically dialled call at the appropriate stage to determine if the wanted person is available.

The subscriber gives this indication as part of his call set-up procedure.

Implementation requires special equipment in the long-distance switching equipment and associated operator positions.

customer equipment

Rec. G.960

The concatenation of equipment on the user side of the T reference point (i.e. TAs, TE2s, TE1s NT2 and associated transmission media). In the case of multiple access, the customer equipment includes all the equipment on the user side of all those accesses comprising the multiple access.

Note 1 – This term should not imply or restrict ownership or responsibility for providing equipment.

Note 2 – The terms "user equipment" "subscriber equipment" and "subscriber installation" are deprecated.

customer equipment

Rec. I.430

The concatenation of equipment on the user side of the T reference point (i.e. TAs, TE2s, TE1s NT2 and associated transmission media). In the case of multiple access, the customer equipment includes all the equipment on the user side of all those accesses comprising the multiple access.

Note 1 – This term should not imply or restrict ownership or responsibility for providing equipment.

Note 2 – The terms "user equipment" and "subscriber equipment" are deprecated.

customer network interface (deprecated)

See:

user network interface.

customer recorded information service

Suppl. No. 1 (II.2)

This service gives to the customer the possibility of distributing information transmitted from recording equipment to calling subscribers.

cut-off call probability

See:

premature release probability; cut-off call probability.

cut-off wavelength

Rec. G.652

The cut-off wavelength is the wavelength greater than which the ratio between the total power, including launched higher order modes, and the fundamental mode power has decreased to less than a specified value, the modes being substantially uniformly excited.

Note 1 – By definition, the specified value is chosen as 0.1 dB for a substantially straight 2 metre length of fibre including one single loop of radius 140 mm.

Note 2 – The cut-off wavelength defined in this Recommendation is generally different from the theoretical cut-off wavelength that can be computed from the refractive index profile of the fibre. The theoretical cut-off wavelength is a less useful parameter for determining fibre performance in the telecommunication network.

Note 3 – In § 1.5, two types of cut-off wavelength are described:

i) a cut-off wavelength λ_c measured in a short length of uncabled primary-coated fibre;

ii) a cut-off wavelength λ_{cc} measured in a cabled fibre in a deployment condition.

To avoid modal noise and dispersion penalties, the cut-off wavelength λ_{cc} of the shortest cable length (including repair lengths when present) should be less than the lowest anticipated system wavelength, λ_s:

$$\lambda_{cc} < \lambda_s \qquad (1)$$

This ensures that each individual cable section is sufficiently single mode. Any joint that is not perfect will create some higher order (LP_{11}) mode power and single mode fibres typically support this mode for a short distance (of the order of metres, depending on the deployment conditions). A minimum distance must therefore be specified between joints, in order to give the fibre sufficient distance to attenuate the LP_{11} mode before it reaches the next joint. If inequality (1) is satisfied in the shortest cable section, it will be satisfied *a fortiori* in all longer cable sections, and single mode system operation will occur regardless of the elementary cable section length.

Specifying $\lambda_{cc} < \lambda_s$ for the shortest cable length (including loops in the splice enclosure) ensures single mode operation. It is frequently more convenient, however, to measure λ_c, which requires only a two-metre length of uncabled fibre. λ_c depends on the fibre type, length, and bend radius, and λ_{cc}, in addition, depends on the structure of a particular cable. The relationship between λ_c and λ_{cc}, therefore, is dependent on both the fibre and cable designs. In general, λ_c is several tens of nm larger than λ_{cc}; λ_c can even be larger than the system wavelength, without violating inequality (1). Higher values of λ_c produce tighter confinement of the LP_{01} mode and, therefore, help to reduce potential bending losses in the 1550 nm wavelength region.

Short fibre lenghts (<20m) are frequently attached to sources and detectors, and are also used as jumpers for interconnections. The cut-off wavelength of these fibres, as deployed, should also be less than λ_s. Among the means of avoiding modal noise in this case are:

a) selecting only fibres with sufficiently low λ_c for such uses;

b) deployment of such fibres with small radius bends.

cyclic distortion

Rec. R.140

A telegraph distortion which is due to events having a periodic character such that the degrees of individual distortion themselves show a periodic character in the sequence of the significant instants.

cyclic redundancy check; cyclic redundancy procedure

Rec. Q.9

The monitoring of a digital bit stream to detect deviations from the expected bit patterns.

cyclic redundancy procedure

See:

cyclic redundancy check; cyclic redundancy procedure.

D

dash (in Morse code)

Rec. R.140

A signal element of mark condition and of a duration of three unit intervals followed by a signal element of space condition having a nominal duration of one unit intervals.

data

Rec. Q.712

The "data" parameter field contains information coming from upper layers or from SCCP management.

In connectionless and connection-oriented messages the data parameter field contains information coming from the upper layers.

data acknowledgement (AK)

Rec. Q.712

A *data acknowledgement* message is used to control the window flow control mechanism, which has been selected for the data transfer phase.

It is used during the data transfer phase in protocol class 3.

data activity ratio

Rec. G.763

The ratio of the number of non-preassigned TCs which are classified as data-active, to the total number of non-preassigned TCs. The ratio is expressed as a percentage to the nearest integer.

$$\text{Data activity ratio} = \frac{\sum_{N} \text{No. of non-preassigned data-active TCs}}{\text{No. of non-preassigned TCs} \times N} \times 100$$

The data activity ratio includes hangover time.

data carrier failure detector

Gloss. (VI.3)

A monitoring unit designed to indicate that the level of the data carrier on a voice-frequency channel is below the minimum sensitivity of the receiver.

data channel

Rec. Q.9

A unidirectional transmission path for data, with transmission terminal equipment at both ends.

data channel, analogue

Gloss. (VI.3)

A one-way path for data signals which includes a voice-frequency channel and an associated data modulator and demodulator.

data channel, digital

Gloss. (VI.3)

A one-way path for data signals which includes a digital channel and associated interface adaptors at each end.

data channel failure detector

Gloss. (VI.3)

A data carrier failure detector or loss of frame alignment detector.

data channel propagation time

Rec. Q.9

The period which starts when the last bit of the signal unit has entered the data channel at the sending side and ends when the last bit of the signal unit leaves the data channel at the receiving end, irrespective of whether the signal unit is disturbed or not.

data channel propagation time T_p

Rec. Q.706, Glos. (VI.7, VI.8, VI.9)

T_p is the period which starts when the last bit of the signal unit has entered the data channel at the sending side and ends when the last bit of the signal unit leaves the data channel at the receiving end irrespective of whether the signal unit is disturbed or not.

See Figure 11/Q.706.

data-circuit

Rec. X.200

A communication path in the physical media for OSI between two physical-entities, together with the facilities necessary in the physical layer for the transmission of bits on it.

data circuit terminating equipment (DCE)

Rec. V.42

In Recommendation V.42, a data circuit terminating equipment (DCE), when used without further qualification, consists primarily of three sections: interchange circuits for the interface to the data terminal equipment (DTE) and signal converters for transmission over telephone circuits. A control function is used to provide a user interface and to coordinate the operation of the interchange circuits. A control function is used to provide a user interface to coordinate the operation of the interchange circuits and the signal converter. The structure of a DCE is shown in Figure 1/V.42.

a) The DTE exchanges data with the DCE through a V.24 interface. The data is exchanged in start-stop format.

b) The signal converter provides the modulation and demodulation of signals exchanged on the GSTN, or two-wire point-to-point leased circuits.

c) The control function provides overall control and coordination between each of the DCE components. Further, the controller provides the specific operational configuration for the DCE selected by the user. The user interface to the controller is implementation dependent.

data circuit-terminating equipment (DCE)

*Series X**

In a data station, the equipment that provides the signal conversion and coding between the data terminal equipment (DTE) and the line.

Note 1 – See Figure 1/X.15.

Note 2 – The DCE may be separate equipment or an integral part of the DTE or of intermediate equipment.

Note 3 – A DCE may perform other functions that are usually performed at the network end of the line.

data communication

*Series X**

Transfer of information between functional units by means of data transmission according to a protocol.

data communications function (DCF) block

Recs. M.30, M.60

The DCF block provides the means for data communication to transport information related to telecommunications management between function blocks. Details of the CDF are given in Recommendation M.30, § 5.3.

data communication network

*Rec. M.60, Series X**

A data network which is established and operated either by Administrations or by private organizations.

data communications network

Recs. M.30, M.60

The DCN is a communication network within a TMN which supports the DCF at the reference point q_3.

data concentrator

Rec. V.7

Equipment that permits a common transmission medium to serve more *data sources* than there are data channels currently available within the transmission medium.

data country code

Rec. X.121

In the context of the international numbering plan for public data networks, a component of the international X.121 format consisting of three digits allocated by CCITT and published in Recommendation X.121.

data form 1 (DT1)

Rec. Q.712

A *data form 1* message is sent by either end of a signalling connection to pass transparently SCCP user data between two SCCP nodes.

It is used during the data transfer phase in protocol class 2 only.

data form 2 (DT2)

Rec. Q.712

A *data form 2* message is sent by either end of a signalling connection to pass transparently SCCP user data between two SCCP nodes and to acknowledge messages flowing in the other direction.

It is used during the data transfer phase in protocol class 3 only.

data link

Rec. Q.9

This is an ensemble of terminal installations and the interconnecting network operating in a particular mode that permits information to be exchanged between terminal installations.

A bidirectional transmission path for data, comprising two data channels in opposite directions which operate together at the same data rate.

data-link-connection

Rec. X.212

An association established by a Data Link Layer between two or more Data Link Service users for the transfer of data, which provides explicit identification of a set of Data Link data transmissions and agreement concerning the Data Link data transmission services to be provided for the set.

Note – This definition clarifies the definition given in Recommendation X.200.

data-link-connection-mode data transmission

Rec. X.212

The transmission of a Data-link-service-data-unit within the context of a Data-link-connection that has been previously established.

data-link-connectionless-mode data transmission

Rec. X.212

The transmission of a data-link-service-data-unit no in the context of a data-link-connection and not required to maintain any logical relationship among multiple invocations.

data network identification code (DNIC)

Rec. X.121

In the context of the international numbering plan for public data networks, a component of the international X.121 format consisting of four digits. The first three digits are regarded as the data country code (DCC), the fourth digit identifies a network in that country according to Recommendation X.121.

data object

Rec. Q.940

An object that is the direct recipient of an action or generator of an event report.

data packet transfer delay

Rec. X.135

Data packet transfer delay is the period of time that starts when a data packet creates a PE at a particular boundary, B_i, and ends when this same packet creates a later PE at another boundary, B_j. The specific X.134 PEs used in measuring data packet transfer delay at each section boundary are identified in Table 5/X.135.

Data packet transfer delay = $\{t_2 - t_1\}$ where

t_1 = Time of occurrence for the first PE.

t_2 = Time of occurrence for the second PE.

data queue freezeout fraction (Data FOF)

Rec. G.763

The ratio of the number of non-preassigned TCs classified as data-active but not connected, to the total number of non-preassigned TCs classified as data-active (i.e. connected + not connected). The ratio should be expressed as a percentage to three decimal places.

$$\text{Data FOF} = \frac{\sum_N \text{No. of non-preassigned TCs classified as data-active but not connected}}{\sum_N \text{Total No. of non-preassigned TCs classified as data-active (i.e. not connected + connected)}} \times 100$$

The number of TCs classified as data-active connected includes those within the hangover time.

data-sensitive fault

Suppl. No. 6 (II.3)

A *fault* that is revealed as a result of the processing of a particular pattern of data.

data service calls

Rec. F.600

Those data calls that relate to the operation of the international telecommunications services.

data service calls

Rec. F.601

Those data calls that relate to the operation of the international services via PSPDNs.

data set

Recs. Z.333, Z.341

A user-accessible set of one or more data items characterized by a particular use, and also by the constraints on data format and/or values that make it suitable for this use.

data signalling rate

*Series X**

The aggregate signalling rate in the transmission path of a data transmission system, expressed in normalized form in binary digits (bits) per second.

It is given by:

$$\sum_{i=1}^{m} \frac{1}{T_i} \log_2 n_i$$

where m is the number of parallel channels, T_i is the minimum interval for the i-th channel expressed in seconds, n_i is the number of significant conditions of the modulation in the i-th channel.

Note – For a single channel (serial transmission) it reduces to $1/T \log_2 n$; with a two-condition modulation ($n = 2$), it is $1/T$.

For a parallel transmission with equal minimum intervals and equal number of significant conditions on each channel, the summation is $m(1/T) \log_2 n$ (m/T in case of a two-condition modulation).

data sink

*Series X**

The functional unit that accepts transmitted data.

data source

*Series X**

The functional unit that originates data for transmission.

data station

*Series X**

The data terminal equipment (DTE), the data circuit terminating equipment (DCE), and any intermediate equipment.

Note 1 – See Figure 1/X.15.

Note 2 – The DTE may be connected directly to a data processing system, or may be part of it.

data structure

Rec. T.411

A set of data items and the relationship among them representing the whole or a part of a constituent.

Note – The data items constituting a data structure represent attributes of the document, the document profile, the component, the style or the content portion concerned.

data terminal equipment (DTE)

*Series X**

That part of a data station that serves as a data source, a data sink, or both.

Note – See Figure 1/X.15.

data transfer

*Series X**

The result of the transmission of data signals from a data source to data sink.

data transfer rate

*Series X**

The average number of bits, characters or blocks per unit time passing between corresponding equipments in a data transmission system.

Note 1 – It is expressed in terms of bits, characters or blocks per second, minute or hour.

Note 2 – Corresponding equipments should be indicated: modems or intermediate equipment or source and sink.

data transmission

*Series X**

The conveying of data from one place for reception elsewhere by telecommunication means.

data transmission relations

Recs. F.600, F.601

A data transmission relation between two terminal countries exists when there is between them an exchange of data traffic (and normally a settlement of accounts).

data transmission service

Rec. X.300

Data transmission service is that service offered by an Administration, RPOA or any private network operator to satify a telecommunication requirement and is composed of technical attributes as seen by the customer and other attributes associated with the service provision, e.g. operational. Use of the technical attributes requires mechanisms to access subnetworks as defined in Recommendation X.1 (circuit switched service, packet switched service and leased circuit service) and I.230-series Recommendations and Recommendation X.10, as far as the prupose of transparent transmission is concerned.

Note – this concept is assumed to be equivalent to the bearer service.

data type

Rec. Z.100

A *data type* is the definition of sets of *values (sorts)*, a set of *operators* which are applied to these *values* and a set of algebraic rules (*equations*) defining the *behaviour* when the *operators* are applied to the *values.*

data type definition

Rec. Z.100

A *data type definition* defines the validity of *expressions* and relationship between *expressions* at any given point in an *SDL specification.*

Data User Part (DUP)

Glos. (VI.7, VI.8, VI.9)

The User Part specified for data services.

data user part handling time, T_{hu}

Rec. X.61/Q.741

T_{hu} is the period which starts when the last bit of the message has entered the Data User Part and ends when the last bit of the derived message has left the Data User Part. (See Figure 19/X.61.)

data value

Rec. X.209

Information specified as the value of a type; the type and the value are defined using ASN.1.

day to busy hour ratio

Rec. E.600

The ratio of the 24-hour day traffic volume to the busy hour traffic volume.

Note – Busy hour to day ratio is also used.

dBm0

Rec. J.14, Series P

The absolute signal power level, in decibels, referred to a point of zero relative level.

dBm

Series P

The absolute power level in decibels.

dBm0

Series P

The absolute power level in decibels referred to a point of zero relative level.

dBm0p

Series P

The absolute psophometric power level in decibels referred to a point of zero relative level.

dBm0s

Rec. J.14

The absolute signal power level, in decibels, referred to a point of zero relative sound-programme level.

dBq0ps

Rec. J.16

Nivel de ruido penderado medido con un instrumento de medida de cuasicresta y una característica de ponderación conformes con la Recomendación 468 del CCIR, con relación a un punto de nivel relativo cero en la transmisión radiofónica.

dBq0s

Rec. J.16

Nivel de ruido no penderado medido con un instrumento de medida de cuasicresta de conformidad con las especificaciones de la Recomendación 468 del CCIR, con relación a un punto de nivel relativo cero en la transmisión radiofónica.

dBr

Rec. J.14, Series P

The relative power level, in decibels.

dBrn

Rec. O.41

Decibels referred to -90 dBm or decibels above a reference power of 10^{-12} watt.

dBrs

Rec. J.14

The relative (power) level, in decibels, with respect to sound-programme signals. (This abbreviation is only applicable at points in a sound-programme circuit where the signals can nominally be related to the input by a simple scaling factor.)

d.c. signalling

See:
direct current (d.c.) signalling; d.c. signalling.

DCE

See:
data circuit terminating equipment.

DCME frame

Rec. G.763

A time interval, the beginning of which is identified by a "unique word" in the control channel. The DCME frame need not coincide with the multiframes defined in Recommendation G.704. The format specification of the DCME frame includes channel boundaries and bit position significance.

DCME gain (DCMG)

Rec. G.763

The trunk channel transmission multiplication ratio, which is achieved through application of DCME, including LRE and DSI. Hence DCMG = TG · IG.

DCME overload

Rec. P.84

The instant when the number of instantaneously active input circuits exceeds the maximum number of "normal" bearer channels available for DSI.

DCME overload (mode)

Rec. G.763

The condition when the number of input trunk channels instantaneously active carrying speech exceeds the number of 32 kbit/s channels available for interpolation.

DEACTIVATE

Rec. Z.333

Terminate a system process initiated by an ACTIVATE action, or make a data set unavailable for use by the system.

deactivate

Rec. Z.341

An *action* to terminate a *system* process initiated by an *activate action*, or an *action* to make a *data set* unavailable for use by the *system*; opposite of *activate*.

deactivation

Recs. G.960, I.430

A function which places a system, or part of a system, into a non-operating or partially operating mode where the power consumption of the system may be decreased (low power consumption mode).

dead sector

Rec. T.0

In drum apparatus, that portion of the drum surface the scanning time of which cannot be used for picture signal transmission.

dead time

Recs. M.60, O.61

The dead time is defined for the purpose of Recommendations O.61 and O.62 as the time after which the counter is ready to record another interruption following the end of the preceding interruption.

dead time

Rec. O.71

For the purpose of Recommendation O.71 the dead time is defined as the time after which the counter is ready to register another pulse following the start of the preceding pulse.

deblocking

Rec. X.200

A function performed by an (N)-entity to identify multiple (N)-service-data-units which are contained in one (N)-protocol-data-unit. It is the reverse function of blocking.

debug

See:
to debug.

decentralized multi-endpoint-connection

Rec. X.200

A multi-endpoint-connection such that data sent by an entity associated with a connection-endpoint is received by all other entities.

decentralized multipoint

*Series X**

This optional user facility provides the user with the capability to establish a connection between $n + 1$ DTEs. Each DTE can transmit towards the n other DTEs. Each DTE can receive from all the other DTEs.

decimal numeral

Recs. Q.9, Z.341

A *numeral* in the decimal (base 10) *numbering system*, represented by the *characters* 0 (zero), 1, 2, 3, 4, 5, 6, 7, 8, 9 optionally preceded by D' (D apostrophe).

decision

Rec. Z.100

A *decision* is an *action* within a *transition* which asks a question to which the answer can be obtained at that instant and accordingly chooses one of the several outgoing *transitions* from the *decision* to continue interpretation.

decision (in SDL)

Rec. Q.9

A decision is an *action* within a *transition* which asks a question to which the answer can be obtained at that instant and chooses one of several paths to continue the *transition.* (See Recommendation Z.100, § 2.7.5.)

decision area

Rec. Z.100

A *decision area* is the *SDL/GR* representation of a *decision.*

decision circuit

Rec. G.701

A circuit that decides the probable value of a signal element of a received digital signal.

decision instant; decision instant of a digital signal

Rec. G.701

The instant at which a decision is taken as to the probable value of signal element of a received digital signal.

decision instant of a digital signal

See:
decision instant; decision instant of a digital signal.

decision value

Rec. G.701

A value defining the boundary between adjacent quantizing intervals. (See Figures 2/G.701 and 4/G.701.)

decoder

Rec. G.701

A device that performs decoding.

decoding

Rec. G.701

The generation of reconstructed samples.

decomposition meta-language ; information structure meta-language

Rec. Z.341

A graphical *meta-language* to describe the structure of the *information entities* associated with an *MML function.*

dedicated circuit (in telegraphy and data transmission)

U.140

A telegraph link established permanently without the use of switching facilities and dedicated to the exclusive use of a set of terminals.

default

Rec. Z.100

The *default assignment* is a denotation of a *value* that is initially associated to each *variable* of the *sort* of the *default* clause. The *default* clause may appear in *data type definitions.*

default context

Rec. X.216

The default context is a presentation context which is always known to the presentation-service-provider and two presentation-service-users for a given presentation-connection. It is the presentation context which always applies to the User data parameter of the P-EXPEDITED-DATA service primitives. It applies to the User data parameters of other service primitives only when the defined context set is empty.

Note – The use of an implied default context can arise when no name for default context is specified.

default option

Rec. Z.341

A *symbol* of the *decomposition meta-language* which indicates that the value taken by an *information entity* will be provided automatically if the user does not supply a value in the *input* for such an *information entity.*

default value

Rec. Z.341

The value given to any *parameter* by the *system* in the absence of a specific value in the *user's input.*

default value lists

Rec. T.412

This attribute specifies default attribute values for subordinate object descriptions.

defect

Suppl. No. 6 (II.3)

Any departure of a characteristic of an *item* from requirements.

Note 1 – The requirements may or may not be expressed in the form of a specification.

Note 2 – A defect may or may not affect the ability of an *item* to perform a *required function.*

defect

Rec. M.60

A defect is a limited interruption of the ability of an item to perform a required function. It may or may not lead to maintenance action depending on the results of additional analysis.

defective; defective item

Suppl. No. 6 (II.3)

An *item* which contains one or more *defects.*

defective item

See:
defective; defective item.

deferred maintenance

Rec. M.60, Suppl. No. 6 (II.3)

Such corrective maintenance which is not immediately initiated after a fault recognition but is delayed in accordance with given maintenance rules.

deferred maintenance alarm (DMA)

Rec. M.60

A deferred maintenance alarm is generated when immediate action is not required by maintenance personnel, e.g. when performance falls below standard but the effect does not warrant removal from service, or generally if automatic changeover to standby equipment has been used to restore service.

defined context set

Rec. X.216

A set of presentation contexts that has been defined by agreement between all three parties to a communication: i.e. the presentation-service-provider and two presentation-service-users.

Note – The inclusion of a presentation context in the defined context set implies that its abstract syntax is acceptable to both presentation-service-users and that the cooperating presentation-entities have agreed on an acceptable transfer syntax for that presentation context.

degradation failure

See:
gradual failure; degradation failure; drift failure.

degraded minute (DM)

Rec. M.60

A degraded minute is a group of 60 consecutive seconds, after excluding SES (severely errored seconds), with a BER (bit error ratio) of 10^{-6} or worse.

A pseudo-degraded minute is a group of 60 consecutive seconds, after excluding SES, with at least N2 anomalies or at least one slip (when the anomaly is not a binary error). N2 is calculated similarly to N1, to detect a BER of 10^{-6} in one minute.

degree of gross start-stop distortion

Rec. R.140

The degree of start-stop distortion determined when the assumed unit interval is exactly that appropriate to the nominal modulation rate.

Note – By convention the gross start-stop distortion may be considered positive when the significant instant occurs after the ideal instant and conversely, negative when it occurs before.

degree of individual distortion (of a particular significant instant)

Rec. R.140

The ratio of the algebraic value of the displacement in time of a given significant instant from the corresponding ideal instant, to a specified unit interval.

Note 1 – By convention the displacement is considered positive when the significant instant occurs after the ideal instant, and conversely it is considered negative when it occurs before.

Note 2 – The degree of individual distortion is usually expressed as a percentage.

degree of isochronous distortion

Rec. R.140

1) Ratio of the maximum measured difference, irrespective of sign, between the actual and the theoretical intervals separating any two significant instants, these instants not necessarily being consecutive, to the mean unit interval.

2) The algebraic difference between the highest and the lowest value of the degree of individual distortion referred to the mean duration of the unit interval for the significant instants of an isochronous signal.

The degree of distortion is expressed as a percentage.

Note – The result of the measurement should be completed by an indication of the period, usually limited, of the observation. For a prolonged modulation (or restitution) it will be appropriate to consider the probability that an assigned value of the degree of distortion will be exceeded.

degree of standardized test distortion

Rec. R.140

The degree of individual distortion of the received signal measured during a specified period of time when the signal at the sending end is perfect and corresponds to a specified text.

degree of start-stop distortion

Rec. R.140

1) In start-stop transmission the ratio of the maximum measured difference, irrespective of sign, between the actual and theoretical intervals separating any significant instant from the significant instant of the start element immediately preceding it, to the unit interval.

2) The highest absolute value of the degrees of individual distortion of the significant instants of a start-stop signal which is reached within a specified time interval.

The degree of distortion of a start-stop modulation, restitution or signal is usually expressed as a percentage.

Note 1 – The result of the measurement should be completed by an indication of the period, usually limited, of the observation. For a prolonged modulation (or restitution) it will be appropriate to consider the probability that an assigned value of the degree of distortion will be exceeded.

Note 2 – By convention the start-stop distortion may be considered positive when the significant instant occurs after the ideal instant and conversely, negative when it occurs before.

degree of start-stop distortion at the actual mean modulation rate

See:

degree of synchronous start-stop distortion; degree of start-stop distortion at the actual mean modulation rate.

degree of synchronous start-stop distortion; degree of start-stop distortion at the actual mean modulation rate

Rec. R.140

The degree of start-stop distortion determined when the assumed unit interval is that appropriate to the actual mean modulation rate.

Note 1 – In practice the degree of synchronous start-stop distortion is measured by adjusting the scanning rate of the distortion measuring set.

Note 2 – The result of the measurement should be completed by an indication of the period, usually limited, of the observation. For a prolonged modulation (or restitution) it will be appropriate to consider the probability that an assigned value of the degree of distortion will be exceeded.

Note 3 – For the determination of the actual mean modulation rate, account is only taken of those significant instants of modulation (or restitution) that correspond to a change of condition in the same sense as that occurring at the beginning of the start element.

delay-dialling signal (sent in the backward direction)

Rec. Q.310

This line signal is transmitted by the incoming exchange following the recognition of the connect (seizing) signal to verify receipt of the connect (seizing) signal and to indicate that the incoming register equipment is not yet attached or ready to receive address signals.

delay distortion

Rec. Q.9

Deviation in delay from a reference or an expected value for signals of various frequencies.

delay mode of operation

Rec. E.600

A mode of operation in which bids which find no suitable resources idle and accessible are permitted to wait.

delay time

See:
answering time of operators; request transmission time; delay time; setting-up times of an international call.

delayed delivery

Suppl. No. 2 (II.4)

A *store-and-forward* process in which the re-transmission of stored *messages* is delayed until a predetermined period.

delayed release message (DRS)

Rec. Q.762

A message sent in either direction indicating that the called or calling party has disconnected but that the network is holding the connection.

delayed release message (DRS)

Rec. Q.9

A message sent in either direction, generated by the network, in response to a request to release a call, if the network is applying a hold condition to the connection.

delaying

Rec. M.30

Withholding the report of alarm information until the condition has persisted for a predetermined amount of time.

DELETE

Rec. Z.333

Eliminate a data set from the system.

delete

Rec. Z.341

An *action* to eliminate a *data set* from the *system*; opposite of *create.*

delete abstract-operation

Rec. X.413

An abstract-operation used to delete one or more entries from an information-base.

delimiter

Rec. Z.341

A character that organizes and separates items of data.

delivered duplicate frames

Rec. I.122

A frame D received by a particular destination user is defined to be a duplicated frame if both of the following conditions are true:

a) D was not generated by the source user;

b) D is exactly the same as a frame that was previously delivered to that destination.

delivered-EITs

Rec. X.413

A multi-valued attribute, giving information about EITs in a delivered-message.

delivered errored frames

Rec. I.122

A delivered frame is defined to be an errored frame when the value of one or more bits in the frame is in error, or when some, but not all, bits in the frame are lost bits or extra bits (i.e. bits that were not present in the original signal).

delivered-message entry

Rec. X.413

An entry in the stored-messages information-base resulting from a delivered-message.

delivered out-of-sequence frames

Rec. I.122

Consider a sequence of frames F_1, F_2, f_3, . . ., F_n. Assume that F_1 is transmitted first, F_2 second, . . . F_n last.

A delivered frame F_i is defined to be out-of-sequence if it arrives at the destination user after any of the frames $F_{(i+1)}$, $F_{(i+2)}$, . . ., F_n.

delivered-report entry

Rec. X.413

An entry in the stored-messages information-base resulting from a delivered-report.

delivery

Recs. F.400, X.400

In the context of message handling, a transmittal step in which an MTA conveys a message or report to the MS or UA of a potential recipient of the message or of the originator of the report's subject message or probe.

delivery notification (DN)

Rec. U.82

A type of SMXU used to provide information on an address or addresses to which a message has been delivered.

delivery of messages

Rec. U.81

The forwarding of messages input into a telex SFU by an originating telex subscriber to a destination telex subscriber over an international telex network.

delivery report

Recs. F.400, X.400

In the context of message handling, a report that acknowledges delivery, non-delivery, export, or affirmation of the subject message or probe, or distribution list expansion.

Delivery Report

Rec. X.402

Delivery, export, or affirmation of the subject message or probe, or DL expansion.

delta modulation

Rec. G.701

A form of differential pulse code modulation in which only the sign of the difference between each sample and its predicted value is detected and encoded by a single bit.

delta$_{SM}$ (DELSM)

Rec. P.10

Delta $_{SM}$ is defined as the difference between the sending sensitivity of a telephone set using a real mouth and voice, S_{MJ}, and that using a diffuse room noise source $S_{MJ/RN}$, such that:

$$\Delta_{SM} = S_{MJ/RN} - S_{MJ}\,\text{dB}.$$

(See also Recommendations P.11, P.64, P.76, P.79, Supplement No. 11 (V) and the Handbook on Telephonometry.)

Note – For most practical purposes Δ_{SM} will be closely approximated by the quantity Δ_{Sm} which is easier to determine.

delta$_{Sm}$ (DELSm)

Rec. P.10

Delta $_{Sm}$ is defined as the difference between the sending sensitivity of a telephone set using an artifical mouth S_{mJ}, and that using a diffuse room noise source $S_{mJ/RN}$, such that:

$$\Delta_{SM} = S_{MJ/RN} - S_{mJ}\,\text{dB}.$$

(See also Recommendations P.11, P.64, P.76, P.79, Supplement No. 11 (V) and the Handbook on Telephonometry.)

demand (communication)

Rec. I.140

The communication can be started as soon as possible after the request is made (e.g. $t_1 - t_0$ is as short as possible).

Communication and connection release occurs in response to the request of any of the users (calling or called users), $t_3 - t_2$ is as short as possible (see Figure A-1/I.140).

demand operating

Rec. E.100

In demand operating (manual or semiautomatic), after the request has been recorded in the outgoing international exchange, an immediate attempt to set up the call is made by the operator at this exchange who took the request.

A distinction is made between:

1) manual demand operating

   There are two operating methods:

   a) indirect manual demand operating

      In this method of operating, the operator at the incoming international exchange always acts as an interpreter between the operator in the outgoing international exchange and the called party.

   b) direct manual demand operating

      In this method of operating, the operator in the outgoing international exchange speaks with the called party direct.

2) semiautomatic demand operating

   In this method of operating, the operator in the outgoing international exchange controls the automatic switching operations to obtain either the called station, or an operator in the incoming or transit international exchange (or an operator in a manual exchange in the country of destination).

demand service; demand telecommunication service

Rec. I.112

A type of telecommunication service in which the communication path is established almost immediately, in response to a user request effected by means of user-network signalling.

demand telecommunication service

See:

demand service; demand telecommunication service.

democratic mutually synchronized network

See:

democratic network; democratic mutually synchronized network.

democratic network; democratic mutually synchronized network

Rec. G.701

A mutually synchronized network in which all clocks are of equal status and exert equal amounts of control on the others; the network operating frequency (digit rate) being the mean of the natural (uncontrolled) frequencies of all the clocks.

demultiplexer

Rec. R.140

An equipment for effecting demultiplexing.

demultiplexing

Rec. R.140

A process applied to a multiplex signal for recovering signals combined within it and for restoring the distinct individual channels of these signals.

demultiplexing

Rec. X.200

The function performed by an (N)-entity which identifies (N)-protocol-data-units for more than one (N)-connection within (N – 1)-service-data-units received on a single (N – 1)-connection. It is the reverse function of the multiplexing function performed by the (N)-entity sending the (N – 1)-service-data-units.

dependability

Suppl. No. 6 (II.3)

The collective term used to describe the *availability performance* and its influencing factors: *reliability performance, maintainability performance* and *maintenance support performance.*

Note – Dependability is used only for general descriptions in non-quantitative terms. See Figure 1, Suppl. No. 6 (II.3).

dependent (repeater) station

Rec. G.601

A *repeater station* which receives its electric power supply from a *power feeding repeater station.*

Note – Electric power may be conveyed to the dependent station either by the physical transmission medium itself, or by conductors in the same cable sheath, or by exterior cables.

dereferencing

Rec. X.501

Replacing the alias name for an object by the object's distinguished name.

derived performance parameter

Rec. I.350

A parameter or a measure of a parameter determined on the basis of observed values of one or more relevant primary performance parameters and decision thresholds for each relevant primary performance parameter.

descrambler

Rec. G.701

A device that performs the complementary operation to that of a scrambler.

description

Rec. F.500

An attribute type which describes the associated object, e.g. as an "Yellow pages" entries.

description

Rec. T.411

A constituent that corresponds to a structural element.

description

Rec. Z.100

A *description* of a *system* is the description of its actual *behaviour.*

description (in SDL)

Rec. Q.9

The implementation of the requirements of a system is described in a description of the system. Descriptions consist of *general parameters* of the system as implemented and the *functional description (FD)* of its actual behaviour. (See Recommendation Z.100, § 1.1.)

descriptor

Rec. T.411

A data structure representing the document profile, an object class description, a layout style, a presentation style or an object description.

deserializer

See:
serial to parallel converter;
serial to parallel converter; deserializer.

design defect

Suppl. No. 6 (II.3)

A *defect* due to an inadequate design of an *item.*

design failure

Suppl. No. 6 (II.3)

A *failure* due to a *design defect.*

design fault

Suppl. No. 6 (II.3)

A *fault* due to a *design defect.*

design objective

Recs. G.100, G.102

The "design objective" for a measurable transmission impairment (e.g. noise, error-rate, attenuation-distortion) for an item of equipment (e.g. a line system, a telephone exchange) is its value when the item is operating in certain electrical/physical environments which might be defined by such parameters as power supply voltage, signal load, temperature, humidity, etc. Some of these parameters may be the subject of CCITT Recommendations and some may not, and it is for the Administrations to assign values to them when they prepare specifications. A suitable allowance may also be made for aging. The most adverse combination of the specified parameters is often assumed.

The purpose of a "design objective" is to provide a basis for the design of an item with respect to the quantity concerned. The significance of the design objective for an item, and examples of the relative frequency of impairment values, are illustrated in Figures 1/G.102 and 2/G.102 respectively.

designate

See:
to designate.

designation method

Rec. Q.1001

The calling subscriber must know the actual location area of any mobile station. The call is established according to the dialled information only, i.e. the call is not rerouted by the location register when the mobile station currently is in another location area.

despotic network (deprecated)

See:

monarchic network; monarchic synchronized network.

despotic synchronized network (deprecated)

See:

monarchic network; monarchic synchronized network.

destination

Rec. E.411

A country in which the called subscriber is located or an area or other location that may be specified within that country. A destination can be identified by the digits used for routing the call.

destination

Rec. E.600

The location of the called network termination. This may be specified to whatever accuracy is necessary; in international working, the area or country code is usually sufficient.

destination code

Rec. U.140

A sequence of digits identifying the country in which the called subscriber is located or a specified network in that country.

Note – The telex destination codes have been fixed by Recommendation F.69.

destination country (or Administration)

Rec. D.000

The country in which the called subscriber is located or in which a message is to be delivered.

destination identifier

Rec. Z.341

Identifies, after *input*, the system (destination) that, from the *user*'s perspective, becomes the new partner in a *dialogue*.

destination indicator (public telegram)

Rec. F.500

An attribute type specifying the country and city associated with the object (the addresses) needed to provide the public telegram service.

Note – See Recommendations F.1 and F.31.

destination network (DN) code

Recs. E.160, Q.10

An optional code field within the E.164 numbering plan which identifies the destination network serving the destination subscriber. It performs the destination network selection function of the NDC. In some instances it can be combined with a trunk code to form the NDC. The DN code can be a decimal digit or a combination of decimal digits (not including any prefix).

destination node

Rec. Q.716

Destination of a UDT message or of a signalling connection.

destination PDN

Rec. X.110

A set of equipment and/or circuits which enable connection of a destination IDSE to the called DTE.

destination point (signalling-)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The signalling point to which a message is destined.

destination point code (DPC)

Glos. (VI.7, VI.8, VI.9)

A part of the label in a signalling message which uniquely identifies, in a signalling network, the (signalling) destination point of the message.

destination prologue

Rec. Z.317

The destination prologue consists of a destination identifier terminated by the separator > (greater than sign) so as to distinguish it from a command.

The destination identifier indicates the physical area where the command is to be mainly processed, e.g., exchange identification, processor number. It consists of one or more information units separated by - (hyphen). The destination could also be defined by a parameter in the command.

The destination identifier may be followed by a header to indicate that a selected destination is allowed, available and ready or alternatively by a rejection output to indicate the converse.

destination prologue

Rec. Z.341

An operating sequence causing subsequent *inputs* to be processed in the *system* defined by the *destination identifier.*

destination SFU

Rec. U.82

The telex SFU receiving the telex message.

destruction characteristic

Rec. K.12

The relationship between the value of the discharge current and the time of flow until the gas discharge tube is mechanically destroyed (break, electrode short circuit). For periods of time between 1 μs and some ms, it is based on impulse discharge currents, and for periods of time of 0.1 s and greater, it is based on alternating discharge currents.

destructive

Rec. X.216

A service is destructive if its invocation may cause loss of undelivered data of other service primitives.

detection time, T_1

Rec. M.495

Time interval between a potential failure of transmission and the recognition of that potential failure.

determinate fault

Suppl. No. 6 (II.3)

For an *item*, which produces a response as a result of an action, a *fault* for which the response is the same for all actions.

determination test

Suppl. No. 6 (II.3)

A *test* used to establish the value of a *characteristic.*

deterministic; ATM deterministic transfer mode

Rec. I.113

A specific transfer mode of the asynchronous transfer mode (ATM) in which the maximum information transfer capacity specified for a given service is provided to the user throughout a call.

deterministic failure

See:
systematic failure; reproducible failure; deterministic failure.

device control

Rec. S.140

A *function control* designed to control certain ancillary equipments associated with a *terminal* used in particular to switch such equipments on or off.

device start (DST)

Rec. T.100

The device start (DST) causes a designated terminal device to start.

device stop (DSP)

Rec. T.100

The device stop (DSP) causes a designated terminal device to stop.

device wait (DW)

Rec. T.100

The device wait (DW) causes a designated terminal device to pause.

diagnostic

Rec. M.30

A routine in the NE which performs detailed tests to isolate troubles.

diagnostic

Rec. Q.762

Information sent in association which a cause value and which provides supplementary information about the reason for sending the message.

diagnostic code in Recommendation X.25

*Series X**

A unique combination of symbols, such as the CCITT International Alphabet No. 5, binary or hexadecimal notation, used to convey information between the DTE and the DCE for the purpose of indicating errors, failures, or inherent incompatibilities of a DTE with the network or with another DTE.

diagram

Rec. Z.100

A *diagram* is the *SDL/GR* representation for a part of a *specification.*

dial selection (in telegraph)

Rec. U.140

In automatic telegraph switching, the use of dial pulse trains from a dial or an automatic equipment to form the selection sequence.

dial tone

Rec. E.182

A tone advising that the exchange is ready to receive call information and inviting the user to start sending call information.

dial-tone delay

Rec. E.600

Time interval between off hook and reception of dial tone.

dialling mistake probability

Rec. E.800

The *probability* that the *user* of a telecommunication network makes dialling *mistakes* during his *call attempts.*

dialling-time

Rec. E.600

Time interval between the reception of dial tone and the end of dialling of the calling user.

dialogue

Glos. (VI.7, VI.8, VI.9)

An association established between two TC users exchanging components.

dialogue element

Rec. Z.341

Element of a set of three types of *information entry* in a *man-machine communication*: viz. *direct information entry, information entry* through *menu-item selection* or through *form filling.*

dialogue procedure

Rec. Z.317

A dialogue is opened by a procedure prologue. The procedure prologue contains the various preparations which must be performed before commands can be initiated. It may include a header from the system. Following the procedure prologue a destination prologue can precede one or more interactive operating sequences. The dialogue can be terminated by a procedure epilogue.

dialogue procedure; dialogue session

Rec. Z.341

The complete interactive procedure for interchanging data between *user* and *system* comprising *procedure prologue, procedure body* and *procedure epilogue.* In the Z.300-series Recommendations, the terms *dialogue* and *dialogue procedure* are interchangeable.

dialogue session

See:

dialogue procedure; dialogue session.

diary service

Suppl. No. 1 (II.2)

With prior indication from a subscriber, a call is made automatically to his telephone number at a specific date and time, and when an answer condition is detected a recorded message is connected to this telephone termination to remind him of a particular event, e.g. birthday of a relative. Two versions of the series are envisaged:

a) the recorded message is dictated by the subscriber in each case;

b) the recorded message is selected from a variety of pre-stored messages.

DIB fragment

Rec. X.518

The portion of the DIB that is held by one DSA, comprising one or more naming contexts.

dichotomizing search

Rec. Q.9

A search in which an ordered set of items is partitioned into two parts, one of which is rejected, the process being repeated on the accepted part until the search is completed.

differential echo suppressor

Rec. G.164

An echo suppressor whose operation is controlled by the difference in level between the signals on the two speech paths.

differential pulse code modulation (DPCM)

Rec. G.701

A process in which a signal is sampled, and the difference between each sample of this signal and its estimated value is quantized and converted by encoding to a digital signal.

Note – The estimated values of the signal are calculated by a predictor from the quantized difference signal.

differential sensitivity

Rec. G.164

The difference, in decibels, between the relative level of the test signals applied to the send path and receive path when break-in occurs.

digilogue channel

Rec. G.701

A channel in which information is represented by a digital signal at one end and the same information is represented by the corresponding analogue signal at the other end.

Note – The term may be qualified by "A to D" or "D to A" to indicate whether encoding or decoding is being performed.

digilogue circuit

Rec. G.701

A circuit in which transmission is provided in one direction by an A to D digilogue channel and in the other direction by a D to A digilogue channel.

Note – Because the digital interface is inherently 4-wire, the term may be qualified by "2-W" or "4-W" to indicate whether the analogue interface is 2-wire or 4-wire.

digit

Rec. G.701

A member selected from a finite set.

Note 1 – In digital transmission, a digit may be represented by a signal element, being characterized by the dynamic nature, discrete condition and discrete timing of the element, for example it may be represented as a pulse of specified amplitude and duration.

Note 2 – In equipment used in digital transmission, a digit may be represented by a stored condition being characterized by a specified physical condition, for example it may be represented as a binary magnetic condition of a ferrite core.

Note 3 – The context of the use of the term should be such as to indicate the radix of notation. (The meaning of "digit" in Notes 1, 2 and 3 translates into French as "élément numérique".)

Note 4 – In telephone subscriber numbering, a digit is any of the numbers 1, 2, 3 ... 9 or 0 forming the elements of a telephone number (See Recommendation Q.10). (This meaning of "digit" translates into French as "chiffre".)

digit

Recs. Q.9, Z.341

A *character* of the *character set* representing an integer, listed in Table 1/Z.314, column 3, positions 0 (zero) to 9.

digit position

Rec. G.701

The position in time or space into which a representation of a digit may be placed.

digit rate

Rec. G.701

The number of digits per unit time.

Note 1 – An appropriate adjective may precede the word "digit", for example, binary digit rate.

Note 2 – In the interests of clarity it is recommended that this term should not be used to express the symbol rate on the line.

digit sequence integrity

Rec. G.701

The property of a digital transmission channel, telecommunication circuit or connection, that permits a digital signal to be conveyed over it without change to the order of any signal elements.

digit time-slot

Recs. G.701, Q.9

A time slot allocated to a single digit.

digital access link

Recs. G.960, I.430

A digital link between the T reference point and the V reference point in the case of remote access only.

digital block

Rec. G.701

The combination of a digital link and associated digital multiplex equipments.

Note – The bit rate of the digital link should form part of the title.

digital block

Rec. M.300

The combination of a digital path and associated digital multiplex equipments.

See Figure 6/M.300.

Note – The bit rate of the digital path should form part of the title.

digital channel

Rec. M.300

A digital channel provides one-way 64 kbit/s transmission capability, on a digital path. A digital channel appears at both ends on a digital distribution frame or equivalent either at 64 kbit/s or as a 64 kbit/s time slot in a digital path at a specified level of the digital hierarchy.

See Figure 7/M.300.

digital channel; digital transmission channel

Recs. G.701, I.112

The means of unidirectional digital transmission of digital signals between two points.

digital circuit

Rec. Q.9

A circuit which transmits information signals in digital form between two exchanges. It includes termination equipment but not switching stages.

digital circuit

See:

circuit; digital circuit.

digital circuit; digital telecommunication circuit

Recs. G.701, I.112

A combination of two digital transmission channels permitting bidirectional digital transmission in both directions between two points, to support a single communication.

Note 1 – If the telecommunication is by nature unidirectional (for example, long-distance television transmission), the term "digital circuit" is sometimes used to designate the single digital channel providing the facility.

Note 2 – In a telecommunication network, use of the term "digital circuit" is generally limited to a digital telecommunication circuit directly connecting two switching devices or exchanges, together with associated terminating equipment.

Note 3 – A digital telecommunication circuit may permit transmission in both directions simultaneously (duplex), or not simultaneously (simplex).

Note 4 – A digital telecommunication circuit that is used for transmission in one direction only is sometimes referred to as a unidirectional digital telecommunication circuit. A digital telecommunication circuit that is used for transmission in both directions (whether simultaneously or not) is sometimes referred to as a bidirectional digital telecommunication circuit.

digital circuit multiplication equipment (DCME)

Recs. G.763, P.84

A general class of equipment which permits concentration of a number of 64 kbit/s PCM encoded input trunk channels on a reduced number of transmission channels (see definition of *transmission channel*).

digital circuit multiplication system (DCMS)

Recs. G.763, P.84

A telecommunications network comprised of two or more DCME terminals where each DCME terminal contains a transmit unit and a receive unit.

digital concentrator

See:

concentrator; digital concentrator.

digital connection

Recs. G.701, I.112

A concatenation of digital transmission channels or digital telecommunication circuits, switching and other functional units set up to provide for the transfer of digital signals between two or more points in a telecommunication network, to support a single communication.

digital connection

Rec. Q.9

An association of digital circuits, digital switches and other functional units providing means for the transfer of digitally encoded information signals between two terminal points.

digital connection

See:

connection; digital connection.

digital demultiplexer

Rec. G.701

Equipment that separates a composite digital signal into its component digital signals.

digital demultiplexing

Rec. G.701

The separation of a composite digital signal into its component digital signals.

digital distribution frame

Rec. G.701

A structure that provides flexibility of semipermanent interconnection of digital channels or digital circuits.

Note – Digital sections and digital links normally terminate at digital distribution frames.

digital distribution frame

Rec. M.300

A frame at which interconnections are made between the digital outputs of equipments and the digital inputs of other equipments.

See Figure 6/M.300.

digital error

See:

error; digital error.

digital exchange

Rec. I.112

An exchange that switches digital signals by means of digital switching.

digital exchange

Rec. Q.9

An exchange that switches information in digital form through its switching devices.

digital filling

Rec. G.701

The addition of signal elements at regular intervals to a digital signal to change the digit rate from its original value to a predetermined higher value.

Note – The added digits are not normally used to transmit information.

digital line link

Rec. G.701

A digital link that comprises a digital line section or a number of tandem-connected digital line sections. (See Figure 1/G.701.)

digital line path

Rec. M.300

Two or more digital line sections interconnected in tandem in such a way that the specified rate of the digital signal transmitted and received is the same over the whole length of the line path between the two terminal digital distribution frames (or equivalent).

See Figure 6/M.300.

digital line path (deprecated)

See:

digital line link.

digital line section

Rec. G.701

A digital section implemented on a single type of manufactured transmission medium, such as symmetric pair, coaxial pair, or optical fibre. (See Figure 1/G.701.)

Note – A digital line section includes line terminating equipments at both ends, and regenerative repeaters if needed, but excludes multiplexers.

digital line section

Rec. M.300

Two consecutive line terminal equipments, their interconnecting transmission medium and the in-station cabling between them and their adjacent digital distribution frames (or equivalents), which together provide the whole of the means of transmitting and receiving between two consecutive digital distribution frames (or equivalents) a digital signal of specified rate.

See Figure 6/M.300.

Note 1 – Line terminal equipments may include the following:

- regenerators,
- code converters,
- scramblers,
- remote power feeding,
- fault location,
- supervision.

Note 2 – A digital line section is a particular case of a digital section.

digital line system

Rec. G.701

A digital transmission system that provides a digital line section.

digital line system

Rec. M.300

A specific means of providing a digital line section.

See Figure 6/M.300.

digital link

Rec. Q.9

A means of digital transmission between two points.

digital link; digital transmission link

Recs. G.960, I.430

The whole of the means of digital transmission of a digital signal of specified rate between specified reference points.

Note – A digital link comprises one or more digital sections and may include either a multiplexer or concentrator, but not switching.

digital link; digital transmission link

Recs. G.701, I.112

The whole of the means of digital transmission of a digital signal of specified rate between two digital distribution frames (or equivalent).

Note 1 – A digital link comprises one or more digital sections and may include multiplexing and/or demultiplexing, but not switching.

Note 2 – The term may be qualified to indicate the transmission medium used, for example, "digital satellite link".

Note 3 – The term always applies to the combination of "go" and "return" directions of transmission, unless stated otherwise.

Note 4 – The term "digital path" is sometimes used to describe one or more digital links connected in tandem, especially between equipments at which the signals of the specified rate originate and terminate.

digital local line

Recs. G.960, I.430

A local line which is used by a digital transmission system.

Note – Regenerators are not part of the line but may be inserted between two line lengths.

digital loopback

Recs. I.601, M.60, M.125

A mechanism incorporated into a piece of equipment whereby a bidirectional communication path may be connected back upon itself so that some or all of the information contained in the bit stream sent on the transmit path is returned on the receive path.

digital multiplex equipment

Rec. G.701

The combination of a digital multiplexer and a digital demultiplexer at the same location, operating in opposite directions of transmission.

digital multiplex equipment

Rec. M.300

The combination of a digital multiplexer and a digital demultiplexer at the same location.

digital multiplex equipment

See:

multiplex; digital multiplex equipment.

digital multiplex hierarchy

Recs. G.701, M.300

A series of digital multiplexers graded according to capability so that multiplexing at one level combines a defined number of digital signals, each having the digit rate prescribed for a lower order, into a digital signal having a prescribed digit rate which is then available for further combination with other digital signals of the same rate in a digital multiplexer of the next higher order.

digital multiplexer

Rec. G.701

Equipment that combines by time-division multiplexing several digital signals into a single composite digital signal.

digital multiplexer

Rec. M.300

Equipment for combining by time division multiplexing two or more tributary digital signals into a single composite digital signal.

digital multiplexing

Rec. G.701

A form of time division multiplexing applied to digital channels which convey digital signals.

digital network

See:

integrated digital network; digital network.

digital network; integrated digital network

Rec. I.112

A set of digital nodes and digital links that uses integrated transmission and switching to provide digital connections between two or more defined points to facilitate telecommunication between them.

digital padding (deprecated)

See:

digital filling.

digital path

Recs. M.60, M.300

The whole of the means of transmitting and receiving a digital signal of specified rate between those two digital distribution frames (or equivalent) at which terminal equipments or switches will be connected. Terminal equipments are those at which signals at the specified bit rate originate or terminate.

See Figure 6/M.300.

Note 1 – A digital path comprises one or more digital sections.

Note 2 – Where appropriate, the bit rate should qualify the title.

Note 3 – Digital paths interconnected by digital switches form a digital connection.

digital radio link

Rec. G.701

A digital link that comprises a digital radio section or a number of tandem-connected digital radio sections. (See Figure 1/G.701.)

digital radio path

Rec. M.300

Two or more digital radio sections interconnected in tandem in such a way that the specified rate of the digital signal transmitted and received is the same over the whole length of the radio path between the two terminal digital distribution frames (or equivalent).

See Figure 6/M.300.

digital radio path (deprecated)

See:

digital radio link.

digital radio section

Rec. G.701

A digital section implemented on a radio-relay system. (See Figure 1/G.701.)

digital radio section

Rec. M.300

Two consecutive radio terminal equipments and their interconnecting transmission medium which together provide the whole of the means of transmitting and receiving between two consecutive digital distribution frames (or equivalents) a digital signal of specified rate.

See Figure 6/M.300.

Note – A digital radio section is a particular case of a digital section.

digital radio system

Rec. G.701

A digital transmission system that provides a digital radio section. (See Figure 1/G.701.)

digital radio system

Rec. M.300

A specific means of providing a digital radio section.

See Figure 6/M.300.

digital section

Recs. G.960, I.430

The whole of the means of digital transmission of a digital signal of specified rate between two consecutive reference points. The term should be qualified by the type of access supported, or by a prefix denoting the V interface at the digital section boundaries. For example:

- basic access digital section;
- primary rate access digital section;
- V_x digital section.

digital section

Rec. G.701

The whole of the means of digital transmission of a digital signal of specified rate between two consecutive digital distribution frames or equivalent. (See Figure 1/G.701.)

Note 1 – A digital section forms either a part or the whole of a digital link, and includes terminating equipments at both ends, but excludes multiplexers.

Note 2 – Where appropriate, the digital rate or multiplex order should qualify the title.

Note 3 – The definition applies to the combination of "go" and "return" directions of transmission, unless stated otherwise.

digital section

Rec. M.300

The whole of the means of transmitting and receiving between two consecutive digital distribution frames (or equivalent) a digital signal of specified rate.

See Figure 6/M.300.

Note 1 – A digital section forms either a part or the whole of a digital path.

Note 2 – Where appropriate, the bit rate should qualify the title.

digital section boundaries

Recs. G.960, I.430

The reference points at the near and far ends of the digital section.

digital signal

Recs. G.701, I.112

A discretely timed signal in which information is represented by a number of well-defined discrete values that one of its characteristic quantities may take in time.

Note – The term may be qualified to indicate the digit rate, for example: "140 Mbit/s digital signal".

digital signalling data link

Glos. (VI.7, VI.8, VI.9)

The data link that provides an interface to signalling terminals and is made up of digital transmission channels and digital switches or their terminating equipment.

digital speech interpolation (DSI)

Rec. G.763

A process which, when used in the transmit unit of a DCME, causes a trunk channel (see definition) to be connected to a bearer channel (see definition) only when activity is actually present on the trunk channel. Thus, by exploiting the probability of the speech activity factor (see definition) of trunk channels being less than 1.0, enables the traffic from a number of trunk channels to be concentrated and carried by a lesser number of time-shared bearer channels. The signals carried by a bearer channel, therefore, represent interleaved bursts of speech signals derived from a number of different trunk channels.

Note – A process complementary to DSI is required in the receive unit of a DCME, i.e, assignment of the interleaved bursts to their appropriate trunk channels.

digital speech interpolation (DSI)

Rec. P.84

This is a technique whereby advantage can be taken of the inactive periods during a conversation, creating extra channel capacity. Speech activity is typically 30-40%, on average, which can produce a DSI gain of up to 3 : 1, but generally in the range of 2 : 1 to 2,5 : 1.

digital sum

Rec. G.701

The algebraic sum of the disparities of a sequence of consecutive defined groups of signal elements.

digital sum variation

Rec. G.701

The difference between the maximum possible digital sum and the minimum possible digital sum of a specified number of groups of signal elements.

digital switching

Rec. I.112

Switching by means that may assume in time any one of a defined set of discrete signal states, in order to convey digital signals.

digital switching

Rec. Q.9

A process in which connections are established by operations on digital signals without converting them to analogue signals.

digital switching node

Recs. I.112, Q.9

A node at which digital switching occurs.

digital system ; digital transmission system

Recs. G.960, I.430

A specific means of providing a digital section.

Note – For a specific type of system this term may be qualified by the insertion of the name of the transmission medium employed by that specific system. Some examples are:

- digital line transmission system;
- digital radio system;
- digital optical transmission system.

digital telecommunication circuit

See:

digital circuit; digital telecommunication circuit.

digital transmission

Recs. G.701, I.112

The transmission of digital signals by means of a channel or channels that may assume in time any one of a defined set of discrete states.

digital transmission channel

See:

digital channel; digital transmission channel.

digital transmission link

See:

digital link; digital transmission link.

digital transmission system

Rec. G.701

A specific means of providing a digital section.

digital transmission system

See:

digital system; digital transmission system.

digital transparency

See:

transparency; digital transparency.

digroup

See:

primary block; digroup;
primary PCM group.

dimensions

Rec. T.412

This attribute consists of an ordered pair of parameters, corresponding to the dimensions in the horizontal and vertical directions of the component in scaled measurement units. The first parameter of the pair specifies the dimension in the horizontal direction, the second parameter specifies the dimension in the vertical direction.

direct access; direct access connection element

Recs. G.960, I.430

A specific access connection element in which the basic access digital section or primary rate access digital section is directly connected to the exchange termination at a V_1 or V_3 reference point respectively.

direct access

Rec. Q.9

The facility to obtain data from a storage device or to enter data into a storage device in such a way that the process depends only on a reference to data previously accessed.

direct access connection element

See:

direct access; direct access connection element.

direct address

Rec. Q.9

An address that designates a storage location of an item of data to be treated as an operand.

direct current (d.c.) signalling; d.c. signalling

Rec. Q.9

A signalling method in which the signalling information may be represented by controlling the direct current magnitude, polarity, and duration or a combination thereof.

direct current transmission

Rec. R.140

A form of transmission of telegraph signals where significant conditions are effected by the direct application of voltages supplied from direct current sources.

direct dialling in (DDI)

Rec. I.250

A supplementary service which enables a user to directly call another user on a ISPBX or other private system without attendant intervention.

direct dialling in (DDI)

Rec. Q.730

Enables a user to call directly another user on a PABX or other private system without attendant intervention, the DDI digit(s) being the least significant digit(s) of the called ISDN number.

direct dialling in (DDI)

Rec. Q.81

Enables a user to call directly another user on a ISPBX or other private system without attendant intervention.

direct dialling-in service

Suppl. No. 1 (II.2)

Calls can be dialled from a telephone line connected to the public network directly to extensions in a PABX.

direct incoming selection

Suppl. No. 2 (II.4)

A facility that permits a *terminal* in a telex network to set up a call to a terminal designated by the caller in a *private network* without human intervention in the private network.

direct incoming selection with integrated numbering

Suppl. No. 2 (II.4)

Direct incoming selection using a single *selection sequence* made up from certain figures (digits) identifying the *private network* followed by certain figures identifying the called *terminal* in that network. The complete sequence of figures constitute a complete *address* integrated into the numbering plan of the telex network.

direct incoming selection with two-stage selection

Suppl. No. 2 (II.4)

Direct incoming selection using two *selection sequences* to select the required *terminal* in the *private network*. The first sequence identifies the private network, the second sequence identifies the terminal in this network. Only the first sequence is integrated into the numbering plan of the telex network.

direct information entry

Rec. Z.341

A *dialogue element* whereby the *input* of a *command* or *destination identifier* is done without the aid of *menus* and/or *forms.*

direct manual demand operating

See:
demand operating.

direct outgoing selection

Suppl. No. 2 (II.4)

A facility that permits a *terminal* in a *private network* to set up a call to another network without human intervention in the private network.

direct printer

Rec. S.140

Telegraph printer used in systems employing unequal length codes such as morse-code, two-condition cable code, in which printing is performed directly from the incoming signals.

direct service circuit

Rec. M.100

A telephone or teleprinter (teletypewriter) service circuit serving only two stations and linking them directly.

direct submission

Recs. F.400, X.400

In the context of message handling, a transmittal step in which the originator's UA or MS conveys a message or probe to an MTA.

direct submission

Rec. X.402

A transmittal step in which the originator's UA or MS conveys a message or probe to a MTA. Such a step follows origination or occurs as part of indirect submission.

This step may be taken whether or not the user is equipped with a MS.

direct-transit country

Rec. D.000

A transit country through which traffic is routed on direct circuits, i.e. on circuits provided for the exclusive use of other countries.

direct transmission restoration

See:
transmission restoration function: direct transmission restoration.

direct user

Recs. F.400, X.400, X.402

In the context of message handling, a user that engages in message handling by direct use of the MTS.

directive

Rec. Z.341

Input to direct the *system* to present information rather than to execute a *command*; can also be used in the interaction between the *user* and *system* prior to *command* execution. Directives can never cause any change in the state of the *system.*

directly powered (repeater) station

Rec. G.601

A *repeater station* which receives its electric power directly from the local mains or from a local generator.

directory

Recs. F.400, F.500, X.400

A collection of open systems cooperating to provide directory services.

(the) directory

Rec. X.501

A repository of information about objects and which provides directory services to its users which allow access to the information.

directory entry

Recs. F.500, X.501

A part of the DIB which contains information about an object.

directory entry
See:
entry; directory entry.

directory information base (DIB)

Recs. F.500, X.501

The complete set of information to which the Directory provides access and which includes all of the pieces of information which can be read or manipulated using the operations of the Directory

directory information tree (DIT)

Recs. F.500, X.501

The directory information base considered as a tree, whose vertices (other than the root) are the directory entries.

Note – The term DIT is used instead of DIB only in contexts where the tree structure of the information is relevant.

directory inquiry service

Suppl. No. 1 (II.2)

Callers can be informed of subscribers' telephone numbers, and, possibly, also of their names and addresses.

directory interrogation

Rec. F.500

Methods to get results from a request to a directory by read, compare, list, search or abandon operations.

directory management domain (DMD)

Rec. F.500.

A domain responsible for managing the information contained in a directory and the operation on this information.

directory management domain (DMD)

Rec. F.500

A collection of one or more DSAs and zero or more DUAs which is managed by a single organization. Management of a DUA by a DMD implies an ongoing responsibility for service to that DUA, e.g. maintenance, or in some cases ownership, by the DMD.

directory management domain (DMD)

Rec. X.501

A collection of one or more DSAs and zero or more DUAs which is managed by a single organization.

directory modification

Rec. F.500

Methods to change information in a directory by add entry, remove entry, modify entry or modify relative distinguished name functions.

directory name

Recs. F.400, X.400

Name of an entry in a directory.

Note – In the context of message handling, the entry in the directory will enable the O/R address to be retrieved for submission of a message.

directory name

Recs. F.500, X.501

A construct that singles out a particular object from all other objects. A directory name must be unambiguous (that is, denote just one object). However, it need not to be unique (that is, be the only name which unambiguously denotes the object).

See also *name.*

directory schema

Rec. F.500

The set of definitions and constraints concerning DIT structure, object class definitions, attribute types and syntaxes which characterize the DIB.

directory schema

Rec. X.501

The set of rules and constraints concerning DIT structure, object class definitions, attribute types and syntaxes which characterize the DIB.

directory system agent (DSA)

Recs. F.400, F.500, X.400

An OSI application process which is part of the directory, and whose role is to provide access to the directory information base to DUAs and/or other DSAs.

directory system agent (DSA)

Rec. X.501

An OSI application process which is part of the Directory.

(directory) user

Rec. X.501

The end user of the Directory, i.e. the entity or person which accesses the Directory

directory user agent (DUA)

Recs. F.400, X.400

An OSI application process which represents a user in accessing the directoy. Each DUA serves a single user so that the directory can control access to directory information on the basis of the DUA names. DUAs can also provide a range of local facilities to assist users to compose requests (queries) and interpret the responses.

directory user agent (DUA)

Rec. F.500

An OSI application process which represents a user in accessing the directory. Each DUA serves a single user so that the directory may control access to directory information on the basis of user's identity. DUAs may also provide a range of local facilities to assist users to compose requests (queries) and interpret the responses.

directory user agent (DUA)

Rec. X.501

An OSI application process which represents a user in accessing the Directory.

Note – DUAs may also provide a range of local facilities to assist users, compose queries and interpret the responses.

disabled state; outage

Suppl. No. 6 (II.3)

A state of an *item* characterized by its inability to perform a *required function*, for any reason.

disabled time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *disabled state*. See Figure 3, Suppl. No. 6 (II.3)

discharge current

Rec. K.12

The current that passes through a gas discharge tube when spark-over occurs.

discharge current, alternating

Rec. K.12

The r.m.s. value of an approximately sinusoidal alternating current passing through the gas discharge tube.

discharge current, impulse

Rec. K.12

The peak value of the impulse current passing through the gas discharge tube.

discharge voltage

Rec. K.12

The voltage that appears across the terminals of a gas discharge tube during the passage of discharge current. Also referred to as "residual voltage".

discharge voltage/current characteristic

Rec. K.12

The variation of crest values of discharge voltage with respect to discharge current.

DISCONNECT

Rec. Z.333

Break a previously established connection.

disconnect delay between two connection element boundaries, B_i and B_j

Rec. I.352

The length of time that starts when a DISConnect message creates a message transfer event at B_i and ends when that DISConnect message creates a message transfer event at B_j, further from the clearing party S/T interface.

Disconnect delay between two connection element boundaries = $(t_2 - t_1)$

where

t_1 is the time of occurrence for the message transfer event at B_i,

t_2 is the time of occurrence for the message transfer event at B_j.

disconnect signal; forward-transfer signal (sent in the forward direction)

Rec. Q.310

This line signal is sent in the forward direction at the end of a call when:

a) in semi-automatic working, the operator at the outgoing exchange withdraws the plug from the jack, or when an equivalent operation is performed;

b) in automatic working, the calling party hangs up, or when the time-out period of 10 to 120 seconds as discussed in definition of *hang-up signal* (Signalling System R1) occurs.

discretely-timed signal

Recs. G.701, I.112

A signal composed of successive elements in time, each element having one or more characteristics which can convey information, for example, its duration, its waveform and its amplitude.

disengagement parameters

Rec. X.140

Performance of the disengagement function is described by two parameters: disengagement delay and disengagement denial probability.

disparity

Rec. G.701

The algebraic sum of the values of the departure from notional zero level of one or more consecutive signal elements forming a defined group.

display area

Rec. Z.341

That part of a *visible display* which is available for displaying or entering data.

displayed form

Rec. Z.341

A *form* filled out and displayed by the *system* upon request by the *user.*

disrupt

Rec. X.216

A service procedure is disrupted by another service if the second service results in service primitives of the first service not being used as specified for the procedure of the first service.

disrupt

Rec. X.217

A service procedure is disrupted by another service procedure if the second service results in service primitives not being used as specified for the procedure of the first service.

distinguished name

Rec. F.500

The sequence of relative distinguished names of the entry which represents the object and those of all its subordinate entries (in descending order). Because of the one to one correspondence between objects and object entries, the distinguished name of an object can be considered to also identify the object entry.

distinguished name (of an object)

Rec. X.501

One of the names of the object, formed from the sequence of the RDNs of the object entry and each of its superior entries.

distinguished value

Recs. F.500, X.501

An attribute value in an entry which has been designated to appear in the relative distinguished name of the entry.

distortion analyser

Rec. R.140

Distortion meter for statistical measurements of the degree of individual distortion.

distortion meter

Rec. R.140

Equipment for measuring telegraph distortion.

distributed frame alignment signal

Recs. G.701, Q.9

A frame alignment signal whose signal elements occupy non-consecutive digit time slots.

distributed name resolution

Rec. X.518

The process by which name resolution is performed in more than one DSA.

distributed test method

Rec. X.290

An external test method in which there is a PCO at the layer boundary at the top of the IUT.

distribution; distribution application

Rec. I.113

Use of a broadband service or channel for transferring audio or video information to a user or a number of users which will not apply post-production processing to the information.

distribution application

See:
distribution; distribution application.

distribution cable

Recs. G.960, I.430

A cable used in the local line distribution network between the cross connection point and a distribution point.

distribution frame

Rec. Q.9

A structure for terminating wires and connecting them together in any desired order.

distribution function

Suppl. No. 6 (II.3)

A function giving, for every value x, the *probability* that the *random variable* X is less than or equal to x:

$$F(x) = Pr(X \leqslant x).$$

distribution list

Rec. F.500

List of O/R addresses for message handling services stored in the directory.

Note – This feature is considered to be an optional user facility in the service context.

distribution list (DL)

Recs. F.400, X.400

In the context of message handling, the functional object, a component of the message handling environment, that represents a pre-specified group of users and other distribution lists and that is a potential destination for the information objects an MHS conveys.

Membership can contain O/R names identifying either users or other distribution lists.

distribution list expansion

Recs. F.400, X.400

In the context of message handling, a transmittal event in which an MTA resolves a distribution list, among a message's immediate recipients, to its members.

distribution list name

Recs. F.400, X.400

O/R name allocated to represent a collection of O/R addresses and directory names.

distribution service

Rec. I.113

Service characterized by the unidirectional flow of information from a given point in the network to other (multiple) locations. Distribution services are subdivided into two classes: distribution services without user individual presentation control and distribution services with user individual presentation control.

distribution service with user individual presentation control

Rec. I.113

A distribution service in which the information is provided as a sequence of information entities (e.g., frames) with cyclical repetition, so that the user has the ability to select individual information entities and can control the start and order of the information.

distribution service without user individual presentation control

Rec. I.113

A distribution service which users can access without having any control over the start and order of the presentation of the distributed information.

distribution services with user individual presentation control

Rec. I.121

Services of this class also distribute information from a central source to a large number of users. However, the information is provided as a sequence of information entities (e.g. frames) with cyclical repetition. So, the user has the ability of individual access to the cyclical distributed information and can control the start and order of presentation. Due to the cyclical repetition, the information entities selected by the user will always be presented from its beginning.

One example of such a service is full channel broadcast videography.

See Figure 1/I.121.

distribution services without user individual presentation control

Rec. I.121

These services include broadcast services. They provide a continuous flow of information which is distributed from a central source to an unlimited number of authorized receivers connected to the network. The user can access this flow of information *without* the ability to determine at which instant the distribution of a string of information will be started. The user cannot control the start and order of the presentation of the broadcast information. Depending on the point of time of the user's access, the information will not be presented from its beginning.

Examples are broadcast services for television and audio-programmes.

See Figure 1/I.121.

DIT structure

Rec. F.500

The definition for an entry of an object class of the permissible object class or classes to which the immediate superior (or subordinate) may belong and its permissible RDN attribute types.

DIT structure rule

Rec. X.501

A rule, forming part of the directory schema which relates an object class (the subordinate) to another

object class (the superior) and which allows an entry of the former class to be immediately subordinate to one of the latter classes in the DIT. The rule also governs the attribute type(s) permitted to appear in the (subordinate) entry's RDN, and may impose additional conditions. The schema may contain many such rules.

diversion if number busy service

Suppl. No. 1 (II.2)

The possibility for a subscriber who cannot receive calls, because his number is busy, to have these calls diverted.

DLC voice-on ratio

Rec. G.763

The ratio of the number of frame during which DLC for voice/voiceband data (V/VBD) is ON, to the total number of frames. The ratio is expressed as a percentage, to the nearest integer.

$$\text{DLC voice-on ratio} = \frac{\text{No. of sampled DCME frames with DLC ON for V/VBD}}{N} \times 100$$

do not dereference alias

Rec. F.500

A service control which allows to prohibit that any alias used to identify the entry effected by an operation is to be dereferenced.

See also *alias.*

do not disturb service

Suppl. No. 1 (II.2)

The possibility for a subscriber, who does not wish to answer his telephone during a period of time, to divert incoming calls.

do not use copy

Rec. F.500

A service control allowing for prohibition of copied information.

document

Recs. T.62, T.62 bis

A document is a sequence of one or more pages intended by the originator to be delivered to the address(es) as a single entity in the original page sequence.

document

Rec. T.411

A structured amount of information intended for human perception, that can be interchanged as a unit between users and/or systems.

document application profile

Rec. T.411

The specification of a combination of features defined in the T.410 series, intended to form a subset to fulfil the requirements of an application.

document architecture

Rec. T.411

1) Rules for defining the structure of documents, in terms of a set of components and content portions, and the representation of documents in terms of constituents and attributes.

2) The structural information of a document consisting of the set of one or more of the following structures: specific logical structure, specific layout structure, generic logical structure and/or generic layout structure.

document architecture class

Rec. T.411

The rules for defining the structure and representation of documents in formatted form, processable form or formatted processable form.

document architecture level

Rec. T.411

An identified subset of the features pertaining to a document architecture class.

document body

Rec. T.411

The part of a document that may include a generic logical and layout structure, specific logical and layout structure, layout and presentation styles but excludes the document profile.

document bulk transfer

Rec. T.431

Bulk transmission of a document as a whole.

document bulk transfer and manipulation

Rec. T.431

An arbitrary combination of document bulk transfer and document manipulation.

document class

Rec. T.411

A set of logical object class descriptions, layout object class descriptions, generic content portion descriptions, styles and a document profile, that specifies a set of documents with common characteristics.

document class description

Rec. T.411

The specification of a document class.

document layout process

Rec. T.411

The process that creates a specific layout structure in accordance with the generic layout structure and information contained in the specific logical structure, the generic logical structure and the layout styles.

document layout root

Rec. T.411

The composite object of the specific layout structure at the highest level of the hierarchy.

document logical root

Rec. T.411

The composite object of the specific logical structure at the highest level of the hierarchy.

document manipulation

Rec. T.431

Creation, deletion or modification of one or more constituents or substructures of a document.

document profile

Rec. T.411

A set of attributes which specifies the characteristics of the document as a whole.

document profile level

Rec. T.411

An identified subset of the features pertaining to the document profile.

document transfer and interactive mode

Rec. T.62

This mode allows for interleaving of document transfer with interactive dialogue. Procedures applying to this mode are for further study.

document transfer mode

Rec. T.62

This mode allows only for transfer of documents without interactive capability. Procedures applying to this mode are defined in the main body of this Recommendation.

documents A through G

Rec. Z.341

Specially formatted information generated during various *phases* of the *methodology* for the specification of the *man-machine interface.*

domain

See:
management domain.

domain-defined attribute

Rec. X.402

An attribute whose type is bound to a class of information by an MD.

Both the type and value of every domain-defined attribute are strings or collections of strings.

domain defined attributes

Recs. F.400, X.400

Optional attributes of an O/R address allocated to names in the responsibility of a management domain.

dot (in Morse code)

Rec. R.140

A signal element of mark condition and of duration of one unit interval followed by a signal element of space condition having a nominal duration of one unit interval.

double current transmission

Rec. R.140

A form of two-condition direct current transmission effected by applying to a wire two voltages of opposite polarity, producing currents of opposite directions.

double-ended synchronization

Rec. G.701

A method of synchronizing a specified synchronization node with respect to another synchronization node in which synchronization information at the specified node is derived by comparing the phase difference between the local clock and the incoming digital signal from the other node, with the phase difference at the other node between its local clock and the digital signal incoming from the specified node.

double phantom circuit

Rec. R.140

An additional circuit derived from the conductors of two phantom circuits, with the four conductors of each phantom circuit effectively being used in parallel.

down state; internal disabled state

Suppl. No. 6 (II.3)

A state of an *item* characterized by a *fault* or by a possible inability to perform a *required function* during *preventive maintenance.*

Note – This state relates to *availability performance.*

down time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *down state.* See Figure 3, Suppl. No. 6 (II.3)

drawing convention

Rec. Z.341

A set of rules provided by the *decomposition meta-language* to indicate the allowed use of the *symbols* and their interconnection.

drift compensation

Gloss. (VI.3)

The process of adjusting for the difference in relationship of the backward acknowledgement information contained in the ACU to the forward signal units it acknowledges which occurs as a result of drift in the bit rates of the data channels.

drift failure

See:

gradual failure; degradation failure; drift failure.

drum factor

Rec. T.0

In drum apparatus, the ratio of the usable scanning length of the drum to its diameter.

DSI gain

See:

LRE gain; DSI gain; DCME gain.

DTAM user

Rec. T.431

That portion of the application entity which conceptually invokes the DTAM service.

DTE address

Rec. X.213

Information used to identify a point of attachment to a public data network.

DTE busy

*Series X**

Status of DTE which is unavailable because it cannot accept an additional call.

DTE controlled not ready

*Series X**

Indicates that, although the DTE is operational, it is temporarily unable to accept incoming calls.

DTE uncontrolled not ready

*Series X**

Indicates that the DTE is unable to accept incoming calls, generally because of abnormal operating conditions.

DTE/DCE interface

*Series X**

A set of rules applied to the border between data terminal equipment (DTE) and data circuit terminating equipment (DCE) of data communication networks.

Note – The term will normally be used in the context of user services provided through a data communication network. Depending on the nature of the user services it may comprise functions of one or more layers.

dual seizure

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The condition which occurs when in bothway operation two exchanges attempt to seize the same circuit at approximately the same time.

dual telephone numbers service

Suppl. No. 1 (II.2)

Two telephone numbers are given to one subscriber. One number is known to the public while the other is revealed by the subscriber only to a limited number of persons. When the subscriber applies call diversion or do not disturb services to the first number, the people using the second number will still be connected.

dump

See:
to dump.

duplex

Rec. R.140

Designating or pertaining to a mode of operation or the equipment concerned, by which information can be transmitted in both directions simultaneously between two points.

duplex mode

See:

two-way simultaneous (TWS).

durability

Suppl. No. 6 (II.3)

The ability of an *item* to remain in a condition where it can perform a *required function* under stated conditions of use and *maintenance* until a limiting state is reached.

Note – A limiting state of an *item* may be characterized by the end of the *useful life*, unsuitability for any economic or technological reasons, etc.

(time) duration

Suppl. No. 6 (II.3)

The difference between the end points of a *time interval.*

duration

Rec. Z.100

Duration is a *sort* defined in a predefined *partial type definition* for which the *values* are denoted as *reals* and represent the interval between two time instants.

duration of a call (conversation time)

Rec. E.100

The interval between the instant the call is actually established between the calling and the called stations and the instant the calling station gives the clearing signal (or the instant when, although the caller has not replaced his receiver, the call is:

- in manual or semiautomatic service, officially cleared down by an operator,
- in fully automatic service, cleared down after some slight delay by the action of the called subscriber's clear-back signal).

The time interval between:

a) $t_5 - t_3$ is the duration of a station call;

b) $t_5 - t_4$ is the duration of a personal call.

dynamic conformance

Rec. X.209

A statement of the requirement for an implementation to adhere to the behaviour prescribed by this Recommendation in an instance of communication.

dynamic conformance requirements

Rec. X.290

All those requirements (and options) which determine what observable behaviour is permitted by the relevant OSI* Recommendation(s)* in instances of communication.

dynamic load control (DLC)

Rec. P.84

An overload control strategy in which the DCMS signals to the associated switch that the traffic load the switch is generating, or is predicted to generate, cannot be transmitted satisfactorily by the DCMS and that the switch should reduce its demand on the DCMS by a holding signal sent to the circuits when they become idle.

dynamic multiplex

Recs. G.960, I.430

A multiplex where signalling information of some or all tributary D-channels is assigned to a lesser number of main-stream time-slots on a statistical basis, but the assignment of other channels is fixed.

dynamic window control

Rec. I.122

The term dynamic window control refers to a set of procedures based on which the transmitter's transmit window is modified, according to a user-perceived congestion condition in the network.

dynamically redefinable character set (DRCS)

Rec. T.61

A DRCS is a set of graphic characters whose exact shape is specified and transmitted at the time of use. Such characters may be alphabetic, special symbols or picture element symbols. Once loaded, a DRCS is regarded as a member of a library that can be designated by appropriate ESC sequences as a G0, G1, G2 or G3 set.

dynamicizer (deprecated)

See:
parallel to serial converter;
parallel to serial converter; serializer.

E

ear reference point (ERP)

Recs. P.10, P.64

A point located at the entrance to the ear canal of the listener's ear.

See Figure A-1/P.64.

earcap reference plane

Rec. P.10

That plane formed by the contacting points of a flat surface against a telephone earcap.

earcap reference point (ECRP)

Rec. P.10

Point in the *earcap reference plane*, used as a reference parameter.

earlier transmitted bits

Recs. V.36, V.37

Those bits which have been transmitted earlier than the next transmitted bit. They are numbered sequentially in reverse time order, i.e. the first earlier transmitted bit is that immediately preceding the next transmitted bit.

early distortion

Rec. R.140

Telegraph distortion characterized by the fact that a significant instant appears earlier than the corresponding ideal instant.

early failure period

Suppl. No. 6 (II.3)

That possible early period in the life of an *item*, beginning at a given *instant of time* and during which the *instantaneous failure intensity* for a *repaired item* or the *instantaneous failure rate* for a *non-repaired item* decreases rapidly.

Note – In any particular case, it is necessary to explain what is meant by "decreases rapidly".

earphone coupling loss (L_E)

Rec. P.10

That quantity defined as the receiving sensitivity of a handset (usually as a function of frequency) when applied to an artificial ear minus the receiving sensitivity of the same handset on a human ear.

earth-return double phantom circuit

Rec. R.140

An additional earth-return circuit derived from two pairs of metallic conductors used in parallel.

earth-return phantom circuit

Rec. R.140

An additional circuit derived from the conductors of a metallic circuit, with these two conductors effectively being used in parallel, and with return through the earth or the sea between the end points.

Example: A telegraph circuit superposed on a telephone circuit, with earth-return.

echo

Rec. G.100

Unwanted signal delayed to such a degree that, for instance in telephony, it is perceived as distinct from the wanted signal (i.e. the signal directly transmitted).

Note 1 – Distinction is made between *talker echo* and *listener echo.*

Note 2 – An echo is usually considerably attenuated with respect to the wanted signal.

echo

Recs. G.601, M.60

An electric, acoustic or electromagnetic wave which arrives at a given point, after reflection or indirect propagation, with sufficient magnitude and delay for it to be perceptible at the given point, as a wave distinct from that directly transmitted.

echo balance return loss

Rec. G.100

Balance return loss averaged with $1/f$ power weighting over the telephone band, in accordance with Recommendation G.122, § 4.

echo cancellation

Recs. G.960, I.430

A transmission method used in digital transmission systems in which bi-directional transmission occurs simultaneously on the same line and in the same frequency band. An echo canceller is required to attenuate the echo of the near-end transmission.

echo canceller

Recs. G.165, M.60

A voice operated device placed in the 4-wire portion of a circuit and used for reducing near-end echo present on the send path by subtracting an estimation of that echo from the near-end echo.

See Figures 1/G.165 to 4/G.165.

echo control device

Rec. G.100

A voice-operated device placed in the 4-wire portion of the circuit and used for reducing the effect of echo.

Note – This reduction is in practice carried out either by subtracting an estimated echo from the circuit echo (i.e. cancelling it) or by introducing loss in the transmission path to suppress the echo (echo suppression).

echo control device indicator

Rec. Q.762

Information indicating whether or not a half echo control device is included in the connection.

echo curve

Rec. G.601

A graphic or oscilloscopic representation of *echo* amplitude function of time.

Note – The echo may be corrected in amplitude or in amplitude and phase; the curve is then called, as the case may be, "amplitude-corrected echo curve" or "amplitude- and phase-corrected echo curve".

echo loss (A_{ECHO})

Rec. G.165

The attenuation of a signal from the receive-out port (R_{out}) to the send-in port (S_{in}) of an echo canceller, due to transmission and hybrid loss, i.e. the loss in the echo path.

See Figure 4/G.165.

Note – This definition does not strictly adhere to the echo loss definition given in Recommendation G.122, § 2.2 which applies to loss of the *a-t-b* path viewed from the virtual switching point of the international circuit. The echo canceller may be located closer to the echo reflection point.

echo loss (L_{ECHO})

Rec. G.100

Semi-loop loss averaged with $1/f$ power weighting over the telephone band, in accordance with Recommendation G.122, § 4.

Note 1 – In cases where a point *t* (2-wire point) exists, the echo loss is approximately equal to the sum of the transmission losses *a-t* and *t-b* and the *echo balance return loss*. (Points *a* and *b* are shown in Recommendation G.122.)

Note 2 – Distinction may be made between the echo loss of a given piece of equipment and that of a national system (cf. Note 2 to definition og *semi-loop loss*).

echo suppressor

Recs. G.164, M.60

A voice-operated device placed in the 4-wire portion of a circuit and used for inserting loss in the transmission path to suppress echo. The path in which the device operates may be an individual circuit path or a path carrying a multiplexed signal.

See Figures 1/G.164 to 4/G.164.

echo suppressor indicator

Rec. Q.254

Information sent in the forward direction indicating whether or not an outgoing half-echo suppressor is included in the connection.

echo-suppressor indicator

See:

country-code indicator; echo-suppressor indicator (sent in the forward direction.

echoing loopback (deprecated)

See:

partial loopback.

echometric measurement

Rec. G.601

A measurement made by studying the *echo* which follows the emission of a signal of limited duration, known as a "measuring signal", with a view to analyzing all the causes of reflections.

echoplex mode

*Series X**

A mode of operation whereby characters transmitted by a DTE are automatically returned to that DTE from some specified network node.

EDIT

Rec. Z.333

Display a specified data set and subsequently modify the data set. A common system capability, e.g., editor, is normally used to support such an action.

edit

Rec. Z.341

An *action* to display a specified *data set* and subsequently to modify the *data set.*

editing

*Series X**

A function provided by a PAD, which allows the start-stop mode DTE user to edit characters sent to the PAD before action by the PAD and/or onward transmission.

editing process

Rec. T.411

The stage of a document processing that consists of the content editing process and the logical structure editing process.

effective call attempt

See:

completed call attempt; effective call attempt.

effective character rate

Rec. R.140

The average number of binary digits, characters or blocks transferred per unit time between two points and accepted as valid at the reception.

effective data transfer rate

Rec. V.7

The average number of bits, characters, or blocks per unit time transferred from a data source to a data sink and accepted as valid. It is expressed in bits, characters, or blocks per second, minute, or hour.

effective duration of a call

Rec. U.140

The interval of time between the reception by the calling party of the call-connect signal and the sending of the clearing signal.

effective margin (of a given apparatus)

Rec. S.140

The margin measured on a specified receiver under actual operating conditions.

effective traffic

Rec. E.600

The traffic corresponding only to the conversational portion of effective call attempts.

effectively transmitted signals in sound-programme transmission

Recs. J.13, N.1

For sound-programme transmission, a signal at a particular frequency is said to be effectively transmitted if the nominal overall loss at that frequency does not exceed the nominal overall loss at 800 Hz by more than 4.3 dB. This should not be confused with the analogous definition concerning telephony circuits given in Note 1 of Rec. G.151, § 1.

For sound-programme *circuits*, the overall loss (relative to that at 800 Hz) defining effectively transmitted frequency is 1.4 dB, i.e. about one-third of the allowance.

effectiveness (performance)

Rec. E.800

The ability of an *item* to meet a service demand of a given size.

Note – This ability depends on the combined aspects of the *capability* and the *availability performance* of the *item*.

efficiency factor in time

Rec. U.23

The ratio of the time necessary to transmit a text automatically without repetition, at a specified modulation rate, to the time actually taken to receive the same text with a given error rate.

Note 1 – The whole of the apparatus comprising the communication is assumed to be in the normal conditions of adjustment and operation.

Note 2 – A telegraph communication may have a different efficiency factor in time for the two directions of transmission.

Note 3 – The actual conditions in which the measurement is made should be specified, in particular the duration of the measurement.

efficiency factor in time (of a transmission with automatic repetition for the correction of errors)

Rec. R.140

Ratio of the time necessary to transmit a text automatically without repetition, at a specified modulation rate, to the time actually taken to receive the same text with error control by repetition for a given error rate.

Note – The actual conditions in which the measurement is made should be specified, in particular the duration of the measurement.

eight (8) kHz integrity

Rec. I.140

This value applies when:

i) at each user-network interface, intervals of 125 μs are implicitly or explicitly demarcated, and

ii) all bits submitted within a single demarcated 125 μs interval are delivered within a corresponding single demarcated 125 μs interval.

eight (8) kHz integrity with restricted differential time delay (RDTD)

Rec. I.140

This value applies when the following conditions are met:

- that at each point in a connection or connection element, time slots are explicity or implicitly demarcated for each information channel or an aggregate of information channels; and
- that the information parts submitted to the time slots at the transmitting end are delivered to the receiving end with a differential time delay of not more than 50 ms (provisional).

(electric) circuit

Rec. Q.9

A region of electrical action where such action takes place essentially along a path and can be uniquely specified in terms of time and a single dimension.

Note – In contradistinction, an "electric field" implies action which can only be specified uniquely in terms of time and two or three dimensions.

electrical artificial voice

Recs. P.10, P.50

The artificial voice produced as an electric signal, for testing transmission channels or other electric devices.

electrical objective loudness rating (EOLR)

Suppl. No. 19 (V)

For an electrical network,

$$EOLR = -20 \log_{10} \frac{V_T}{\frac{1}{2} V_W} \tag{1-4}$$

where

V_W is the open-circuit voltage of the electric source (in millivolts)

V_T is the output voltage of the network (in millivolts).

element error rate

Rec. R.2

The ratio of the number of incorrectly received elements to the number of emitted elements.

element error rate; character error rate

Rec. R.140

Ratio of the number of elements [characters] incorrectly received to the total number of elements [characters] correctly emmitted.

Note – In determining the quality of transmission it is possible to consider the probability of exceeding a given error rate.

element interleaving; character interleaving

Rec. R.140

In a multichannel system with time division, the forming of a cycle containing one element [character] from each channel.

element of service

Recs. F.400, X.400

Functional unit for the purpose of segmenting and describing message handling features.

element synchronism

Rec. R.140

In synchronous transmission, the condition in which the rate of the local timing coincides completely with the rate of the received signal elements.

element synchronization

Rec. R.140

The action of adjustment of element synchronism.

elementary cable section

Rec. G.601

All of the physical transmission media and accessories such as splices, connectors or flexible connecting cables included between two consecutive *section terminations* (see Figures 1/G.601 and 2/G.601).

elementary cable section

Rec. G.701

The whole of the physical transmission medium between the section termination at the output of one equipment and the section termination at the input of the following equipment.

Note 1 – An elementary cable section usually consists of several factory lengths of cable connected together and any associated accessories (such as flexible cables) necessary to connect it to the section terminals.

Note 2 – Examples of the physical transmission media are a coaxial or symmetric pair, and optical fibre.

elementary echo

Rec. G.601

In an *echometric measurement*, the state of the echo in a time interval of a duration comparable to that of the test signal.

elementary maintenance activity

Suppl. No. 6 (II.3)

The unit of work into which a maintenance activity may be broken down at a given *indenture level.*

elementary regenerated section

Rec. G.601

In a given direction of transmission, an *elementary cable section* together with the immediately following *regenerative repeater*, all included between two *section terminations.*

elementary regenerator section

Rec. G.701

In a given direction of transmission, an elementary cable section together with the immediately following regenerative repeater.

elementary repeater section

Rec. G.701

In a given direction of transmission, an elementary cable section together with the immediately following analogue repeater.

elementary repeatered section

Rec. G.601

In a given direction of transmission an *elementary cable section* together with the immediately following *analogue repeater*, all included between two *section terminations* (see Figure 2/G.601).

embedded testing

Rec. X.290

Testing the behaviour of a single layer within a multi-layer IUT without accessing the layer boundaries for that layer within the IUT.

emergency call service

Suppl. No. 1 (II.2)

A caller is given a fast and easy means of giving information about an emergency situation to the appropriate emergency organization (e.g. fire department, police, ambulance).

emergency changeover

Glos. (VI.7, VI.8, VI.9)

A modified changeover procedure to be used whenever the normal one cannot be accomplished, i.e. in case of some failures in the signalling terminal equipment or in case of inaccessibility between the two involved signalling points.

emergency-load-transfer signal

Rec. Q.255

A signal sent on as many links as possible to indicate that the error rate on those links has met the requirements of the *emergency proving period*, and that emergency transfer can take place to one of these links.

emergency restart

Gloss. (VI.3)

The procedure of re-established signalling communication, when the regular and all reserve signalling links fail.

emergency routes

Recs. F.60, F.68

The circuit(s) to be used in case of complete interruption or major breakdown of the primary and secondary routes. The emergency routes may pass through any country.

emergency routing

U.140

The routing to be chosen exceptionally if neither the normal traffic routing nor any alternative traffic routing set of circuits is available.

en-bloc signalling

Rec. Q.9

A signalling method in which the address digits are assembled into one block for onward transmission, the block containing all of the address information necessary to route the call to its destination.

enabling condition

Rec. Z.100

An *enabling condition* is a means for conditionally accepting a *signal* for *input.*

enabling condition area

Rec. Z.100

The *enabling condition area* is the *SDL/GR* representation of an *enabling condition.*

encoded information type (EIT)

Recs. F.400, X.400

In the context of message handling, an identifier, on a message envelope, that identifies one type of encoded information represented in the message content. It identifies the medium and format (e.g., IA5 text, Group 3 facsimile) on an individual portion of the content.

encoder

Rec. G.701

A device that performs encoding.

encoding

Rec. G.701

The generation of a code word to represent a quantized value.

encoding (of a data value)

Rec. X.209

The complete sequence of octets used to represent the data value.

Note – Some CCITT Recommendations use the term "data element" for this sequence of octets, but the term is not used in this Recommendation, as ISO International Standard use it to mean "data value".

encoding law

Rec. G.701

The law defining the relative values of the quantizing intervals used in quantizing and encoding. (See Figure 4/G.701.)

end-aligned

Rec. T.411

1) The result of a layout or imaging process that positions the sequence of character images for a line such that the escapement point of the last character image is positioned at the end edge of the positioning area.

2) A tabulation alignment that positions the sequence of character images for a specified character string such that the escapement point of the last character image is positioned at the tabulation stop.

end edge

Rec. T.411

The edge of the positioning area of a basic layout object that is in the direction of the character path.

end-of-contents octets

Rec. X.209

Part of a data value encoding, occurring at its end, which is used to determine the end of the encoding.

Note – Not all encodings require end-of-contents octets.

end of dialogue

Rec. Z.341

The indication that *dialogue* has finished.

end of input indication

Rec. Z.341

An indication to mark the end of *input* in order to have the information interpreted by the *system.*

end of optional parameters

Rec. Q.712

The "end of optional parameters" parameter field is used in any message containing optional parameters to indicate where the part allocated to these optional parameters ends.

end of output

Rec. Z.341

The indication that *output outside dialogue* has finished.

end-of-pulsing (ST) signal

Rec. Q.254

An address signal sent in the forward direction indicating that there are no more address signals to follow.

end-of-pulsing signal

See:

ST signal; end-of-pulsing (sent in the forward direction.

end-of-pulsing signal (sent in the forward direction)

Rec. Q.400

An address signal sent indicating (in semi-automatic service) that no other address signal will follow or (in automatic service) that the transmission of the code identifying the origin of the call is completed.

end-of-pulsing signal (sent in the forward direction); code fifteen (15) (Signalling System No. 4)

Rec. Q.120

This numerical type signal is sent from the international outgoing exchange to show that there are no more numerical signals to follow. In semi-automatic working, this signal is always sent. In automatic working, this signal *may* be sent, viz., when, in the outgoing international exchange, it is known that there are no more digits to follow.

end-of-pulsing signal (sent in the forward direction); ST signal (Signalling System No. 5)

Rec. Q.140

This numerical type signal is sent to show that there are no more numerical signals to follow. The signal is always sent in semi-automatic as well as in automatic working.

end-of-pulsing (ST) signal

Rec. Q.9

An address signal sent in the forward direction indicating that there are no more address signals to follow.

end-of-selection signal

Rec. Q.9

A signal sent in the backward direction indicating the successful completion or unsuccessful termination of the call set-up process, and which may contain information or the called party's line condition.

Note – The functions of this signal in Signalling System No. 7 are provided by the Address Complete message, and the Unsuccessful Call Set-up message.

end-of-selection signal

U.140

A switching signal transmitted among the selection signals after the digits of the called subscriber's number to indicate that there is no further digit belonging to this number.

end statement

Rec. Z.317

An end statement is an indication that an operating sequence has finished.

end statement

Rec. Z.341

Terminates *output* information from the *system* in an operating sequence where termination is not obvious.

end system

Rec. X.300

The functional abstraction of a real end system.

end-to-end call set-up delay

Rec. X.135

The call set-up delay between DTE boundaries, e.g., B_1 and B_n in Figure 2/X.135. This end-to-end delay excludes the called user response time.

end-to-end clear indication delay

Rec. X.135

The one-way delay between DTE boundaries, e.g., B_1 and B_n in Figure 2/X.135.

end-to-end communication

Rec. I.122

End-to-end communication is a direct peer-to-peer communication of TE to TE, or TE to a network interworking function (IWF) supporting, for example, PSPDN interworking.

end-to-end data packet transfer delay

Rec. X.135

The end-to-end data packet transfer delay is the one-way delay between DTE boundaries, e.g., B_1 and B_n in Figure 2/X.135

end-to-end digital leased circuit

Rec. D.8

One circuit which uses exclusively digital transmission technology for the routing of information in the form of bit streams. The circuit may be established by conventional physical transmission media (coaxial cables or radio-relay links), by optical fibre cables, or by satellite links.

It may also consist of sections combining the different media indicated above.

end-to-end information indicator

Rec. Q.762

Information sent in either direction indicating whether or not the sending exchange has further call information available for end-to-end transmission. In the forward direction, an indication that end-to-end information is available will imply that the destination exchange may obtain the information before alerting the called party.

end-to-end method indicator

Rec. Q.762

Information sent in either direction indicating the available methods, if any, for end-to-end transfer of information.

end-to-end signalling

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The capability to transfer signalling information of end point significance directly between signalling end points in order to provide a requesting user with a basic or supplementary service.

end-to-end signalling

Rec. Q.9

A procedure for the exchange of signalling information directly between signalling entities in an originating exchange and a destination exchange for purposes of supporting certain user services.

end-to-end signalling (general sense)

Rec. Q.9

A signalling method in which signals are transmitted from one end of a multi-link connection to the other end where processing of these signals is required.

end-user (SCCP)

Glos. (VI.7, VI.8, VI.9)

A functional entity above the SCCP upper layer boundary indirectly using the services of the SCCP.

endpoint identifier (EID)

Rec. Q.932

The endpoint identifier information element is used for terminal identification. The endpoint identifier parmeters contain a USID and TID and additional information used to interpret them.

endurance test

Suppl. No. 6 (II.3)

A *test* carried out over a *time interval* to investigate how the properties of an *item* are affected by the application of stated stresses and by their *time duration.*

engaged ; busy signal

U.140

A busy signal which indicates that the called station is busy or not available.

engaged test ; busy test

Rec. Q.9

An engaged test is a test made to find out whether or not certain facilities which may be desired, such as a subscriber's line or trunk, are available for use.

engineered capacity

Rec. Q.543

The mean offered load at which the exchange just meets all grade of service requirements used by the Administration to engineer the exchange.

engineered exchange capacity

Rec. Q.9

The maximum traffic load that an exchange can handle while meeting specified performance requirements, and performing all normal operational and administrative functions, without entering into an overload condition.

enhanced-quality television

Rec. I.113

Television of quality superior to **existing-quality television**, but less than the quality of high-definition television.

enhanced services offered over the existing network

Rec. E.508

These are services which are offered over the existing network, and which offer an enhancement of the original use for which the network was intended. Services such as the international freephone service, credit card calling and closed user groups are examples of enhancements of voice services; while facsimile, telefax and videotex are examples of non-voice services.

enquiry (in a transaction)

Rec. Q.9

A signal or signals (possibly sent as a sequence of messages) requesting specific information.

ensemble activity

Rec. G.763

The ratio of the time active signals and their corresponding hangover time and front-end delay occupy the trunk channels, to the total measuring time, averaged over the total number of trunk channels included in the measurement.

entity or (N) entity

Glos. (VI.7, VI.8, VI.9)

A set of functions invoked by a given layer for an instance of intersystems communications in which that system is involved. An entity may be partitioned into several sub-entities. For each instance of intersystems communications, the set of functions invoked will be a part of all the functional capability of the given system within the layer in accordance with the functionality required for that instance of inter-system communication.

entity

Rec. Q.9

A part, device, subsystem, functional unit, equipment or system that can be individually considered. In ISDN the term is used to refer to a particular system or subsystem such as a user terminal or a digital exchange. It is also used to refer to a set of functions of a particular system at a location, e.g., the Layer 2 functions of a signalling system at a user terminal.

entity

See:

item; entity.

entity class

Rec. Z.100

An *entity class* is a categorization of *SDL types* based on similarity of use.

entry

Rec. X.413

An information set in an information-base. See main-entry and child-entry for further classification of entries.

entry

See:

(directory) entry.

entry; directory entry

Rec. F.500

A part of the DIB which describes a particular object, and which consists of information that the directory holds about that object.

entry-information

Rec. X.413

A parameter, used in abstract-operations, which conveys selected information from an entry.

entry-information-selection

Rec. X.413

A parameter, used in abstract-operations, which indicates what information from an entry is being requested.

entry-status

Rec. X.413

An attribute giving information about the processing status of that entry. Possible values are new, listed or processed.

entry-type

Rec. X.413

An attribute which signals an entry is associated with a delivered-message or a delivered-report.

enumerated type

Rec. X.208

A simple type whose values are given distinct identifiers as part of the type notation.

envelope

Recs. F.400, X.400

In the context of message handling, an information object, part of a message, whose composition varies from one transmittal step to another and that variously identifies the message originator and potential recipients, documents its past and directs its subsequent conveyance by the MTS, and characterizes its content.

envelope

Rec. X.402

An information object whose composition varies from one transmittal step to another and that variously identifies the message's originator and potential recipients, documents its previous conveyance and directs its subsequent conveyance by the MTS, and characterizes its content.

environment

Rec. T.51

The characteristic that identifies the number of bits used to represent a character in a data processing or data communication system or in part of such a system.

environment

Rec. Z.100

The term *environment* is a synonym for the *environment of a system.* Also when context allows, it may be a synonym for the *environment* of a *block, process, procedure* or a *service.*

environment of a system

Rec. Z.100

The *environment of a system* is the external world of the *system* being specified. The environment interacts with the *system* by sending/receiving *signal instances* to/from the *system.*

equal-length code

Rec. R.140

A code, the character signals of which are composed of the same number of unit elements.

equation

Rec. Z.100

An *equation* is a relation between *terms* of the same *sort* which holds for all possible *values* substituted for each *value identifier* in the *equation.* An *equation* may be an *axiom.*

equipment

Rec. X.224

Hardware or software or a combination of both; it need not be physically distinct within a computer system.

equipment identity register

Rec. Q.1001

The register to which an international mobile equipment identity is assigned for record purposes.

equipment identity register

Rec. Q.9

The register to which an international mobile equipment identity is assigned for record purposes.

equipped channel

Rec. R.140

A channel having all the necessary equipment to enable usage in case of need.

equivalent binary content

Rec. G.701

The number of binary digits strictly necessary to convey the same information as a defined number of signal elements in a given digital signal.

equivalent bit rate

Rec. G.701

The value of the bit rate strictly necessary to convey the same information in the same time as a given digital signal at a given digit rate.

equivalent random traffic

Rec. E.600

The theoretical poisson traffic that, when offered to a theoretical circuit group (equivalent random circuit group) produces an overflow traffic with a mean and variance equal to that of a given offered traffic.

Note – The equivalent random traffic and circuit group represent the traffic impact of a more complex arrangement of offered traffics and high usage circuit groups.

equivalent resistance error

Rec. G.601

The value of a hypothetical impedance deviation which, if situated at the end of a section of a transmission medium, would produce in an *echometric measurement* at that end the same reflected energy as all the irregularities of the section.

equivalent r.m.s. sine wave power of the peak of a multiplex telephone signal

Rec. G.223

This is the power of a sinusoidal signal whose amplitude is that of the peak voltage of the multiplex signal.

erasure signal

Rec. S.140

A signal used for the purpose of invalidating a previous signal.

erlang

Rec. E.600

The unit of traffic (symbol: E). In traditional telephony the number of Erlangs is the number of busy resources or the expected number of busy resources under stated conditions.

error

Suppl. No. 6 (II.3)

A discrepancy between a computed, observed or measured value or condition and the true, specified or theoretically correct value or condition.

Note – An *error* can be caused by a *faulty item*, e.g. a computing *error* made by a *faulty* computer equipment.

error; digital error

Recs. G.701, M.60

An inconsistency between a digit in a transmitted digital signal and the corresponding digit in the received digital signal.

error

Rec. Z.100

An *error* occurs during the interpretation of a *valid specification* of a *system* when one of the dynamic conditions *SDL* is violated. Once an *error* has occurred, the subsequent *behaviour* of the *system* is not defined by *SDL*.

error

See:

mistake; error (deprecated in this sense).

error burst

Rec. M.60

A group of bits in which two successive erroneous bits are always separated by less than a given number (x) of correct bits. The number (x) should be specified when describing an error burst.

error burst

Rec. Q.9

A group of bits in which two successive erroneous bits are always separated by less than a given number (x) of correct bits. The number x should be specified when describing an error burst.

Note – The last erroneous bit in a burst and the first erroneous bit in the following burst are accordingly separated by x correct bits or more.

error cause

Rec. Q.712

The "error cause" parameter field is used in the *Protocol Data Unit Error* message in order to indicate what is the exact protocol error.

error code

Rec. F.500

Information provided from the directory system for the purpose of indicating to the requestor why a request could not be performed sufficiently.

Note – A local directory domain may transfer the information to the requestor in a way appropriate to local requirements. Error codes may refer to service error, attribute error, update error, security error, referral error, abandon error or name error. They are transferred to service messages for the user.

error control

Rec. V.7

That part of a protocol controlling the detection and possibly the correction of transmission errors.

error control loop

Gloss. (VI.3)

The number of signal units transmitted on the signalling link between the time a particular signal unit is sent and the time that the acknowledgement of that signal unit is recognized.

error correcting code

Rec. R.140

An error detecting code which also permits the automatic correction of a proportion of the detected errors without using a backward channel.

error-correcting DCE

Rec. V.42

The logical structure of an error-correcting data circuit terminating equipment (DCE) is shown in Figure 2/V.42. The error control functions implements the error-correcting protocols of Recommendation V.42.

error correction

Rec. Z.341

The activity of correcting *input* which has been offered to but not accepted by the *system.*

error correction by detection and repetition (ARQ)

Rec. R.140

Error correction using an error detecting code in which every mutilation discovered at the receiving end causes the sending to the transmitting end, over the return channel, of a function signal which orders the repetition of a fixed sequence of the last signals sent.

error correction method

See:
basic (error correction method.

error detecting code

Rec. R.140

A redundant code in which the rules of construction are such that any error causing departures from this construction can be automatically detected.

error free seconds (EFS)

Recs. E.800, M.60

The ratio of the number of one-second intervals during which no bits are received in error to the total number of one-second intervals in the time interval.

Note 1 – The length of the time interval needs to be specified.

Note 2 – This ratio is usually expressed as a percentage.

error indication

Rec. X.224

An N-RESET indication, or an N-DISCONNECT indication with a reason code indicating an error, that a transport entity receives from the NS-provider.

error multiplication

Rec. G.701

The property of an apparatus whereby a single digital error in the input signal presented to it results in more than one digital error in the output signal.

Note – Line code converters and descramblers are examples of apparatus that may cause error multiplication.

error multiplication factor

Rec. G.701

The ratio of the number of digital errors in the output signal to the number of digital errors in the input signal.

Note – The error multiplication factor may be expressed as either an average or maximum value.

error of the first kind

Suppl. No. 6 (II.3)

The *error* committed in rejecting the *null hypothesis*, because the *statistic* takes a value which belongs to the *critical region*, when the *null hypothesis* is true.

error of the second kind

Suppl. No. 6 (II.3)

The *error* committed in failing to reject (accept) the *null hypothesis* (because the value of the *statistic* does not belong to the *critical region*), when the *null hypothesis* is not true (the *alternative hypothesis* therefore being true).

error performance parameter

Rec. G.821

The percentage of averaging periods each of time interval T_0 during which the bit error ratio (BER) exceeds a threshold value. The percentage is assessed over a much longer time interval T_L (see Note 3 to Table 1/G.821).

error rate (deprecated)

See:
error ratio.

error rate monitor

Gloss. (VI.3)

A device which receives an indication for each signal unit found in error and which measures the rate of occurrence of errors according to a prescribed rule.

error ratio

Rec. G.701

The ratio of the number of digital errors received in a specified period to the total number of digits received in the same period.

Note 1 – Numerical values of error ratio should be expressed in the form

$$n \cdot 10^{-p}$$

where p is a positive integer.

Note 2 – Error ratio may be qualified, for example by the term "bit" or "block".

error spread

Rec. G.701

The number of consecutive digits of the output signal over which digital errors are distributed when a single digital error in the input signal causes error multiplication.

errored seconds

Rec. M.60

An errored second is a second with at least one anomaly or defect.

escape code

Recs. E.160, Q.10

An escape code is an indicator consisting of one or more digits which is defined in a given numbering plan and is used to indicate that the digits that follow are from a specific numbering plan which is different from the given numbering plan.

For example, escape codes are currently used within the X.121 numbering plan to interwork with E.164 (ISDN) and F.69 (Telex) numbering plans.

An escape code can be carried forward through the originating network and can be carried across internetwork and international boundaries. Therefore the digits used for escape codes should be standardized.

escape code

Suppl. No. 2 (II.4)

An indicator consisting of one or more digits. The indicator is defined in a given numbering plan and is used to indicate that the following digits are a number from a different numbering plan. Escape codes are currently used within Recommendation X.121 numbering plans.

Note – An escape code may be carried forward through the originating network and can be carried across inter-network and international boundaries. Therefore, the values of escape codes should be standardized.

escape code

Rec. X.121

In the context of the international numbering plan for public data networks, an indicator consisting of one digit which indicates that the following digits are a number from a different numbering plan.

Note – An escape code is part of the international X.121 format.

escape indication

Rec. Z.341

A mechanism to indicate that following character(s) are not to be interpreted according to the normal *syntax* rules.

escape sequence

Rec. T.51

A bit string that is used for control purposes in code extension procedures and that consists of two or more bit combinations. The first of these bit combinations represents the character ESCAPE (1/11).

escape sequence

Rec. T.61

A bit string that is used for control purposes in code extension procedures and that consists of two or more bit combinations. The first of these combinations corresponds to the character *escape.*

escapement point

Rec. T.411

A reference point associated with a character image that is used for positioning of the next character image.

essential information (of internal automatic observations)

Rec. E.425

The answer seizure ratio (ASR) (see its definition) or answer bid ratio (ABR) (see its definition), whichever is appropriate in terms of attempts, completed attempts and percentage completed.

establishment of communication

Rec. I.140

This attribute describes the mode of establishment associated to the telecommunication service used to establish and release a given communication.

establishment of connection

Rec. I.140

This attribute describes the mode of establishment used to establish and release a given connection in an ISDN.

establishment of connection

Rec. I.140

This attribute describes the mode of establishment used to establish and release a given connection element in an ISDN.

estimate

Suppl. No. 6 (II.3)

The result of an *estimation.*

Note – This result may be expressed either as a single numerical value (point estimation) or as a *confidence interval.*

estimated ...

Suppl. No. 6 (II.3)

The value obtained as the result of an *estimation.*

Note – The result may be expressed either as a single numerical value, a point estimate, or as a *confidence interval.*

estimation

Suppl. No. 6 (II.3)

The operation made for the purpose of assigning, from the observed values in a sample, numerical values to the parameters of the distribution chosen as the statistical model of the population from which this sample is taken.

estimator

Suppl. No. 6 (II.3)

A *statistic* intended to estimate a population parameter.

even indicator

See:
Odd/even indicator.

event indicator

Rec. Q.762

Information sent in the backward direction indicating the type of event which caused a call progress message to be sent to the originating local exchange.

event presentation restricted indicator

Rec. Q.762

Information sent in the backward direction indicating that the event should not be presented to the calling party.

exchange

Recs. I.112, M.60

An aggregate of traffic carrying devices, switching stages, controlling and signalling means, and other functional units at a network node that enables subscriber lines, telecommunication circuits and/or other functional units to be interconnected as required by individual users.

exchange; switching exchange; switching centre

Rec. Q.9

An aggregate of traffic carrying devices, switching stages, controlling and signalling means at a network node that enables subscriber lines and/or other telecommunication circuits to be interconnected as required by individual users. (See Figure 1/Q.9.)

exchange

Rec. Z.341

SPC switching *system.*

exchange cable

Recs. G.960, I.430

A cable forming part of the local line distribution network, used in the local exchange between the line termination and main distribution frame.

exchange call release delay

Rec. Q.543

Exchange call release delay is the interval from the instant at which the last information required for releasing a connection is available for processing in the exchange to the instant that the switching network through-connection in the exchange is no longer available for carrying traffic and the disconnection signal is sent to the subsequent exchange, if applicable. This interval does not include the time taken to detect the release signal, which might become significant during certain failure conditions, e.g., transmission system failures.

exchange call-release delay

Rec. Q.9

Exchange call release delay is the interval from the instant at which the last information required for releasing a call in an exchange is available for processing in the exchange to the instant that the switching network through-connection is no longer available between the incoming and outgoing 64-kbit/s circuits and the disconnection signal is sent to the subsequent exchange. This interval does not include the time taken to detect the release signal, which might become significant during certain failure conditions, e.g. transmission system failures.

exchange call set-up delay

Recs. E.543, E.600

The interval from the instant when the address information required for setting up a call is received at the incoming side of the exchange to the instant when the seizing signal or the corresponding address information is sent to the subsequent exchange.

exchange call set-up delay

Rec. Q.9

The interval from the instant when the digits required for setting up a call are available in the exchange or the address information is received at the incoming signalling data transmission control of the exchange to the instant when the seizing signal is sent to the subsequent exchange or the corresponding address information is sent from the outgoing signalling data transmission control.

exchange call set-up delay (transit and originating outgoing traffic connections)

Rec. Q.543

Exchange call set-up delay is defined as the interval from the instant that the information is required for outgoing circuit selection is available for processing in the exchange, or the signalling information required for call set-up is received from the signalling system, until the instant when the seizing signal has been sent to the subsequent exchange or the corresponding signalling information is passed to the signalling system.

For transit traffic connections between circuits that use CCITT Signalling System No. 7 signalling exclusively, the requirements of the appropriate signalling system Recommendation should apply, e.g. Recommendations Q.725 and Q.766 for T_{cu} value (case of a processing intensive message).

For outgoing traffic connections originating from DIGITAL SUBSCRIBER LINES using overlap sending, the time interval starts when the INFORMATION message received contains a "sending complete indication" or when the address information necessary for call set-up is complete.

For outgoing traffic connections originating from DIGITAL SUBSCRIBER LINES using en-bloc sending, the time interval starts when the SETUP message has been received from the digital subscriber signalling system.

exchange concentrator

Rec. Q.9

A switching stage wherein a number of subscriber lines or inter-exchange circuits carrying relatively low traffic volumes can be through-connected to a few number of circuits carrying higher traffic volumes. (See Figure 1/Q.9.)

exchange connection

Recs. I.112, Q.9

A connection that is established through an exchange, between the terminations on that exchange, of two or more channels or circuits.

exchange control system

Rec. Q.9

The central control *system* of a stored program controlled switching *system.* It may consist of one or more *processors.*

exchange function

Rec. Q.9

A process which performs a specific action in support of a telecommunications service or network operation in exchanges or at other network-associated locations such as STPs or a data base.

exchange function set

Rec. Q.9

An organized assembly of exchange functions in a given location. Usually an exchange function set is associated to one or more phase(s) in call handling or other network operations.

exchange group

Recs. Z.337, Z.341

A set of exchanges which handles traffic forwarded to or coming from a specific geographical area (e.g. area code, switching centre, etc.).

exchange input and output

Rec. Q.551

The exchange input and output for a connection through a digital exchange are located at the interfaces identified in § 1.1 and shown in Figures 1/Q.551 and 2/Q.551.

The exact position of each of these points depends on national practice, and it is not necessary for the CCITT to define it.

However, the applicability of recommended values to points arbitrarily located is subject to certain restrictions:

- for analogue interfaces, as referred to in Recommendation Q551, § 2 (maximum length of exchange cabling between exchange equipment ports and the interface);
- for digital interfaces, as also mentioned in Recommendation Q.551, § 2 (maximum loss between exchange interfaces and connected equipment, e.g., digital line or higher order multiplex equipment).

exchange input and output ports

Rec. Q.45 bis

An exchange input and output port has to be defined for unidirectional measuring access. For the GO direction of transmission indicated by a heavy line in Figure 1/Q.45 *bis*, the boundary at the point A constitutes the input port and the boundary at the point D constitutes the output port respectively. For the RETURN direction of transmission the constitution is approached vice versa.

The exact location of each of the points A and D, and hence of input and output ports depends on national practice and therefore it is unnecessary for the CCITT to define it. Only the national authority responsible for each international transit exchange can fix the location of these points and thus define the boundaries of the exchange concerned.

exchange output

See:
exchange input and output.

exchange signalling transfer delay (other than answer signal)

Rec. Q.543

Exchange signalling transfer delay is the time taken by the exchange to transfer a signal, no other exchange action being required. It is defined as the interval from the instant that the incoming signal is recognizable, or the signalling information is received from the signalling system, until the instant when the corresponding outgoing signal has been transmitted, or the appropriate signalling information is passed to the signalling system.

For transit traffic connections between circuits that use CCITT Signalling System No. 7 signalling exclusively, the requirements of the appropriate signalling system Recommendations should apply, e.g., Recommendations Q.725 and Q.726 for T_{cu} value (case of a simple message).

Exchange signalling transfer delay for originating, terminating and internal traffic involving a mix of ANALOGUE and DIGITAL SUBSCRIBER LINES is left for further study. Exchange signal transfer delay between DIGITAL SUBSCRIBER signalling systems or between DIGITAL SUBSCRIBER LINE signalling systems and CCITT Signalling System No. 7 is covered in Recommendation Q.543, § 2.4.2.

exchange termination (ET)

Recs. G.960, I.430

The functional group containing at least the layer 2 and layer 3 network side functions of the I.420 interface at the T reference point.

Note 1 – This may not be true if concentrators or other intelligent equipment are located in the local line distribution network.

Note 2 – The ET is not the switching function. The extent to which the ET supports call control processing and management is not defined.

exchange termination (ET)

Rec. Q.9

The unit or function on the exchange side of the switching/transmission interface. See Figure 2/Q.9.

exchange test points

Rec. Q.551

The exchange test points shown in Figure 1/Q.551 are defined for specification purposes. They may not physically exist in an exchange but may be accessed via the digital switching network. In this case, some or all of the switching network will be included in the path from the exchange interface to the access points.

executable test case

Rec. X.290

A realization of an abstract test case.

Note – In general the use of the word "test" will imply its normal English meaning. Sometimes it may be used as an abbreviation for abstract test case or executable test case. The context should make the meaning clear.

executable test suite

Rec. X.290

A test suite composed of executable test cases.

EXECUTE

Rec. Z.333

Perform a predefined procedure.

execution character

Rec. Z.341

A character which requests that the *command* be executed.

execution error; generated error

Suppl. No. 6 (II.3)

Error produced during the operation of a *faulty item.*

executive program; supervisory program; supervisor

Rec. Q.9

A program, usually part of an operating system, that controls the execution of other programs and regulates the flow of work in a data processing system.

exercise

Rec. M.30

Sequential operations which test the overall functioning of an NE or sub-system.

existing-quality television

Rec. I.113

Television as defined in conventional 625-line and 525-line television standards, such as NTSC, PAL and SECAM.

expanded session reference

Rec. T.62

The expanded session reference is used to identify a session uniquely. It consists of the mandatory basic session reference plus an optional additional session reference number.

expansion (in a switching stage)

Rec. Q.9

A configuration wherein the number of inlets into the switching stage is smaller than the number of outlets.

expectation (of a random variable); mean (of a random variable)

Suppl. No. 6 (II.3)

a) For a discrete *random variable X* taking the values x_i with the *probabilites* p_i,

$$E(X) = \Sigma\, p_i x_i$$

the sum being extended over all the values x_i which can be taken by X.

b) For a continuous *random variable X* having the probability density function $f(x)$,

$$E(X) = \int x f(x)\, dx$$

the integral being extended over all values of the interval of variation of X.

Note 1 – No distinction is made between the *expectation* of a *random variable* and that of a *probability* distribution.

Note 2 – The term *mean* is also used with other meanings, for example as the normalized integral over a *time interval.*

expedited data

Glos. (VI.7, VI.8, VI.9)

Data transferred with priority which bypasses the normal data flow control.

expedited data (ED)

Rec. Q.712

An *expedited data* message functions as a *data form 2* message but includes the ability to bypass the flow control mechanism which has been selected for the data transfer phase. It may be sent by either end of the signalling connection.

It is used during the data transfer phase in protocol class 3 only.

expedited data acknowledgement (EA)

Rec. Q.712

An *expedited data acknowledgement* message is used to acknowledge an *expedited data* message. Every ED message has to be acknowledged by an EA message before another ED message may be sent.

It is used during the data transfer phase in protocol class 3 only.

expedited (N)-service-data-unit; (N)-expedited-data-unit

Rec. X.200

A small (N)-service-data-unit whose transfer is expedited. The (N)-layer ensures that an expedited-data-unit will not be delivered after any subsequent service-data-unit or expedited unit sent on that connection.

explicit congestion message

Rec. I.122

Explicit congestion message is a message generated by the network and sent to a user terminal to indicate a congestion condition.

explicit conversion

Recs. F.400, X.400, X.402

In the context of message handling, a conversion in which the originator selects both the initial and final encoded information types.

export

See:

export operation; export.

export operation; export

Rec. Z.100

An *export operation* is the operation by which the *exporter* discloses the *value* of a *variable.* See the definition of the term *import operation.*

exported variable

Rec. Z.100

An *exported variable* is a *variable* which can be used in an *export operation.*

exporter

Rec. Z.100

An *exporter* of a *variable* in the *process instance* which owns the *variable* and *exports* its *values.*

expression

Rec. Z.100

An *expression* is either a *literal,* an *operator* application, a *synonym,* a *variable access,* a *conditional expression,* or an *imperartive operator* applied to one or more *expressions.* When an *expression* is interpreted a *value* is obtained (or the *system* is in *error*).

extension indicator

Rec. Q.762

Information indicating whether or not the associated octet has been extended.

extension of physical delivery address components

Recs. F.400, X.400

Standard attribute of a postal O/R address as a means to give further information about the point of physical delivery in a postal address, e.g., the name of a hamlet, or room and floor numbers in a large building.

extension of postal O/R address components

Recs. F.400, X.400

Standard attribute of a postal O/R address as a means to give further information to specify the addressee in a postal address, e.g. by organizational unit.

external blocking

Rec. E.600

The probability that a connection cannot be made between a given point in a network and any suitable resource in an external pool of resources owing to call congestion within the pool of resources.

external disabled state

Suppl. No. 6 (II.3)

That subset of the *disabled state* when the *item* is in an *up state*, but lacks required external resources.

external disabled time; external loss time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in an *external disabled state*. See Figure 3, Suppl. No. 6 (II.3)

external document class

Rec. T.411

A document class referred to by the document profile of an interchanged document containing no generic structure.

external loss time

See:
external disabled time; external loss time.

external routing

Rec. X.402

A routing preparatory to an external transfer (i.e., a transfer between MDs).

external synonym

Rec. Z.100

An *external synonym* of a predefined *sort* whose *value* is not specified in the *system specification.*

external test methods

Rec. X.290

Abstract test methods in which the lower tester is separate from the SUT and communicates with it via an appropriate lower layer service-provider.

Note – The service-provider is immediately beneath the (lowest layer) protocol which is the focus of the testing, and may involve multiple OSI layers.

external transfer

Rec. X.402

A transfer involving MTAs in different MDs.

external type

Rec. X.208

A type whose distinguished values cannot be deduced from their characterisation as external, but which can be deduced from the encoding of such a value; the value may, but need not, be describable using ASN.1, and thus their encoding may, but need not, conform to ASN.1 encoding rules.

external videotex application provider

Rec. F.300

An application provider whose applications and/or whose facilities are provided by means of host computers not provided by the service provider.

external videotex host computer

Suppl. No. 1 (II.4)

An external videotex host computer is a host computer not operated by the Videotex service provider.

external videotex host computer

Rec. F.300

A host computer not operated by the service provider.

extract!

Rec. Z.100

Extract! is an *operator* which is implied in an *expression* when a *variable* is immediately followed by bracketed *expression(s).*

extrapolated ...

Suppl. No. 6 (II.3)

The *predicted* value based on *estimated* values for one or a set of conditions, intended to apply to other conditions such as time, *maintenance* and environmental conditions.

F

F interface

Rec. M.30

The F interface is applied at f reference points.

f reference points

Rec. M.30

The f reference points connect function blocks OSF, MF, NEF, DCF to the WSF.

facility accepted message (FAA)

Rec. Q.762

A message sent in response to a facility request message indicating that the requested facility has been invoked.

facility indicator

Rec. Q.762

Information sent in facility related messages identifying the facility or facilities with which the message is concerned.

facility reject message (FRJ)

Rec. Q.762

A message sent in response to a facility request message to indicate that the facility request has been rejected.

facility request message (FAR)

Rec. Q.762

A message sent from an exchange to another exchange to request activation of a facility.

facsimile

Rec. F.160

Reproduction of all forms of graphical, handwritten or printed material, at a distant location of the original material, within the limits and characteristics specified by the relevant CCITT Recommendations.

facsimile

Rec. F.710

Reproduction of all forms of graphics, handwritten or printed material, in the sense of a distant reproduction of the original within the limits and characteristics specified by the relevant Recommendation.

facsimile

Rec. T.0

The process of scanning a document (page), converting the image scanned into electrical signals for transmission to a remote receiver and the conversion of the received signals to produce a copy of the image originally scanned.

facsimile machine

See:
facsimile terminal; facsimile machine.

facsimile on private networks

Rec. F.160

With regard to facsimile communications on private networks, circuits leased must be used in accordance with the provisions of Recommendation T.10 and the Series D Recommendations.

facsimile service

Rec. F.160

Telecommunication service offered for the purpose of transmitting documents between facsimile machines.

facsimile telephone number

Rec. F.500

An attribute type which specifies a telephone number for a facsimile terminal (and optionally its parameters) associated with an object.

facsimile terminal; facsimile machine

Rec. F.160

Machine used for the transmission and/or receipt of documents in facsimile services.

factor of cooperation

Rec. T.0

The product of the total scanning line length and the scanning density.

factor set

Rec. T.411

One or more object class descriptions which are used to factorise the attributes of object descriptions representing a specific structure.

fail safe

Suppl. No. 6 (II.3)

A designed property of an *item* which prevents its *failures* from resulting in *critical faults.*

"fail" verdict

Rec. X.290

A verdict given when the observed outcome is syntactically invalid or inopportune with respect to the relevant Recommendation(s)* or the PICS.

failure

Rec. M.60, Suppl. No. 6 (II.3)

The termination of the ability of an item to perform a required function.

Note – After failure the item has a fault.

failure cause

Suppl. No. 6 (II.3)

The circumstances during design, manufacture or use which have led to a *failure.*

failure intensity

See:
instantaneous failure intensity z(t)

failure intensity acceleration factor

Suppl. No. 6 (II.3)

In a *time interval* of given *duration,* whose beginning is specified by a fixed age of a *repaired item,* the ratio of the number of *failures* obtained under two different sets of stress conditions.

failure mechanism

Suppl. No. 6 (II.3)

The physical, chemical or other process which has led to a *failure.*

failure mode (deprecated)

See:
fault mode.

failure rate (λ)

Rec. X.137

The average number of transitions from the available state to the unavailable state per unit available time.

failure rate

See:
instantaneous failure rate λ(t)

failure rate acceleration factor

Suppl. No. 6 (II.3)

The ratio of the accelerated testing *failure rate* to the *failure rate* under stated reference test conditions.

Note – Both *failure rates* refer to the same time period in the life of the tested *items.*

failure response time

Glos. (VI.7, VI.8, VI.9)

The elapsed time from the instant a signalling point recognises that a signalling link is unavailable, until the instant when the signalling point completes sending a changeover (or emergency changeover) order to the remote signalling point.

false

Rec. X.208

The other distinguished value of the Boolean type.

far-end crosstalk (FEXT)

Recs. G.960, I.430

Crosstalk where the coupling is occurring at or near to the end of the line furthest from the transmitter.

fault

Rec. M.60, Suppl. No. 6 (II.3)

The inability of an item to perform a required function, excluding that inability due to preventive maintenance, lack of external resources or planned actions.

Note – A fault is often the result of a failure of the item itself, but may exist without prior failure.

fault analysis

Suppl. No. 6 (II.3)

The logical, systematic examination of an *item* or its diagram(s) to identify and analyse the *probability,* causes and consequences of potential and real *faults.*

fault correction

Rec. M.60, Suppl. No. 6 (II.3)

Actions taken after a fault localization intended to restore the ability of the faulty item to perform a required function.

fault correction time

Suppl. No. 6 (II.3)

That part of *active repair time* during which *fault correction* is performed. See Figure 3, Suppl. No. 6 (II.3)

fault coverage

Suppl. No. 6 (II.3)

The proportion of *faults* of an *item* that can be recognized under given conditions.

fault definition program

Rec. M.495

Program which collects fault information and defines faulty transmission links.

fault diagnosis

Suppl. No. 6 (II.3)

Actions taken for *fault recognition, fault localization* and cause identification.

fault localization; fault location (deprecated in this sense)

Suppl. No. 6 (II.3)

Actions taken to identify the *faulty* sub-item or sub-items at the appropriate *indenture level.*

fault localization; localization of faults

Rec. M.60

The broad localization of fault consists in finding the general part of the equipment in which it exists. Fault finding consists of determining the faulty item of the equipment.

fault localization time; fault location time (deprecated)

Suppl. No. 6 (II.3)

That part of *active repair time* during which *fault localization* is performed. See Figure 3, Suppl. No. 6 (II.3)

fault location

See:
fault localization; fault location (deprecated in this sense).

fault location time (deprecated)

See:
fault localization time; fault location time.

fault masking

Suppl. No. 6 (II.3)

The condition in which a *fault* exists in a sub-item of an *item* but cannot be recognized because of a feature of the *item* or because of another *fault* of the sub-item or of another sub-item.

fault mode

Suppl. No. 6 (II.3)

One of the possible states of a *faulty item,* for a given *required function.*

fault modes and effects analysis (FMEA)

Suppl. No. 6 (II.3)

A qualitative method of *reliability* analysis which involves the study of the *fault modes* which can exist in every sub-item of the *item* and the determination of the effects of each *fault mode* on other sub-items of the *item* and on the *required functions* of the *item.*

fault modes, effects and criticality analysis (FMECA)

Suppl. No. 6 (II.3)

Fault modes and effect analysis together with a consideration of the *probability* of occurrence and a ranking of the seriousness of the *fault.*

fault recognition

Suppl. No. 6 (II.3)

The event when a *fault* is recognized.

fault report point (circuit)

Recs. M.60, M.715

The fault report point (circuit) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre or common for more than one international centre.

The fault report point (circuit) is equipped with all the necessary facilities and arranged in such a way that it may receive fault reports relating to one or more specifically identified circuits from different sources or make such fault reports to other points and initiate the fault localization and clearing operations.

The fault report point (circuit) will undertake its given responsibilities and functions for circuits provided by wholly analogue transmission and switching systems, and those provided by a mixture of analogue and digital systems.

fault report point (network)

Recs. M.60, M.716

The fault report point (network) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre or for more than one international centre. If more than one international centre is associated with a given relation, it is desirable to designate one fault report point (network) as the principle one for that relation. If such is not practical, one of the fault report points (network) or a central organization may be nominated to coordinate the activities of the various fault report points (network) that are involved.

Such arrangements provide the maintenance organization of other Administrations with a single point of contact for directing fault reports and service problems which involve more than one international centre.

While the fault report point (network) is essentially a maintenance element, it will in fact receive reports of network difficulties which may result in network management actions. In other cases, network fault reports may be explained by information already available to the network management (implementation and control point) and collected as a result of its network surveillance responsibility. Therefore, to avoid duplication of report points, considerable benefit is derived from close liaison between the fault report point (network) and the network management (implementation and control point). (See Recommendation E.413.)

The fault report point (network) is equipped with all the necessary facilities and arranged in such a way as to enable it:

a) to receive from different sources, fault reports of difficulties on the international telephone network or of problems with the international telephone service that, at the time of reporting, cannot be related to specific circuits or, in some cases, even to a specific international centre; and

b) to make such fault reports to other points and initiate the fault location and clearing operations.

fault reporting centre (FRC)

Rec. N.51

A centre at a receiving country dealing with enquiries and fault reports concerning transmission to TVROs not related to an ITC. (See Figure 6/N.51.)

fault tolerance

Suppl. No. 6 (II.3)

The attribute of an *item* that makes it able to perform a *required function* in the presence of certain given sub-item *faults.*

fault tree

Suppl. No. 6 (II.3)

A logic diagram showing which *fault modes* of sub-items or external events, or combinations thereof, result in a given *fault mode* of the *item.*

fault tree analysis (FTA)

Suppl. No. 6 (II.3)

An analysis to determine which *fault modes* of the sub-items or external events, or combinations thereof, may result in a stated *fault mode* of the *item*, resulting in a *fault tree.*

faulty

Suppl. No. 6 (II.3)

Property of having a *fault.*

faulty link information

Gloss. (VI.3)

Information sent on a signalling link to indicate a failure of that link. The information consists of alternate blocks of changeover signals and of synchronization signal unit.

FAX 4

Suppl. No. 1 (II.4)

International facsimile service between subscribers with Group 4 terminals.

fetch abstract-operation

Rec. X.413

An abstract-operation which allows one entry to be fetched from the stored-messages information-base.

fetch-restrictions

Rec. X.413

Restrictions, imposed by the UA, on what kind of messages it is prepared to receive as a result of fetch. The possible restrictions are on message-length, content-types and EITs.

field

Gloss. (VI.3)

A subdivision of a signal unit, which carries a certain type or classification of information – e.g. label field, signal information field, etc.

field

Rec. Q.9

In a record, a specified area used for a particular category of data.

field

Rec. T.62

Either a group of one or more bits within a single octet or a group of one or more octets, used to represent a particular set of information.

field

Rec. Z.341

A part of a *window* area (sometimes the entire *window* area), which is used either for entering or displaying information.

field data

Suppl. No. 6 (II.3)

Observed data obtained during field operation.

field maintenance

See:
on-site maintenance; in situ maintenance; field maintenance.

field test

Suppl. No. 6 (II.3)

A *compliance test* or *determination test* made in the field where operating, environmental, maintenance and measurement conditions are recorded.

fifteen (15) kHz audio

Rec. I.140

Digital representation of audio information with a bandwidth of 15 kHz, the encoding rule being specified.

fifteen (15) supergroup assembly

Rec. M.300

A 15 supergroup assembly consists of a 15 supergroup assembly link terminated at each end by terminal equipments. These terminal equipments provide for the setting-up of 15 supergroup links or sections separated by free spaces of 8 kHz and occupying a band whose total width is 3716 kHz. The basic 15 supergroup assembly is made up of supergroups 2 to 16 occupying the frequency band 312-4028 kHz.

See Figures 2/M.300 to 4/M.300.

fifteen (15) -supergroup assembly link

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (3716 kHz) connecting two terminal equipments (supergroup modems permitting the setting-up of a 15-supergroup assembly). The ends of the link are the points on 15-supergroup assembly distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more 15-supergroup assembly sections.

See Figure 3/G.211

Note – The notion of 15-supergroup assembly link relates to translating procedure 2 mentioned in Recommendation G.211, § 1 above. It is the equivalent of the "supermastergroup link" concept of the translating procedure 1 (900 telephone channels).

fifteen (15) supergroup assembly link

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (3716 kHz) connecting two 15 supergroup assembly distribution frames (or equivalent points). It can be made up of a number of 15 supergroup assembly sections. When terminal equipments are connected to both ends, it becomes a constituent part of a 15 supergroup assembly for carrying telephony or telegraphy channels or data or facsimile, etc.

See Figures 2/M.300 to 4/M.300.

fifteen (15) -supergroup assembly section

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (3716 kHz) connecting two consecutive 15-supergroup assembly distribution frames (or equivalent points) via at least one line link.

See Figure 3/G.211

Note 1 – The notion of 15-supergroup assembly link relates to translating procedure 2 mentioned in Recommendation G.211, § 1. It is the equivalent of the "supermastergroup link" concept of the translating procedure 1 (900 telephone channels).

Note 2 – In a country which uses procedure 1, a 15-supergroup assembly can be through-connected without difficulty at the supermastergroup distribution frame. In this case, the 15-supergroup assembly is through-connected to position *3* (8620-12 336 kHz) instead of position *1* (312-4028 kHz) as required by the definition of the through-connection point of such an assembly (see Recommendation G.242, § 6). This through-connection point does not therefore correspond to this definition and is not at the end of a 15-supergroup assembly section.

fifteen (15) supergroup assembly section

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (3716 kHz) connecting two consecutive 15 supergroup assembly distribution frames (or equivalent points) and connected, at least at one end, to through-15 supergroup assembly connection equipment. It always forms part of a 15 supergroup assembly link.

See Figures 1/M.300 to 4/M.300.

figure-shift signal

Rec. S.140

The signal which conditions a telegraph receiver to translate all signals received as secondary *characters* or functions of *figures case.*

figures case

Rec. S.140

One of the cases into which the *characters*, predominantly numerals and signs, and functions of a *telegraph code* with *case shift* are grouped.

figures shift

Rec. S.140

A *case shift* resulting in the *translation* of signals as secondary *characters*, predominantly figure characters, or functions of *figures case.*

file

Rec. Q.9

A set of related records treated as a unit.

filing

Rec. T.411

The storage of a document according to some defined method in order to facilitate retrieval of the document.

fill-in signal unit (FISU)

Glos. (VI.7, VI.8, VI.9)

A signal unit containing only error control and delimitation information, which is transmitted when there are no message signal units or link status signal units to be transmitted.

fill order

Rec. T.412

This attribute specifies how the block(s) containing content associated with this logical object are to be laid out within their immediately superior layout object, relative to the direction of layout path of that superior object.

filling bit

Rec. R.140

Bit with no specific meaning used to fill a time of communication during which there are no significant bits to be transmitted.

filter

Rec. F.500

A filter parameter applies a test to a particular entry and either is satisfied or not by the entry. The filter is expressed in terms of assertions about the presence or value of certain attributes of the entry, and is satisfied if and only if it evaluates to TRUE.

filter

Rec. X.413

A parameter, used in abstract-operations, to test a particular entry in an information-base and is either satisfied or not by that entry.

FILTER

Rec. Z.333

Form a subset of a data set consisting of all data items in the set meeting specified criteria. The original data set is unaffected by this action.

filter

Rec. Z.341

An *action* to form a subset of a *data set* consisting of all data items in the *data set* meeting specified criteria; the original *data set* is unaffected by this *action.*

filter-item

Rec. X.413

An assertion about the presence or value(s) of an attribute of a particular type in an entry under test. Each such assertion is either true or false.

final character

Rec. T.51

The character the bit combination of which terminates an escape sequence.

final circuit group

Rec. E.600

With respect to a particular traffic relation, a circuit group from which there is no possibility of overflow to another circuit group within the routing scheme currently in effect.

first call attempt

Rec. E.600

The first attempt of a call demand that reaches a given point of the network.

first choice circuit group

Rec. E.600

With respect to a particular traffic relation, the circuit group to which this traffic is first offered.

first choice set of circuits

U.140

A set of circuits to be used on a first priority basis if a free circuit from this set is available.

first line offset

Rec. T.416

This attribute specifies an offset along the character path from the line home position, measured in SMUs (see Rec. T.416, § 5.2.8). The offset shall be positive (in the direction of the character path), negative (in the direction opposite to the character path) or zero.

The position identified by application of this offset to the line home position is used instead of the line home position for the purposes of formatting and imaging the first line of the basic layout object in which the content of the basic logical component is laid out.

first-order digital transmission hierarchy

Rec. Q.9

Digital signals multiplexed to the 1544 or 2048 kbit/s level (Primary level) for digital transmission.

first-order multiplexed signals

See:
first-order multiplexes; first-order multiplexed signals.

first-order multiplexes; first-order multiplexed signals

Rec. Q.9

Digital signals that have been multiplexed into 1544 or 2048 kbit/s bit streams.

fixed destination call services

Suppl. No. 1 (II.2)

The possibility for a subscriber to set up a call to a predetermined telephone number by lifting the handset only.

fixed multiplex (deprecated)

See:
static multiplex.

fixed overhead

Rec. Q.9

Capacity used for performing functions other than, and in addition to, traffic handling that are always required.

flag (F)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The unique pattern on the signalling data link used to delimit a signal unit.

flat-bed transmitter

Rec. T.0

Apparatus in which the original document is placed flat and scanned line by line.

flat-rate price per circuit procedure

Rec. D.000

The procedure which consists of remunerating an Administration on the basis of a flat-rate price per circuit.

flow control

Glos. (VI.7, VI.8, VI.9)

A function in a protocol used to control the flow of signalling messages between adjacent layers of a protocol, and/or between peer entities. The function permits, for example, a receiving entity to control signalling message flow from the sending entity.

flow control

Rec. Q.9

A function in a protocol used to control the flow of signalling messages between adjacent layers of a protocol, or between peer entities. The function permits, for example, a receiving entity to control signalling message flow from a sending entity (or between or within different users, and the MTP).

flow control

Rec. X.200

A function which controls the flow of data within a layer or between adjacent layers.

flow control

*Series X**

In data communication, control of the data transfer rate.

flow control parameter selection/negotiation and indication for virtual call service

*Series X**

A user facility for the virtual call service which provides for the packet mode DTE in classes of service 8-11 to select and negotiate the packet and window size and the significance of the *receive packet sequence number* [P(R)] and permits the DCE to indicate the appropriate value of each parameter at the end of the call establishment phase.

flow line

Rec. Z.100

A *flow line* is a *symbol* used to connect *areas* in a *control flow diagram.*

flow line (in MML)

Rec. Q.9

A line representing a connection path between *symbols* in a *syntax diagram.*

flow line (in SDL)

Rec. Q.9

A flow line (——— or ———→) connects every *symbol* to the symbol(s) it follows. (See Recommendation Z.100, § 2.2.4.)

flowline

Rec. Z.341

A line representing a connection between *symbols* in:

i) a *syntax diagram*;

ii) an *information structure diagram.*

follow current

Rec. K.12

The current from the connected power source that passes through a gas discharge tube during and following the passage of discharge current.

font

Rec. T.411

A set of character images normally with a common design and size.

font size

Rec. T.411

The height of the character images in a font.

forced rerouting

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure of transferring signalling traffic from one signalling route to another, when the signalling route in use fails or is required to be cleared of traffic.

forced retransmission (procedure)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

An error correction procedure used to complement the preventive cyclic retransmission procedure.

foreseen outcome

Rec. X.290

An outcome identified or categorized in the abstract test case specification.

form

Rec. Z.341

A list of *parameters*, including empty positions for insertion of *parameter values* by the *user.*

form filling

Rec. Z.341

The activity of inserting *parameter values* into a *form*, and submitting the completed *form* to the *system* under *user* control.

form identity

Rec. Z.341

An identity unique to a *form* so that it can be distinguished from other *forms.*

form output

Rec. Z.341

An *output* of a *form* belonging to a *command*, used in certain *information entry* procedures.

formal description technique (FDT)

Rec. Z.110

A specification method based on a description language using rigorous and unambiguous rules both with respect to developing expressions in the language (formal syntax) and interpreting the meaning of these expressions (formal semantics). FDTs are intended to be used in the development, specification, implementation and verification of Recommendations (or parts thereof).

formal parameter

Rec. Z.100

A *formal parameter* is a *variable name* to which *actual values* are assigned or which are replaced by *actual variables.*

formal parameter list

Rec. Z.100

A *formal parameter list* is list of a *formal parameters.*

format

Rec. Q.9

The arrangement or layout of data on a data medium.

format effector

Rec. S.140

A *function control* used to insure a final lay-out of *characters* for printing or display.

format effector

Rec. Z.341

Any character(s) used to control the position of printed, displayed or recorded data.

format effectors

Rec. T.61

Control functions that influence the positioning of text, within the text area, on a presentation device.

formatted form

Rec. T.411

A form of representation of a document that allows the presentation of the document as intended by the originator and that does not support editing and (re)formatting.

formatted postal O/R address

Recs. F.400, X.400

O/R address based on a postal address with formatted attributes.

formatted processable form

Rec. T.411

A form of representation of the document that allows presentation of the document as intended by the originator and also supports editing and (re)formatting.

formatting

Rec. T.411

The carrying out of operations to determine the layout of a document.

formatting indicator

Rec. T.416

This attribute specifies whether the content of a basic component has been formatted by a content layout process or not.

fortuitous distortion

Rec. R.140

The telegraph distortion resulting from random events affecting the channel or equipments and such that the degree of individual distortion of any significant instant is unpredictable.

forward echo

Rec. G.601

An *echo* arriving at a defined point and having the same direction of transmission as that of the direct signal.

forward indicator bit (FIB)

Glos. (VI.7, VI.8, VI.9)

A bit in a signal unit which indicates the start of a retransmission cycle.

forward sequence number (FSN)

Glos. (VI.7, VI.8, VI.9)

A signal unit used to identify the transmitted message signal units.

forward signal

Recs. G.960, I.430

The signal transmitted beyond the loopback point.

Note – The forward signal may be a defined signal or unspecified.

forward signal

Rec. Q.9

A signal, used for the establishment, release or other control of a connection sent in the same direction as call set-up.

forward switching signal

U.140

A switching signal transmitted in the direction from the caller to the called party.

forward transfer message (FOT)

Rec. Q.762

A message sent in the forward direction on semi-automatic calls when the outgoing international exchange operator wants the help of an operator at the incoming international exchange. The message will normally serve to bring an assistance operator (see Recommendation Q.101) into the circuit if the call is automatically set up at the exchange. When the call is completed via an operator (incoming or delay operator) at the incoming international exchange, the message should preferably cause this operator to be recalled.

forward-transfer signal

Rec. Q.254

A signal sent in the forward direction on semi-automatic calls when the outgoing international exchange operator wants the help of an operator at the incoming international exchange. The signal will normally serve to bring an assistance operator (see Recommendation Q.101) into the circuit if the call is automatically set up at that exchange. When a call is completed via an operator (incoming or delay operator) at the incoming international exchange, the signal should preferably cause this operator to be recalled.

forward-transfer signal (sent the forward direction)

Recs. Q.120, Q.140

This signal is sent to the incoming international exchange when the outgoing international exchange operator wants the help of an operator at the incoming international exchange.

The signal will normally serve to bring an assistance operator into the circuit if the call is automatically set up at that exchange. When a call is completed via an operator (incoming or delay operator) at the incoming international exchange, the signal should preferably cause this operator to be recalled.

Note – See the definition of *assistance operator.*

forward-transfer signal (sent in the forward direction)

Rec. Q.400

A signal sent on semi-automatic calls when the outgoing international exchange operator wants the help of an operator at the incoming international exchange. The signal will usually bring an assistance operator (see Recommendation Q.101) into the circuit. If the call is completed via an incoming or delay operator at the incoming international exchange, the signal indicates that recall of this operator is wanted. *Note* – This signal is not provided in either the analogue or digital version of signalling System R2 line signalling. Information about possible arrangements for such a signal and signalling procedures involved are contained in Annex A to the present Specifications of Signalling System R2, Part III, Fascicle VI.4.

forward-transfer signal

See:

ring-forward signal; forward-transfert signal (sent in the forward direction.

forwarding-request

Rec. X.413

This is a parameter that may be present in a message-submission abstract-operation, invoked by the UA, to request that a message is forwarded from the MS.

four concentric circles near field template

Rec. G.651

A template comprising four concentric circles applied to a near field radiation pattern from a fibre.

Note – The template is normally used as a global check of the acceptability of the various geometrical parameters of the fibre in one simple process.

four concentric circles refractive index template

Rec. G.651

A template comprising four concentric circles applied to a complete refractive index profile of the fibre.

Note – The template is normally used as a global check of the acceptability of the various geometrical parameters of the fibre in one simple process.

four condition

See:
two condition; three condition; four condition.

four-wire chain (4-wire chain)

Recs. G.101, Q.40

The abbreviation 4-wire chain (see Figure 3/G.101 or 3/Q.40) signifies the chain composed of the international chain and the national extension circuits connected to it, either by 4-wire switching or by some equivalent procedure.

four-wire switching

Rec. Q.9

Switching using a separate path, frequency band or time interval for each direction of transmission.

frame

Rec. G.701

A cyclic set of consecutive time slots in which the relative position of each time slot can be identified.

frame

Rec. I.113

A block of variable length identified by a label at layer 2 of the OSI reference model, e.g. an HDLC block.

frame

Rec. Q.9

A set of consecutive digit time slots in which the position of each digit time slot can be identified by reference to a frame alignment signal.

The frame alignment signal does not necessarily occur, in whole or in part, in each frame.

frame

Rec. R.140

A repetitive set of consecutive timeslots constituting a complete cycle of a signal in which the relative position of each timeslot in the cycle can be identified.

Example: In a time division multiplex system with a binary aggregate signal a frame is the smallest periodically repeated bit group containing bits from all individual channels together with bits carrying auxiliary information.

frame

Rec. T.411

A type of composite layout component that corresponds to a rectangular area within a page or another frame.

frame alignment

Rec. G.701

The state in which the frame of the receiving equipment is synchronized with that of the received signal.

frame alignment

Rec. Q.9

The state in which the frame of the receiving equipment is correctly phased with respect to that of the received signal.

frame alignment

Rec. R.140

The state in which the frame generated by the receiving equipment has a desired constant phase relationship with the frame of the received signal, so that the individual timeslots in each frame can be uniquely identified.

frame alignment recovery time

Recs. G.701, Q.9

The time that elapses between a valid frame alignment signal being available at the receive terminal equipment and frame alignment being established.

Note – The frame alignment recovery time includes the time required for replicated verification of the validity of the frame alignment signal.

frame alignment signal

Rec. G.701

The distinctive signal inserted in every frame or once in every n frames, always occupying the same relative position within the frame, and used to establish and maintain frame alignment.

frame alignment signal

Rec. Q.9

The distinctive signal used to secure frame alignment; this signal does not necessarily occur, in whole or in part, in each frame.

frame alignment time-slot

Rec. G.701

A time slot occupying the same relative position in every frame and used to transmit the frame alignment signal.

frame alignment time slot

Rec. Q.9

A time slot starting at a particular phase in each frame and allocated to the transmission of a frame alignment signal.

frame resynchronization

Rec. R.140

The act of re-establishing lost frame alignment.

frame slot

Rec. R.140

An elementary time interval generally allocated to tributary channel.

frame structure

Rec. R.140

General rule of the establishment of a frame with allocation of each bit to a determined channel.

framed interface

Rec. I.113

An interface whose serial bit stream is segmented into periodic physical frames. Each frame is divided by a fixed partition into an overhead and an information payload portion.

free circuit condition

U.140

The characteristic state of a circuit available for the setting up of a call.

free state

See:
idle state; free state.

free time

See:
idle time; free time.

freephone service

Suppl. No. 1 (II.2)

A subscriber can be allocated a special (freephone) number and the charge for all calls to this number are paid by him instead of by the callers.

freeze-out

Rec. G.763

The condition when a trunk channel becomes active and cannot immediately be assigned to a bearer channel, due to lack of available transmission capacity.

freezeout

Rec. P.84

The condition when an input circuit becomes active with speech and cannot be immediately assigned to a bearer channel, due to lack of availability of such channels.

freezeout fraction

Rec. P.84

The percentage of speech lost, obtained by averaging over all input circuits for a given time interval, e.g. one minute.

freeze-out fraction (FOF)

Rec. G.763

The ratio of the total time that the individual channels experience the freeze-out condition to the total time of the active intervals and their corresponding hangover times and front-end delays, for all trunks over a fixed interval of time, e.g. one minute.

frequency departure

Rec. G.810

An underlying offset in the long term frequency of a timing signal from its ideal frequency.

frequency division

Rec. Q.9

The separation in the frequency domain of a plurality of transmission channels between two points.

frequency division multiplexing (FDM)

Rec. R.140

Multiplexing in which a separate frequency band is allocated to each tributary channel in common channel.

frequency division switching

Rec. Q.9

The switching of inlets to outlets using frequency division (multiplexing) techniques.

frequency-exchange modulation; two tone modulation

Rec. R.140

A frequency modulation method in which the change from one frequency to another is not necessarily phase continuous.

frequency modulation

Rec. R.140

In telegraphy, modulation in which the significant conditions are represented by alternating currents of different frequency.

Note – The representative function of the modulation signal may be continuous or discontinuous at the significant instants.

frequency shift keying (FSK); frequency shift modulation

Rec. R.140

Phase continuous frequency modulation in which the frequency of a periodic sinusoidal oscillation is varied between a set of discrete values, each value representing a significant condition of a modulating telegraph signal.

frequency shift modulation

See:

frequency shift keying (FSK); frequency shift modulation.

frozen reference

Rec. X.224

A reference which is not available for assignment to a connection because of the requirements of Recommendation X.224, § 6.18.

full break-in

Rec. G.164

A stable condition of break-in which follows the partial break-in condition once it has been determined, with high probability, that the signal causing break-in is speech. This state is characterized by the insertion of receive loss and longer break-in hangover times.

full break-in operate time

Rec. G.164

The time interval between the instant when defined test signals, applied to the send- and/or receive-in ports, are altered in a defined manner such as to remove suppression and extend the hangover time and the instant when the extended hangover time is applied. Removal of suppression occurs at the same time as for partial break-in. Insertion of loss in the receive path may occur at the same time or slightly after removal of suppression.

full character rate

Rec. R.140

In synchronous telegraphy, the maximum number of character signals per unit time achievable in a given synchronous channel.

full duplex (deprecated)

See:

duplex.

full echo suppressor

Rec. G.164

An echo suppressor in which the speech signals on either path control the suppression loss in the other path.

full refund

Rec. D.000

Reimbursement to the customer of the total charges paid to the Administration for the service/facility in question.

fully automatic operation

Rec. F.200

Operation such that teletex equipment is able to send documents (prepared in local mode, e.g., by an operator) into receiving storage without the intervention of an operator beyond the initial command and similarly are capable of receiving messages while they are unattended. Operator selection and operator assisted printing are not excluded.

Note – Examples are the intercommunication between the Teletex service and the telex service, the intercommunication between service and the IPM service.

fully automatic reperforator transmitter distributor (FXRD)

See:

coupled reperforator and tape reader; fully automatic reperforator transmitter distributor.

fully compelled signalling

See:

compelled signalling; fully compelled signalling; continuous compelled signalling.

fully dissociated mode of operation

Rec. Q.253

The fully dissociated mode of operation is the extreme case of the non-associated mode. It is assumed that there is an established network of common signalling links and signal transfer points which may have its own routing principles.

In the fully dissociated mode of operation, the signals are transferred between the two exchanges via any available path in the signalling network according to the rules of that network.

fully dissociated signalling

Gloss. (VI.3)

A form of non-associated signalling in which the path that signals may take through the network is only restricted by the rules and configuration of the signalling network.

fully provided circuit group

Rec. E.600

With respect to a particular traffic relation, a circuit group which is the first choice circuit group for this traffic and which is traffic engineered as a final circuit group.

fully routed call attempt

See:
successful call attempt; fully routed call attempt.

function

Rec. I.112

A set of processes defined for the purpose of achieving a specified objective.

Note – Functions may be ordered in a logical hierarchy.

function

Glos. (VI.7, VI.8, VI.9)

A logical object which accepts one or more inputs (arguments) and produces a single output (value) uniquely determined by the combination of the input and the formal specification of the function.

function

Rec. Z.341

A *system* activity necessary to the performance of a duty for which the *system* was designed (see also *class A, B, and C functions*).

function (in MML)

Rec. Q.9

A function is an action which various groups of staff wish to carry out, e.g., add subscriber's line, initiate a testing routine, read a subscriber's class of service. To carry out one function, one or more *commands* may be necessary. The function is characterized by the *command code(s).*

function-affecting maintenance

Suppl. No. 6 (II.3)

A *maintenance action* that affects one or more of the *required functions* of a maintained *item.*

Note – Function-affecting maintenance is divided into *function-preventing maintenance* and *function-degrading maintenance.*

function check-out

Suppl. No. 6 (II.3)

Actions taken after *fault correction* to verify that the *item* has recovered its ability to perform the *required function.*

function code

Rec. E.131

A code indicating the type or types of process to be applied to the service.

function control

Rec. S.140

Control of an elementary operation to be performed by a device other than recording or printing a letter, figure, punctuation mark or graphic symbol contained in a *message* or in *data.*

function-degrading maintenance

Suppl. No. 6 (II.3)

A *maintenance action* that affects one or more of the *required functions* of a maintained *item,* but not to such extent as to cause complete loss of all the functions.

function element (FE)

Recs. G.960, I.430

A signal representing a functional exchange of layer 1 information at the V_1 interface.

function identification

Rec. E.131

Information indicating the type or types of process to be applied to the service.

function key

Rec. Z.341

A key which when pressed causes a modification in the *man-machine terminal* or causes the *system* to perform a specific *function.*

function model

Rec. Z.341

A formal or informal representation of one or more aspects of those parts of telecommunication systems which should be controlled by means of MML.

function-permitting maintenance

Suppl. No. 6 (II.3)

A *maintenance action* that does not affect any of the *required functions* of a maintained *item.*

function preventing fault

See:
complete fault; function preventing fault.

function-preventing maintenance

Suppl. No. 6 (II.3)

A *maintenance action* that prevents a maintained *item* from performing a *required function* by causing complete loss of all the functions.

function signal

Rec. S.140

A set of *signal elements* used to transmit a *function control.*

functional area (or sub-area)

Rec. Z.341

A set of related operation, maintenance, installation or acceptance testing *functions* to be controlled by means of *MML* (*class B functions*).

functional behaviour

See:

behaviour; functional behaviour.

functional block (in SDL)

Rec. Q.9

A functional block is an object of manageable size and relevant internal relationship, containing one or more *processes.*

functional description (FD) (in SDL)

Rec. Q.9

The functional description (FD) of a system describes the actual behaviour of the implementation of the functional requirements of the system in terms of the internal structure and logic processes within the system.

functional entity

Rec. Q.9

An entity that comprises a specific set of functions at a given location.

functional entity

Rec. Q.9

A grouping of service-providing functions in a single location and subset of the total set of functions required to provide the service.

functional group

Rec. G.960

A set of functions that may be performed by a single equipment.

Note 1 – The transmission medium is not part of any functional group.

Note 2 – Regenerators, multiplexers and concentrators are functional groups which are outside the scope of Recommendation I.411.

functional group

Rec. I.112

A set of functions that may be performed by a single equipment.

functional group

Rec. I.430

A set of functions that may be performed by a single equipment.

Note 1 – The transmission medium is not part of any functional group.

Note 2 – Regenerators, multiplexers and concentrators are functional groups which are outside the scope of Recommendation I.411.

functional grouping (deprecated)

See:

functional group.

functional groupings

Rec. I.324

Sets of functions which may be needed in ISDN arrangements.

functional groups

Rec. I.411

Sets of functions which may be needed in ISDN user access arrangements. In a particular access arrangement, specific functions in a functional group may or may not be present. Note that specific functions in a functional group may be performed in one or more pieces of equipment.

functional groups

Rec Q.1062

Functional groups are sets of functions which may be needed in PLMN access arrangements. In a particular access arrangement, a specific function in a functional group may or may not be present. Note that a specific function in a functional group may be performed in one or more pieces of equipment.

functional mode

Suppl. No. 6 (II.3)

A subset of the whole set of possible functions of an *item.*

functional specification (FS) (in SDL)

Rec. Q.9

The functional specification (FS) of a system is a specification of the total functional requirements of that system from all significant points of view.

functional test

See:
test; functional test.

functional unit

Rec. Q.9

An entity of hardware or software, or both, capable of accomplishing a special purpose.

functional unit

Rec. X.216

A logical grouping of services defined by this Recommendation for the purpose of

- negotiation during the presentation-connection establishment, for use on the presentation-connection;
- referencing by other standards.

G

G interface

Rec. M.30

The G interface is applied at the g reference point.

g reference points

Rec. M.30

The g reference points are points between the WSF and the user.

gas discharge tube

Rec. K.12

A gap, or several gaps, in an enclosed discharge medium, other than air at atmospheric pressure, designed to protect apparatus or personnel, or both, from high transient voltages. Also referred to as "gas tube surge arrester".

gas tube surge arrester

See:

gas discharge tube.

gated RQ

Rec. R.140

A procedure in which a check is made for the presence of a signal repetition during the non-print cycle.

Note – See CCIR Recommendation 342-2.

gateway mobile service switching centre (MSC)

Rec. Q.9

The MSC which receives a call from a fixed subscriber, via a public switched network, for extension to a mobile station. The gateway MSC may vary for interconnection with different public networks.

The gateway MSC could be the home MSC or the visited MSC or any other.

gateway MSC

Rec. Q.1001

The MSC which receives a call from a fixed subscriber, via a public switched network, for extension to a mobile station. The gateway MSC may vary for interconnection with different public networks.

The gateway MSC may be any MSC of the PLMN, including the HMSC or VMSC if the home and visited location registers are implemented in the MSC.

gateway PLMN

Rec. Q.1001

The PLMN which receives a call from a fixed subscriber, via a public switched network, for extension to a mobile station. The gateway PLMN may vary for interconnection with different public networks.

The gateway PLMN could be the home PLMN or the visited PLMN or any other.

general-attribute

Rec. X.413

A set of MS attributes which are valid for all types of messages and reports, independent of content-type. Only these MS attributes are explicitly defined in Recommendation X.413.

general-auto-action

Rec. X.413

Auto-actions which are valid for all types of messages and reports, independent of content-type. Only these auto-actions are explicitly defined in Recommendation X.413.

general information window area

Rec. Z.341

This *window area* can contain system identification and/or application identification, date, time, and other relevant information.

general negative recorded announcement

Rec. E.182

A recorded announcement given to the user of a supplementary service to advise that the request cannot be executed or that the call cannot be completed.

Examples

"Your order cannot be executed."
"Your call cannot be completed at this time."
"Please try again."

general option

Rec. Z.341

A *symbol* of the *decomposition meta-language* which indicates either that an *information entity* exists in the *system* in a predetermined manner or that it is not needed.

general option area

Rec. Z.100

The *general option area* is the *SDL/GR* representation of an *option.* [4.3.3]

general parameters

Recs. Q.9, Z.100

The *general parameters* in both a *specification* and a *description* of a *system* relate to such matters as temperature limits, construction, exchange capacity, grade of service, etc., and are not defined in *SDL.*

general positive recorded announcement

Rec. E.182

A recorded announcement given to the user of a supplementary service to advise that the request has been accepted.

Example

"Your order has been executed."

general recorded announcement

Rec. E.182

A recorded announcement giving general information about a call attempt or control order.

general telecommunications information service

Suppl. No. 1 (II.2)

A service given by an operator or a machine using the most common languages explaining the telecommunciations services and facilities in a country.

generated error

See:
execution error; generated error.

generator

Rec. Z.100

A *generator* is an incomplete *newtype* description. Before it assumes the status of a *newtype*, a *generator* must be instantiated by providing the missing information.

generator for subordinates

Rec. T.412

This attribute specifies which objects, and which combinations of objects, may be immediately subordinate to an object of the class. In addition, this attribute specifies an ordering among these immediately subordinate objects.

generic address

Rec. X.213

An address which identifies a set of NSAPs rather than a single specific NSAP.

generic content portion

Rec. T.411

A content portion associated with an object class.

generic content portion description

Rec. T.411

A content portion description associated with an object class description.

generic-document

Rec. T.411

A structured amount of information intended for the interchange of generic structures, and optionally associated styles and content portions, for use in the processing of interchanged documents.

generic layout structure

Rec. T.411

A set of layout object classes and associated generic content portions.

generic logical structure

Rec. T.411

A set of logical object classes and associated generic content portions.

generic test case

Rec. X.290

A specification of the actions required to achieve a specific test purpose, defined by a test body together with a description of the initial state in which the test body is to start.

generic test suite

Rec. X.290

A test suite composed of generic test cases, with the same coverage as the complete set of test purposes for the particular protocol, this being the set or a superset of the test purposes of any particular abstract test suite for the same protocol.

Gentex network

U.140

Switched telegraph network used between Administrations or recognized private operating agencies to provide an international public telegram service.

geographically dispersed exchange (deprecated)

See:

geographically distributed exchange.

geographically distributed exchange

Rec. Q.9

An exchange where not all sub-systems such as switching stages and control means are at the same location. (See Figure 1/Q.9.)

geometric graphic element

Rec. T.411

A graphic element used to describe an image by geometric graphical means.

Note – Geometric graphic elements include those describing primitive geometric shapes such as points, arcs, lines.

global network addressing domain

Rec. X.213

An addressing domain consisting of all of the Network service access point addresses in the OSI environment.

global-title

Rec. X.200

A title which is unique within the OSI environment and comprises two parts, a title-domain-name and a local-title.

global title (GT)

Glos. (VI.7, VI.8, VI.9)

An address used by the SCCP, such as customer dialled digits which does not explicitly contain information that would allow routing in the signalling network, i.e., the SCCP translation function is required.

glow current

Rec. K.12

The current which flows after spark-over when circuit impedance limits the discharge current to a value less than the glow-to-arc transition current.

glow-to-arc transition current

Rec. K.12

The current required for the gas discharge tube to pass from the glow mode into the arc mode.

glow voltage

Rec. K.12

The voltage drop across the terminals of the gas discharge tube during the passage of glow current.

Government telex calls

Rec. F.60

Those telex calls originating with one of the authorities which enjoy the advantages of Government telegrams and telephone calls, in accordance with the *International Telecommunication Convention.*

grade

Rec. X.402

There are four types of grades:

a) mandatory (M): a mandatory component shall be present in every instance of the class.

b) optional (O): an optional component shall be present in an instance of the class at the discretion of the object (e.g., user) supplying that instance. There is no default value.

c) defaultable (D): a defaultable component shall be present in an instance of the class at the discretion of the object (e.g., user) supplying that instance. In its absence a default value, specified by this Recommendation, applies.

d) conditional (C): a conditional component shall be present in an instance of the class as dictated by Recommendation X.402.

grade of service (GOS)

Rec. E.600

A number of traffic engineering variables used to provide a measure of adequacy of a group of resources under specified conditions; these grade of service variables may be probability of loss, dial tone delay, etc.

Note 1 – The parameter values assigned as objectives for grade of service variables are called grade of service standards.

Note 2 – The values of grade of service parameters achieved under actual conditions are called grade of service results.

gradual failure; degradation failure; drift failure

Suppl. No. 6 (II.3)

A *failure* due to a gradual change in time of given characteristics of an *item* and that could be anticipated by prior examination or monitoring.

Note – A *gradual failure* can sometimes be avoided by *preventive maintenance.*

graph

Rec. Z.100

A *graph* in the *abstract syntax* is a part of an *SDL specification* such as *procedure graph* or a *process graph.*

graphic character

Recs. T.50, T.51

A character, other than a control function, that has a visual representation normally handwritten, printed or displayed.

graphic character

Rec. T.61

A character, other than a control function, that has a visual representation normally hand-written, printed or displayed. The term *graphic character* is used with a dual meaning:

a) Graphic characters that are elements of a set that can be designated. These are called *elementary graphic characters* in order to distinguish them from the *composite graphic characters.* Some of the elementary graphic characters are used in combinations to represent composite graphic characters.

b) Graphic characters that are members of a repertoire. Some of these are *composite graphic characters* represented by combinations of *elementary graphic characters.*

graphic character

Rec. T.411

A member of a set of graphic symbols used for the representation of information.

Note – Graphic characters include simple alphanumeric characters (for example, accented letters) and pictorial characters (for example, mosaics).

graphic character sets

Rec. T.416

This attribute specifies the graphic character set(s) designated and/or invoked at the beginning of the basic component.

graphic character subrepertoire

Rec. T.416

This attribute identifies the subrepertoire of the graphic character repertoire of ISO 6937 used at the beginning of the basic component.

graphic characters

Recs. Q.9, Z.341

A collection of characters within the *character set* used to improve readability of *output.*

graphic code extension

Rec. T.61

The method of encoding graphic characters in excess of those that may be represented by the 8-bit code combinations of the basic code table. Alternative sets of 94 graphic characters may be *designated* by means of escape sequences and *invoked* by means of shift functions. Depending on the designating escape sequence, the alternative sets of characters are represented by bit combinations of the left-hand half (positions 2/1 to 7/14 inclusive) or the right-hand half (positions 10/1 to 15/14 inclusive) of the 8-bit code table.

graphic element

Rec. T.411

A content element that is capable of having a visual representation.

Note – Three types of graphic elements are distinguished in the T.410 series of Recommendations: graphic characters, geometric graphics elements and raster graphics elements.

graphic rendition

Rec. T.416

This attribute specifies the rendition parameters for font, underlining, etc., which apply at the beginning of the basic component (see Rec. T.416, § 6.1).

graphic terminals

Rec. Z.341

Terminals which provide graphic capability (line drawing, circles, etc.) using other than alphanumeric means.

ground expression

Rec. Z.100

A *ground expression* is an *expression* containing only *operators, synonyms* and *literals.*

group 2

Suppl. No. 1 (II.4)

Facsimile terminals which ensure the transmission of an A4 document in 3 minutes over the public telephone network and which conform to Recommendation T.3.

group 3

Suppl. No. 1 (II.4)

Facsimile terminals which ensure the transmission of an A4 document in about 1 minute over the public telephone network and which conform to Recommendation T.4.

group 4

Suppl. No. 1 (II.4)

Facsimile terminals mainly intended for operation on public data networks but also usable on the public telephone network and conforming to Recommendation T.5.

group

Rec. M.300

A group consists of a group link connected at each end to terminal equipments. These terminal equipments provide for the setting-up of a number of telephony channels (generally 12), one or more data transmission or facsimile channels, etc.

See Figures 1/M.300 to 4/M.300.

It occupies a 48 kHz frequency band. Figures 1/M.320, 2/M.320 and 3/M.320 show various possible arrangements of telephony channels in a basic group B (60 to 108 kHz).

group (of facsimile terminals)

Suppl. No. 1 (II.4)

Set of compatible facsimile terminals which conform to certain CCITT Recommendations.

group-audio terminals

Rec. P.10

A hands free set primarily designed for use by several users.

group delay

Rec. Q.9

The time of propagation between two points of a certain point (for example the crest) of the envalope of a wave.

For a given frequency it is equal to the first derivative of the phase shift measured in radians, between these points, with reference to the angular frequency measured in radians per second.

group-delay distortion

Rec. G.100

The difference between group delay at a given frequency and minimum group delay, in the frequency band of interest.

group 4 facsimile apparatus

Rec. T.62

A device that is capable of transmitting and receiving facsimile documents in accordance with the basic requirements of Recommendation T.5.

group 4 facsimile apparatus

Rec. T.62 bis

A device that is capable of transmitting and receiving facsimile documents in accordance with the basic requirements of Recommendation T.563.

group link

Recs. G.211, M.300

The whole of the means of transmission using a frequency band of specified width (48 kHz) connecting two terminal equipments, for example, channel translating equipments, wideband sending and receiving equipments (modems, etc.). The ends of the link are the points on group distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more group sections.

See Figures 1/M.300 to 4/M.300.

group of circuits

See:

set of circuits; group of circuits.

group section

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (48 kHz) connecting two consecutive group distribution frames (or equivalent points) via at least one line link. See Figure 3/G.211

group section

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (48 kHz) connecting two consecutive group distribution frames (or equivalent points).

See Figures 1/M.300 to 4/M.300.

guarantor Administration

Recs. D.98, F.41

The Administration responsible for the collection of TA charges and for the payment of such charges to the Administration of origin of TA traffic.

guarantor service

Rec. D.30

A service in which all variable charges for calls are charged to a guarantor residing in the country of origin and not the called subscribers in the destination country. The subscriber in the destination country indicates the network address to which the procedure is to be applied. Moreover, the customer names the guarantor in the country of origin. This guarantor settles accounts with the subscriber in the destination country on a private basis.

guard-ring

Rec. P.10

Annular ring fitted, during tests, onto the transmitter housing of a telephone handset, to localize the sound source in a prescribed position relative to the microphone.

guarding (in VF signalling)

Rec. Q.9

Rendering ineffective the signal imitation by recognizing the simultaneous presence of frequencies outside the signalling band.

guidance output

Rec. Z.341

Output providing assistance to the *user* in a *man-machine* communication.

guidelines

Rec. Z.341

i) Information that gives general direction in the implementation of *CCITT MML.*

ii) General directions by which the purpose of one or more phases of the *methodology* may be accomplished.

H

half character rate; quarter character rate

Rec. R.140

Character rate reduced to one half [one quarter] of the full characrer rate by using half [quarter] of the available time in the full rate channel.

half connection

Recs. Q.9, Q.551

A bi-directional path comprised of an input connection and an output connection, both having the same exchange interface.

Note 1 – These terms may be qualified by the words analogue or digital, the qualification signifying the property of the exchange interface.

Note 2 – An analogue input (output) (half) connection may be further qualified by the words 2-wire or 4-wire.

half duplex (deprecated)

See:

simplex.

half-duplex apparatus

Rec. S.140

Apparatus comprising a transmitter and receiving part, the arrangement of which allows for transmission in both directions but not simultaneously.

half duplex mode

See:

two-way alternate (TWA).

half-duplex operation

Rec. V.7

The exchange of data in either direction, one direction at a time.

half-echo suppressor

Rec. G.164

An echo suppressor in which the speech signals of one path control the suppression loss in the other path but in which this action is not reciprocal. See Figure 5/G.164.

handling time

See:

switching delay; processing time; handling time.

handover

Rec. Q.1001

Handover is the action of switching a call in progress from one cell to another (or between radio channels in the same cell). Handover is used to allow established calls to continue when mobile stations move from one cell to another (or as a method to minimize co-channel interference).

handover

Rec. Q.9

Handover is the action of switching a call in progress.

hands free (telephone) set

Rec. P.10

A *telephone set* using a loudspeaker associated with an amplifier as a telephone receiver and which may be used without a handset.

hang-up signal; clear-back signal (sent in the backward direction)

Rec. Q.310

This line signal is sent to the outgoing exchange to indicate that the called party has cleared. In the semi-automatic service it performs a supervisory function.

In automatic working, arrangements are made to clear the connection, stop the charging, and stop the measurement of call duration if within 10 to 120 seconds (in word numbering zone 1, 13 to 32 seconds is used) after recognition of the hang-up signal, the calling subscriber has not cleared. Clearing of the connection should preferably be controlled from the point where the charging is carried out.

hard line terminator

Rec. T.411

A line terminator that is intended not to be removed in a re-formatting process.

harmful out-of-band components

Rec. G.242

Transferred currents arising from speech, or pilots, or additional measuring frequencies, and of frequencies such that they will always lie outside the useful frequency band (corresponding to speech frequencies) of the carrier systems, but which may interfere with pilots or additional measuring frequencies.

harmless out-of-band components

Rec. G.242

Transferred currents arising from speech or pilots which, at all translation points, have frequencies outside the useful frequency band corresponding to audio frequencies or pilot frequencies.

The term "wanted component" is applied below in respect to speech band, to an 800-Hz signal with a power of 1 milliwatt sent to a zero relative level point, and in respect of pilots or additional measuring frequencies, to the signal of specified frequency and level at the point where it is normally injected.

hash function

Rec. X.509

A (mathematical) function which maps values from a large (possibly very large) domain into a smaller range. A "good" hash function is such that the results of applying the function to a (large) set of values in the domain will be evenly distributed (and apparently at random) over the range.

head and torso simulator (HATS)

Rec. P.10

Manikin extending downward from the top of the head to the waist, designed to simulate the acoustic diffraction produced by a median adult and to reproduce the acoustic field generated by the human mouth.

head-on collision

U.140

The condition which exists when, on a transmission path capable of being used to set up calls in both directions, the path is seized from both ends simultaneously or nearly so. The seizure of the path by the distant end is not apparent, due to propagation delays.

header

Suppl. No. 2 (II.4)

The initial part of a *message* or *packet* which contains the service information.

header

Recs. Q.9, Z.341

The header provides general information which could comprise identification information, date and time, etc.

header

Rec. U.82

The portion of the MXU which contains the information to service the control need of the calling telex SFU.

header

Rec. Z.317

The header (see Recommendation Z.316) is output by the system at the end of the procedure prologue.

header; block header

Rec. I.113

The bits within a block allocated for labelled multiplexing functions.

heading

Recs. F.400, X.400

Component of an IP-message. Other components are the envelope and the body.

help output

Rec. Z.341

The *output* resulting from a request for *user* assistance.

help request

Rec. Z.341

User input to ask for assistance.

heterochronous

Rec. G.701

The essential characteristic of time-scales or signals such that their corresponding significant instants occur at different nominal rates.

Note – Two signals having different nominal digit rates, and not stemming from the same clock or from homochronous clocks are usually heterochronous.

heterochronous (deprecated)

See:

non-synchronous.

heterogeneous multiplex

Rec. R.140

A multiplex in which all the individual channels are not for the same modulation rate or character rate, etc.

Note – For the signalling rate condition we can add additional conditions.

hexadecimal numeral

Recs. Q.9, Z.341

A *numeral* in the hexadecimal (base 16) *numbering system*, represented by the *characters* 0 (zero), 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, optionally preceded by H' (H apostrophe).

hierarchic mutually synchronized network

Rec. G.701

A mutually synchronized network in which each clock is assigned a particular status which determines the degree of control it exerts over other clocks; the network operating frequency being a weighted mean of the natural frequencies of all the clocks.

hierarchic (mutually synchronized) network

Rec. Q.9

A mutually synchronized system in which some *clocks* exert more control than others, the network operating frequency being a weighted mean of the natural frequencies of the population of *clocks*.

hierarchic network; hierarchic synchronized network

Rec. G.701

A synchronized network in which each clock is assigned a particular status which determines the degree of control it exerts over the other clocks.

hierarchic synchronized network

See:

hierarchic network; hierarchic synchronized network.

hierarchical structure

Rec. Z.100

A *hierarchical structure* is a structure of a *system specification* where *partitioning* and *refinement* allow different views of the *system* at different *levels of abstraction*. *Hierarchical structures* allow the management of complex *system specifications*. See the definition of the term *block tree diagram*.

hierarchical transmultiplexer

Rec. G.791

A transmultiplexer in which the digital interfaces satisfy the provisions of Recommendations G.703 and G.704 and the analogue interfaces those of Recommendation G.233.

high definition TV and existing quality TV distribution services

Rec. I.121

High definition TV (HDTV)/existing quality TV distribution services provide the capability of distributing TV programmes with the quality of HDTV/existing quality TV as appropriate.

high layer compatibility information

Rec. I.515

Information defining the higher layer characteristics of a terminal.

high level language (HLL)

Rec. Q.9

A programming language that does not reflect the structure of any given computer or any given class of computers.

high quality broadband videoconference services

Rec. I.121

High Quality Broadband Videoconference services provide person-to-person or group-to-group capability for the transfer of different high quality information types primarily including voice (sound), full motion video, moving pictures, and, optionally, video-scanned still images, documents and other video information, to support conferencing between two or more locations.

high quality broadband videotelephony services

Rec. I.121

High quality broadband videotelephony services are symmetrical real-time, bi-directional audio-visual services which provide person-to-person communication for the transfer of high quality voice (sound), moving pictures, and optionally video-scanned still images between two locations.

high usage circuit group

Rec. E.600

With respect to a particular traffic relation, a circuit group that is traffic engineered to overflow to one or more other circuit groups.

highlighting

Rec. Z.341

Techniques used to emphasize visually a portion of the *display area* to make it stand out from adjacent portions, i.e. to call the viewer's attention to it.

highway

Rec. G.701

A common path within an apparatus or station over which pass signals from a number of channels identified by time division.

(time division) highway (in switching); bus

Rec. Q.9

A common path within an apparatus or station over which signals from a plurality of channels pass, separated by time division.

hold

Rec. Q.9

The function of not releasing a resource or call but retaining it for possible reconnection.

hold provided indicator

Rec. Q.762

Information sent in either direction indicating that the connection will be held after the calling or called party has attempted to release.

holding indicator

Rec. Q.762

Information sent in either direction indicating that holding of the connection is requested.

holding time

Rec. E.411

The time interval between seizure and release of a circuit or switching equipment.

holding time

Rec. E.600

The time between the seizure of a resource and its release.

holding time of an international circuit

Rec. E.100

The time interval $t_6 - t_2$ during which the circuit is used is the holding time of the international circuit.

This interval includes in particular the call duration, the operating time and the time taken to exchange service information.

Note – The term "operating time" is meant to cover the time taken both by operators and switching equipment.

(For an explanation of the different time instants see *successive phases of a call.*)

holdover voltage

Rec. K.12

The maximum d.c. voltage across the terminals of a gas discharge tube under which it may be expected to clear and to return to the high impedance state after the passage of a surge, under specified circuit conditions.

hollowness

Rec. G.100

Distortion in telephony caused by double reflected signals and subjectively perceived as a "hollow sound", i.e. as if the talker would speak into some hollow vessel.

Note – Hollowness is to be distinguished from *listener echo.*

home location register

Recs. Q.1002, Q.1003

Register where the current location and all subscriber parameters of a mobile station are permanently stored.

home location register (HLR)

Rec. Q.1003

Contains all permanent subscriber data and all relevant temporary subscriber data for all MSs permanently registered in the HLR.

home location register (HLR)

Recs. Q.9, Q.1001

The location register to which a mobile station is assigned for record purposes such as subscriber information.

home mobile service switching centre (HMSC)

Rec. Q.9

May be used in cases where the home location register is implemented in an MSC.

home MSC

Rec. Q.1001

The term home MSC (HMSC) may be used in cases where the home location register is implemented in a MSC.

home PLMN

Rec. Q.1001

The PLMN in which a mobile station is permanently registered.

home position

Rec. T.61

The reference position on any line to which the active position moves after a terminal receives a *Carriage return.* The starting position for printing is then established from this reference position by the sending terminal, using *Space* or *Backspace* characters as required.

home public land mobile network (HPLMN)

Rec. Q.9

The PLMN in which a mobile station is permanently registered.

homochronous

Rec. G.701

The essential characteristic of time-scales or signals such that their corresponding significant instants have a constant, but uncontrolled, time relationship with each other.

homogeneous multiplex

Rec. R.140

A multiplex in which all the individual channels are for the same modulation rate.

Note – In addition to the modulation rate it is sometimes necessary to define conditions for all channels such as the character length.

homogeneous section

Rec. G.212

A section without diversion or modulation of any channel groups, supergroups, etc., established on the system which is being considered except for those modulations or demodulations defined at the ends of the section.

All the hypothetical reference circuits defined under *hypothetical reference circuit* and *hypothetical reference circuit for telephony* consist of homogeneous sections of equal length: 6,9 or 12 sections as the case may be. (The number is not specified for ... systems.) The number is not specified for the tropospheric-scatter radio-relay systems. as the case may be.

It is assumed that at the end of each homogeneous section, the channels, groups, supergroups, etc., are connected through at random.

homogeneous structure

Rec. R.140

Pertaining to a group of individual channels in a multiplex system all of which have the same properties, e.g. modulation rate, character format, inherent telegraph distortion.

horizontal direction (of a layout object)

Rec. T.411

The direction in a layout object relative to which content architectures may define attributes determined using the horizontal axis of the page.

horizontal plane

Rec. P.51

The plane containing the reference axis, perpendicular to the vertical plane. It shall be horizontally oriented in order to reproduce the acoustic field generated by a person in the upright position.

housekeeping digits (deprecated)

See:
service digits.

human-machine interface

Rec. Q.9

The interface between a person and a system (e.g., video display unit used for interacting with an operations system).

hybrid interface structure

Rec. I.113

An interface structure which has a mixture of labelled channels and positioned channels.

hybrid multiplex

Rec. R.140

A multiplex providing simultaneously transparent and non-transparent (code-and-speed independent and dependent) channels.

hypothetical reference circuit

Rec. G.212

This is a hypothetical circuit of defined length and with a specified number of terminal and intermediate equipments, this number being sufficient but not excessive. It forms a basis for the study of certain characteristics of long-distance circuits (noise, for example).

hypothetical reference circuit; nominal maximum circuit

Rec. Q.9

A hypothetical circuit having a defined length and a defined amount of terminal and intermediate equipment, these quantities being reasonably large but not extreme. Such a conception is of value in the study of certain characteristics (noise, for example) of long-distance circuits.

hypothetical reference circuit (deprecated)

See:

hypothetical reference connection (in telegraphy).

hypothetical reference circuit for telephony

Rec. G.212

This is a complete telephone circuit (between audio-frequency terminals) established on a hypothetical international telephone carrier system and having a specified length and a specified number of modulations and demodulations of channels, groups, supergroups, these numbers being reasonably great but not having their maximum possible values. The hypothetical reference circuit has to reflect what is generally expected to be the practical application of the system.

Various hypothetical reference circuits for telephony have been defined to allow the coordination of the different specifications concerning the constituent parts of the multichannel carrier telephone systems, so that the complete telephone circuits set up on these systems can meet CCITT standards.

In order to take account of the variety of operating conditions and in particular the differences there may be in the size of the countries to be served, the CCITT has defined two categories of hypothetical reference circuits for telephony:

- a set of hypothetical reference circuits with a length of 2500 km,
- a hypothetical reference circuit with a length of 5000 km (see Recommendation G.215).

The former includes the following hypothetical reference circuits for telephony:

- on open-wire lines (see Recommendation G.311),
- on symmetric pair cable (see Recommendation G.322),
- on coaxial pair cable (see Recommendations G.332 to G.346).

The 5000 km hypothetical reference circuit is used in various types of carrier systems on coaxial cable and on radio relay systems.

hypothetical reference connection (HRX)

Rec. G.100

A hypothetical connection of defined structure, length and performance in a telecommunication network for analogue or digital (or mixed) signal transmission, to be used as a model in which studies relating to overall performance may be made, thereby allowing comparisons with standards and objectives.

hypothetical reference connection (in telegraphy)

Rec. R.140

Hypothetical connection made up for two terminals in the world telex network, or other telegraph network, corresponding in principle to the most onerous case in order to study the transmission and switching characteristics necessary to ensure satisfactory operation.

hypothetical signalling reference connection (HSRC)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A hypothetical reference model of a connection in a signalling network.

I

ideal instant

Rec. R.140

The instant with which the significant instant (if existing) would coincide in certain conditions to be specified for each particular case.

Note – It will be necessary to indicate, in each particular case, how these ideal instants are determined.

a) Start-stop signal

The ideal instant associated with the start element is the instant at which this element begins. The ideal instant associated with each of the other elements is n times the theoretical unit interval later than the ideal instant of the start element of the same signal, n being the rank of this element in the signal.

The standardized unit interval should be taken as the theoretical unit interval. The interval corresponding to the real mean modulation rate can also be taken, provided that it is specified.

The instant corresponding to the beginning of the start element of a signal should be known as the reference ideal instant for this signal.

b) Isochronous signal

An ideal reference instant can be chosen arbitrarily. All the others are deduced from it by intervals equal to the corresponding theoretical significant intervals.

In the absence of any other deciding reason, the reference ideal instant shall be chosen so that the mean value of the deviations with respect to it is equal to zero.

identification invitation

Rec. Z.341

A prompt to request the *user* to identify himself by means of a *password* and/or an identity card.

identification procedure

Rec. Z.317

The identification procedure is used to identify the user to the system. The identification procedure may involve the use of identity cards which provide secure access to the system.

After a user has been identified to the system, different authorization levels may be applied that restrict access to groups of commands depending on security or functional classification.

The identification procedure (see Figure 3.2.2/Z.317) is flexible, with many options, but the following guidelines apply:

- if an identity card is used, it should always be preceded or followed by a password;
- for security reasons, it might be required to suppress all response from the system to the identification procedures;
- after a number of consecutive attempts some appropriate action is needed. For example: generate an alarm, or temporarily block access to the system from that terminal.

identification request

Rec. S.140

A *transmission control* used as a request for a response from a remote terminal; the response may include the terminal identification, or the state of the terminal.

identifier

Rec. Z.100

An *identifier* is the unique identification of an object, formed from a *qualifier part* and a *name.*

identifier (ID)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A character, or group of characters, used to identify or name an item of data and possibly to indicate certain properties of that data.

identifier (in MML)

Recs. Q.9, Z.341

An identifier is a representation of an entity, typically consisting of one or more *characters*. It is used to identify or name a unique item of data. In the *man-machine language*, the first character is a letter.

identifier octets

Rec. X.209

Part of a data value encoding which is used to identify the type of the value.

idle (state)

Rec. E.600

Condition of a resource that is free to be seized.

idle circuit condition

Rec. R.140

The characteristic state of the circuit in an established connection when it is transmitting neither character signals nor supervisory signals.

idle state; free state

Suppl. No. 6 (II.3)

A non-operating *up state* during *non-required time*. See Figure 2, Suppl. No. 6 (II.3)

idle time; free time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *free state*. See Figure 3, Suppl. No. 6 (II.3)

image area

Rec. T.150

Rectangular part of the display area, to be considered as the image of the coding rectangle.

image dimensions

Rec. T.417

This attribute specifies the intended dimensions of the basic layout object that is to contain the clipped pel array.

imaging order

Rec. T.411

The order of precedence of layout objects for imaging in the layout object to which they are immediately subordinate.

imaging order

Rec. T.412

This attribute specifies the precedence for imaging of the immediately subordinate layout objects.

imaging process

Rec. T.411

The process of producing a document on a presentation medium in human perceptible form, making use of the document profile, specific and generic layout structures, presentation styles and content portions.

immediate recipient

Recs. F.400, X.400

In the context of message handling, one of the potential recipients assigned to a particular instance of a message or probe (e.g., an instance created by splitting).

immediate superior (noun)

Rec. X.501

Relative to a particular entry or object (it must be clear from the context which is intended) the immediately superior entry or object.

immediately superior

Rec. X.501

Entry: relative to a particular entry – an entry which is at the initial vertex of an arc in the DIT whose final vertex is that of the particular entry.

Object: relative to a particular object - an object whose object entry is the immediate superior of any of the entries (object or alias) for the second object.

impedance

Rec. Q.45 bis

Measurements shall be made under nominally matched conditions, i.e. the exchange boundaries are terminated with their nominal exchange impedance.

imperative operator

Rec. Z.100

An *imperative operator* is a now *expression, view expression, timer active expression, import expression* or one of the *PId expressions: SELF, PARENT, OFFSPRING* or *SENDER.*

imperfection

See:
minor defect; imperfection.

implementation under test (IUT)

Rec. X.290

That part of a real open system which is to be studied by testing, which should be an implementation of one or more OSI* protocols in an adjacent user/provider relationship.

implicit congestion control

Rec. I.122

Implicit congestion control is a scheme under which user terminals first detct a possible congestion condition by means other than explicit congestion messages, and then take appropriate action to reduce their throughput.

implicit conversion

Recs. F.400, X.400

In the context of message handling, a conversion in which the MTA selects both the initial and final encoded information types.

implicit conversion

Rec. X.402

A conversion in which the MTA selects the final EITs based upon the initial EITs and the capabilities of the UA.

implicit transition

Rec. Z.100

An *implicit transition* is in the *concrete syntax* initiated by a *signal* in the *complete valid input signal set* and not specified in an *input* or *save* for the *state.* An *implicit transition* contains no *action* and leads directly back to the same *state*

import
See:
import operation; import.

import operation; import

Rec. Z.100

An *import operation* is the operation that yields *value* of an *exported variable.*

imported variable

Rec. Z.100

An *imported variable* is a *variable* used in an *import operation.*

importer

Rec. Z.100

An *importer* of an *imported variable* is the *process instance* which *imports* the *value.*

impulse spark-over voltage/time curve

Rec. K.12

The curve which relates the impulse spark-over voltage to the time to spark over.

impulse waveform

Rec. K.12

An impulse waveform designated as x/y has a rise time of x µs and a decay time to half value of y µs as standardized in IEC Publication 60.

in situ maintenance
See:
on-site maintenance; in situ maintenance; field maintenance.

IN variable

Rec. Z.100

An *IN variable* is a *formal parameter* attribute denoting the case when a *value* is passed to a *procedure* via an *actual parameter.*

inaccessible field

Rec. Z.341

A field for writing only by the *system.*

inactive character

*Series X**

A character that is sent in the data transfer phase as a filler which does not represent information.

inactivity test (IT)

Rec. Q.712

An *inactivity test* message may be sent periodically by either end of a signalling connection to check if this signalling connection is active at both ends, and to audit the consistency of connection data at both ends.

It is used in protocol classes 2 and 3.

inadequately handled call attempts

Rec. Q.543

Inadequately handled call attempts are attempts which are blocked (as defined in the E.600-series of Recommendations) or are excessively delayed within the exchange. "Excessive delays" are those that are greater than three times the "0.95 probability of not exceeding" values recommended in the tables in §§ 2.3 and 2.4 of Recommendation Q.543 (See Note.)

For originating and transit calls, this inadequately handled call attempt parameter applies only when there is at least one appropriate outlet available.

Note – Provisionally, call request delay is not included in this parameter. Further study is required.

in-band information indicator

Rec. Q.762

Information sent in the backward direction indicating that in-band information or an appropriate pattern is now available.

in-band parameter exchange

Rec. I.515

Information exchanged using the same information channel as that used for the user information transfer.

in-band signalling

Rec. Q.9

A signalling method in which signals are sent over the same transmission channel or circuit as the user's communication and in the same frequency band as that provided for the users.

inband signalling

Rec. V.7

The exchange of control signals between interconnected data circuit terminating equipments (DCEs) using the DCE line signal band with which data in the forward channel are transmitted. The transmission of DTE data, if any, is disrupted.

in-call rearrangement

Rec. Q.9

Reassignment of the switched path during the call.

incoming call barring service

Suppl. No. 1

The ability of the Administration or the subscriber to prevent all or certain incoming calls to a telephone line. No variants identified so far.

incoming call indication sending delay (for terminating and internal traffic connections)

Rec. Q.543

For calls terminating on ANALOGUE SUBSCRIBER LINES, the incoming call indication sending delay is defined as the interval from the instant when the last digit of the called number is available for processing in the exchange until the instant that ringing signal is applied by the exchange to the called subscriber line.

For calls terminating on DIGITAL SUBSCRIBER LINES, the incoming call indication sending delay is defined as the interval from the instant at which the necessary signalling information is received from the signalling system to the instant at which the SETUP message is passed to the signalling system of the called digital subscriber line.

incoming call indication sending delay (for terminating and internal traffic connections)

Rec. Q.543

The incoming call indication sending delay is defined as the interval from the instant at which the necessary signalling information is received from the signalling system to the instant at which the SETUP message is passed to the signalling system of the called subscriber line.

incoming only terminal

Suppl. No. 2 (II.4)

A *terminal* that can receive incoming calls from the network but which is prevented from making outgoing calls.

incoming response delay

Rec. E.543

The interval from the instant when an incoming seizure signal has arrived at the incoming side of the exchange to the instant when a proceed-to-send signal is returned to the preceding exchange by the receiving exchange.

The incoming response delay may affect the holding time of the preceding trunks and of the common control equipment in the preceding exchange(s). It may also be perceived by the subscriber as dial-tone delay, in case of special dial tone for international calls in outgoing international exchanges, or may contribute to the post-dialling delay experienced by the subscriber in all other cases. The contribution to post-dialling delay does not necessarily comprise the whole of the incoming response delay.

Note – The above definition of incoming response delay does not explicitly mention that it includes receiver attachment delay. However, for the purpose of Recommendation E.543, it is assumed that receiver attachment delay is a part of the incoming response delay.

incoming response delay

Rec. E.600

The interval from the instant when an incoming seizure is recognizable at the incoming side of the exchange to the instant when the proceed-to-send signal is sent to the preceding exchange by the receiving exchange.

Note – This definition is only applicable in the case of channel associated signalling.

incoming response delay

Rec. Q.9

A characteristic that is applicable where channel associated signalling is used. It is defined as the interval from the instant an incoming circuit seizure signal is recognizable until a proceed-to-send signal is sent backwards by the exchange.

incoming response delay (transit and terminating incoming traffic connections)

Rec. Q.543

Incoming response delay is a characteristic that is applicable where channel associated signalling is used. It is defined as the interval from the instant an incoming circuit seizure signal is recognizable until a proceed-to-send signal is sent backwards by the exchange.

incoming traffic

Rec. E.600

Traffic entering the network considered, from outside it, whatever its destination.

"inconclusive" verdict

Rec. X.290

A verdict given when the observed outcome is valid with respect to the relevant Recommendation(s)* but prevents the test purpose from being accomplished.

in-connector

Rec. Z.100

An *in-connector* is a *connector.*

incorrect access probability

Rec. X.140

Incorrect access probability is the ratio of total access attempts that result in incorrect access to total access attempts in a specified sample.

Note – This ratio is actually an *estimate* of the true probability value.

Incorrect access is essentially the case of a "wrong number". It occurs when the network establishes a physical or virtual circuit connection to a user other than the one intended by the call originator, and then does not correct the error before the start of user information transfer. Incorrect access can only occur in connection-oriented services, since the network does not establish a connection between users in connectionless services. Incorrect access is distinguished from successful access (in connection-oriented services) by the fact that the intended called user is not contacted and committed to the data communication session during the access attempt. Values for network-specific parameters corresponding to incorrect access probability are contained in network-specific Recommendations (e.g. X.136).

incorrect accounting probability

See:
incorrect charging or accounting probability.

incorrect charging or accounting probability

Rec. E.800

The *probability* of a *call attempt* receiving incorrect charging or accounting treatment.

incorrect signal

Rec. R.140

A telegraph signal in which the significant conditions of one or more elements differ from the kind prescribed by the code.

indentation

Rec. T.411

The result of a layout or imaging process that causes the sequence of character images for a line to begin at a distance from the line home position in the direction of the character path.

indentation

Rec. T.416

This attribute specifies the distance, in the direction of character path from the start edge of the positioning area, to the initial point of the basic layout object in which the content of the basic logical component is laid out (see Figure 10/T.416). The distance is specified in SMUs.

indenture level (for maintenance)

Suppl. No. 6 (II.3)

A level of subdivision of an *item* from the point of view of a *maintenance action.*

Note 1 – Examples of *indenture levels* could be a subsystem, a circuit board, a component.

Note 2 – The *indenture level* depends on the complexity of the item's construction, the accessibility to sub-items, skill level of maintenance personnel, test equipment facilities, safety considerations, etc.

indeterminate fault

Suppl. No. 6 (II.3)

For an *item,* which produces a response as a result of an action, a *fault* such that the *error* affecting the response depends on the action applied.

Note – An example would be a *data-sensitive fault.*

index number

Rec. Z.341

A character combination consisting of one or more *digits.* Used in compound *parameter names.*

index of cooperation

Rec. T.0

Quotient of the factor of cooperation divided by the quantity π. In the case of a drum apparatus, the index of cooperation is also equal to the product of the drum diameter and the scanning density.

index profile

See:
(refractive) index profile.

indication

Rec. V.25 bis

An instruction or response issued by the data circuit terminating equipment (DCE) to the data terminal equipment (DTE) as part of the automatic calling procedure.

indication (primitive)

Rec. X.210

A primitive issued by a service-provider either:

i) to invoke some procedure; or

ii) to indicate that a procedure has been invoked by the service-user at the peer service-access-point.

indication of charge

Suppl. No. 2 (II.4)

The indication by the network to the paying *terminal* of the charge of a call prior to the release of the paying terminal or by recall at a convenient time.

Note – This information may be provided automatically or on demand.

indication of duration

Rec. U.140, Suppl. No. 2 (II.4)

The indication by the network to the paying *terminal* of the chargeable time of a call prior to the release of the paying terminal or by recall at a convenient time.

Note – This information may be provided automatically or on demand.

indicator

Rec. Z.341

A *character input* by a *user* or *output* by a *system* to indicate a state or to request *user* or *system* action.

indirect address

Rec. Q.9

An address that designates the storage location of an item of data to be treated as the address of an operand but not necessarily as its direct address.

indirect manual demand operating

See:
demand operating.

indirect submission

Recs. F.400, X.400

In the context of message handling, a transmittal step in which an originator's UA conveys a message or probe to an MTA via an MS.

indirect submission

Rec. X.402

A transmittal step in which the originator's UA conveys a message or probe to its MS and in which the MS effects direct submission. Such a step follows origination.

This step may be taken only if the user is equipped with an MS.

indirect-submission port

Rec. X.413

The port offering the indirect-submission abstract-service within the MS abstract-service. The indirect-submission abstract-service offers the same services as the message-submission abtract-service (from the MTS abstract-service) with the added functionality of forwarding messages residing in the MS.

indirect user

Recs. F.400, X.400

In the context of message handling, a user that engages in message handling by indirect use of MHS, i.e. through another communication system (e.g., a physical delivery system or the telex network) to which MHS is linked.

Note – Indirect users communicate via access units with direct users of MHS.

indirect user

Rec. X.402

A user that engages in message handling by indirect use of the MHS, i.e., through another communication system (e.g., a postal system or the telex network) to which the MHS is linked.

indivisibility

Rec. T.412

This attribute specifies that the content associated with the logical object shall if possible be laid out within a single layout object which is of a specified object class or layout category or object type.

This attribute does not restrict the layout of other logical objects within the same layout object.

infix operator

Rec. Z.100

An *infix operator* is one of the predefined dyadic *operators* of *SDL* (=>, OR, XOR, AND, IN, /=, =, >, <, <=, >=, +, −, //, *, /, MOD, REM) which are placed between its two arguments.

INFO

Recs. G.960, I.430

A defined layer 1 signal with specified meaning and coding at a basic access user-network interface.

informal text

Rec. Z.100

Informal text is text included in an *SDL specification* for which *semantics* are not defined by *SDL*, but through some other model. *Informal text* is enclosed in apostrophes.

information access protocol layer 1-3

See:
signalling access protocol layer 1-3, information access protocol layer 1-3.

information-base

Rec. X.413

Objects within the MS which store information relevant to the MS abstract-service, e.g. the stored-messages information-base, which stores the messages and reports that have been delivered into the MS.

information-base-type

Rec. X.413

The type of information-base, e.g. the stored-messages.

information element

Glossary

The basic unit of a TCAP message.

information entity

Rec. Z.341

An information element associated with an *MML function* and usually represented in an *information structure diagram.*

information entry

Rec. Z.341

General term for each of the three *dialogue elements.*

information entry through form filling

Rec. Z.341

A *dialogue element* whereby the *input* of *parameter values* is done by means of *form filling.*

information entry through menu-item selection

Rec. Z.341

A *dialogue element* whereby the *input* of a *command* or *destination identifier* is done by means of *menu-item selection.*

information flow

Rec. Q.9

An interaction between a communicating pair of functional entities. The relationship between any pair of functional entities is the complete set of information flows between them.

information integrity

Rec. I.122

Information integrity is a network providing frame-relaying bearer service defines that all frames carried by the network shall satisfy the FCS check.

information message (INF)

Rec. Q.762

A message sent to convey information in association with a call, which may have been requested in an information request message.

information object

Rec. X.208

A well-defined piece of information, definition, or specification which requires a name in order to identify its use in an instance of communication.

information payload capacity

Rec. I.113

The interface rate minus the overhead. The bit rate of the interface payload.

information rate

Rec. V.7

The transfer of information bits (the equivalent of the bit rate of circuit 103 or 104 on a V.24 interface).

information request message (INR)

Rec. Q.762

A message sent by an exchange to request information in association with a call.

information structure (diagram)

Rec. Z.341

A representation of the *information entities* associated with an *MML function* and their interrelationships.

information structure meta-language

See:

decomposition meta-language; information structure meta-language.

information transfer capability

Rec. I.140

This attribute describes the capability associated with the transfer of different types of information through the ISDN.

information transfer coding/protocol

See:

connection control protocol; information transfer coding/protocol.

information transfer mode

Rec. I.140

This attribute describes the operational mode for transferring (transporting and switching) user information through the ISDN.

information transfer rate

Rec. I.140

This attribute describes either the bit rate (circuit mode) or the throughput (packet mode). It refers to the transfer of digital information at the access points.

information transfer rate

Rec. I.140

This attribute describes either the bit rate (circuit mode) or the throughput (packet mode). It refers to the transfer of digital information between access points or reference points.

information transfer susceptance

Rec. I.140

This attribute describes the capability associated with the transfer of different types of information through the ISDN.

information transfer susceptance

Rec. I.140

This attribute identifies equipment which may restrict the types of information which may pass through the ISDN.

information unit

Rec. Z.341

The smallest part of data in the *input* or *output.*

inherent distortion (of a transmission channel)

Rec. R.140

The telegraph distortion of a received signal at the output of a transmission channel when the signal at the input is a perfect signal.

Note 1 – The inherent distortion includes all the distortions produced in the channel such as bias distortion, characteristic distortion and fortuitous distortion.

Note 2 – The concept of inherent distortion can be extended to the constituents such as a telegraph relay, telegraph repeater or exchange.

inherent regeneration

Rec. R.140

Regeneration resulting from the method of switching or transmission.

inherent weakness failure

See:
(inherent) weakness failure.

inherent weakness fault

See:
(inherent) weakness fault.

INHIBIT

Rec. Z.333

Prevent the specified system actions, system responses or functions from occurring. These functions may normally be allowed by the system design, or by the ALLOW action defined above.

inhibit

Rec. Z.341

An *action* to prevent the specified *system actions*, *system* responses or *functions* from occurring; these *functions* may normally be allowed by the *system* design or by the *allow action.*

initial address message (IAM)

Rec. Q.258

The initial address message (IAM) is the first message of a call. It is a special case of the multi-unit message as it consists of a minimum of three signal units and a maximum of six signal units. It can contain different types of information – address signals (including ST), other routing information, and the filler code – under the same heading code.

initial address message (IAM)

Gloss. (VI.3)

A multi-unit message which is sent as the first message in a call set-up, consisting of a minimum of three and a maximum of six signal units, and containing enough information to route the call through the international network.

initial address message (IAM)

Rec. Q.762

A message sent in the forward direction to initiate seizure of an outgoing circuit and to transmit number and other information relating to the routing and handling of a call.

initial address message (IAM)

Rec. Q.9

A type of message sent in the forward direction at call set-up. It contains address information and other information relating to the routing and handling of the call.

initial address message with additional information (IAI)

Rec. Q.9

A type of message sent first in the forward direction at call set-up. It contains address, routing and handling information, such as charging and supplementary services information to be used in the call set-up procedures.

initial algebra

Rec. Z.100

An *initial algebra* is the formalism for defining *abstract data types.*

initial alignment (procedure)

Glos. (VI.7, VI.8, VI.9)

A procedure by which a signalling link becomes able to carry signalling traffic either for the first time or after a failure has occurred.

initial offset

Recs. T.416, T.417

This attribute specifies the position of the initial point relative to the basic layout object.

initial point

Rec. T.411

1) The point associated with a basic layout object relative to which all line boxes imaged within that basic layout object are positioned (character content architectures see Recommendation T.416).

2) The point associated with a basic layout object relative to which all pels imaged within that basic layout object are positioned (raster graphics content architectures see Recommendation T.417).

initial signal unit (ISU)

Rec. Q.257, Gloss. (VI.3)

The first signal unit of a multi-unit message.

initialization

Rec. M.30

Setting a process to a specified state. This may be a restart state or intermediate levels.

INITIALIZE

Rec. Z.333

Put specified data or equipment into a predefined initial (normal) condition or value.

initialize

Rec. Z.341

An *action* to put specified data or equipment into a predefined initial (normal) condition or value.

initiator

Rec. X.216

The presentation-entity or presentation-service-user that initiates the presentation-connection establishment.

initiator

Rec. X.224

A transport entity that initiates a CR TPDU.

initiator

Rec. X.225

An SPM that initiates a CONNECT SPDU.

initiator

Rec. X.226

The presentation protocol machine that initiates the presentation-connection establishment.

inlet

Rec. Q.9

Point through which the incoming traffic flow enters a switching stage.

inlet

Rec. Z.100

An *inlet* represents a line, such as a *channel* or a *flow line*, entering an *SDL/GR macro call.*

in-local override

Suppl. No. 2 (II.4)

A facility of the network to override a *terminal* working *in local*, for the purpose of connecting an incoming call to that terminal.

INMARSAT mobile international number

Rec. E.215

The number following the international prefix which identifies terminal equipment connected to an *INMARSAT* mobile earth station for access from a public network.

INMARSAT mobile international number

Rec. F.125

The international number which identifies a terminal equipment connected to an INMARSAT mobile earth station for access from a public network.

INMARSAT mobile number

Rec. E.215

The part of the *INMARSAT* mobile international number which follows a country code allocated to the INMARSAT system.

INMARSAT mobile number

Rec. F.125

The part of the INMARSAT mobile international number which follows a F.69 telex destination code allocated to the INMARSAT system.

INMARSAT mobile terminal number

Rec. F.125

That part of the INMARSAT mobile number which identifies a specific terminal equipment connected to the mobile earth station.

inopportune test event

Rec. X.290

A test event which, although syntactically correct, occurs or arrives at a point in an observed outcome when not allowed to do so by the protocol Recommendation*.

IN/OUT variable

Rec. Z.100

An *IN/OUT variable* is a *formal parameter* attribute denoting the case when a *formal parameter name* is used as a synonym for the *variable* (i.e. the *actual parameter* must be a *variable.*

INPUT

Rec. Z.333

Enter data by means of a user terminal into the system.

input

Rec. Z.341

i) Information that is transferred to the *system* by the *user*, e.g. *commands*, *directives*, *menu-item selections*, *form identities*, etc.

ii) An *action* to enter data by means of a *man-machine* terminal into the *system.*

input

Rec. Z.100

An *input* is the consumption of a *signal* from the *input port* which starts a *transition.* During the consumption of a *signal*, the *values* associated with the *signal* become available to the *process instance.*

input (in MML)

Rec. Q.9

The process that constitutes the introduction of data into a data processing system or any part of it.

input (in SDL)

Rec. Q.9

An input is an incoming *signal* which is *recognized* by a *process.* (See Recommendation Z.100, § 2.6.4.)

input acknowledgement

Rec. Z.341

Termination of *information entry* through *menu-item selection* or *form filling.*

input area

Rec. Z.100

An *input area* is the *SDL/GR* representation of an *input.*

input connection

Recs. Q.9, Q.551

An unidirectional path from an interface of a digital exchange to an exchange test point.

input error

Rec. Z.341

A *system*-detected error in *input* information.

input error information

Rec. Z.341

Information describing the location and nature of an *input error.*

input field

See:
accessible field; input field.

input message acknowledgement (IMA)

Rec. F.201, Suppl. No. 1 (II.4)

The IMA message sent by the CF to the telex user is used to indicate that the message has been well received by the CF and to give to the telex user a unique reference for this message. This reference should be used again when sending an NDN.

input port

Rec. Z.100

An *input port* of a *process* is a queue which receives and retains *signals* in the order of arrival until the *signals* are consumed by an *input.* The *input port* may contain any number of *retained signals.*

input window area

See:
output and input window area.

input/output

Rec. G.100

Terms used to indicate the direction of transmission at an interface of an equipment item. These terms avoid the ambiguity encountered in the use of "transmit/receive" or "send/receive".

input/output devices; I/O devices

Rec. Q.9

Memory and keyboard devices for entering or receiving data to or from the *system.* Can be controlled manually for entering or receiving data.

insertion gain; orthotelephonically referred gain

Rec. P.10

Ratio of the total electroacoustic gain to the orthotelephonic acoustic reference gain.

in-slot signalling

Recs. I.112, Q.9

Signalling associated with a channel and transmitted in a digit time-slot permanently (or periodically) allocated in the channel time-slot.

installation cable

Recs. G.960, I.430

A cable or single pair of metallic wires used in the local line distribution point and the customer premises.

instance

Rec. Z.100

An *instance* of a *type* is an object which has the properties of the *type* (given in the definition).

instant of time

Suppl. No. 6 (II.3)

A single point on a time scale.

Note – The time scale may be continuous as calendar time, or discrete, e.g. number of use cycles.

instantaneous ...

Suppl. No. 6 (II.3)

The value of a *measure* determined for a given *instant of time.*

instantaneous availability A(t); pointwise availability

Suppl. No. 6 (II.3)

The *probability* that an *item* is in an *up state* at a given *instant of time, t.*

Note – In French the term *disponibilité* is also used to denote the performance quantified by this *probability.*

instantaneous availability of a leased circuit

Suppl. No. 6 (II.3)

The *probability* that, under stated operating conditions, a leased circuit can perform a *required function* when requested by the subscriber.

instantaneous exchange inaccessibility

Rec. E.550

The probability that the exchange in question cannot perform the required function (i.e. cannot successfully process calls) under stated conditions at the time a request for service is placed.

instantaneous unavailability U(t); pointwise unavailability

Suppl. No. 6 (II.3)

The probability that an *item* is in a *down state* at a given *instant of time, t.*

(instantaneous) failure intensity z(t)

Suppl. No. 6

The limit, if this exists, of the ratio of the mean number of *failures* of a *repaired item* in a *time interval,* $(t, t + \Delta t)$, to the length of this interval, Δt, when the length of the *time interval* tends to zero.

Note – The *instantaneous failure intensity* is expressed by formula as:

$$z(t) = \lim_{\Delta t \to 0+} \frac{E[N(t + \Delta t) - N(t)]}{\Delta t}$$

where $N(t)$ is the number of *failures* in the *time* interval $(0, t)$.

(instantaneous) failure rate λ(t)

Suppl. No. 6 (II.3)

The limit, if this exists, of the ratio of the conditional *probability* that the *time to failure, T,* of an *item* falls within a given *time interval,* $(t, t+\Delta t)$, to the length of this interval, Δt, when Δt tends to zero, given that the *item* is in a state to perform a *required function* at the beginning of the *time interval.*

Note – The *instantaneous failure rate* is expressed by formula as:

$$\lambda(t) = \lim_{\Delta(t)\to 0+} \frac{Pr(t < T \leqslant t + \Delta t | T > t)}{\Delta t}$$

where T is the *instant of time* of *failure.*

The formula is also applicable if T denotes the *time to failure.*

(instantaneous) repair rate μ(t)

Suppl. No. 6 (II.3)

The limit, if this exists, of the ratio of the conditional *probability* that the corrective *maintenance action* terminates in a *time interval,* $(t, t+\Delta t)$ to the length of this *time interval,* when Δt tends to zero, given that the action had not terminated at the beginning of the *time interval.*

Note – The *instantaneous repair rate* is expressed by formula as:

$$\mu(t) = \lim_{\Delta(t)\to 0} \frac{Pr(t < T \leqslant t + \Delta t | T > t)}{\Delta t}$$

where T is the *instant of time* of *restoration.*

T may also represent the *time to restoration.*

instantiation

Rec. Z.100

Instantiation is the creation of an *instance* of a *type.*

integer

Rec. Z.100

Integer is a *sort* defined in a predefined *partial type definition* for which the *values* are these of mathematical integers (..., −2, −1, 0, +1, +2, ...). For the *sort integer* the predefined *operators* are +, −, *, / and the *ordering operators.*

integer type

Rec. X.208

A simple type with distinguished values which are the positive and negative whole numbers, including zero (as a single value).

Note – Particular encoding rules limit the range of an integer, but such limitations are chosen so as not to affect any user of ASN.1.

integrated digital network (IDN)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A network in which connections established by digital switching are used for the transmission of digital signals.

integrated digital network

See:
digital network; integrated digital network.

integrated digital network; digital network

Rec. Q.9

A combination of digital switching nodes and digital links that uses integrated digital transmission, digital switching and common channel signalling to provide digital connections between two or more points to facilitate telecommunication and possibly other functions.

integrated digital transmission and switching

Recs. I.112, Q.9

The direct (digital) concatenation of digital transmission and digital switching, that maintains a continuous digital transmission path.

integrated services digital network (ISDN)

Rec. I.112

An integrated services network that provides digital connections between user-network interfaces.

integrated services digital network (ISDN)

Rec. Q.1100, Glos. (VI.7, VI.8, VI.9)

An integrated digital network in which the same digital switches and digital paths are used to establish connections for different services, for example, telephony, data.

integrated services exchange

Rec. Q.9

An exchange arranged to handle multiple services such as telephone and data using all or part of the switching, signalling and control devices in common.

integrated services network

Rec. I.112

A network that provides or supports a range of different telecommunication services.

intelligible crosstalk components

Rec. G.242

Transferred speech currents which can introduce intelligible crosstalk into certain channels at the point considered.

intended recipient

Rec. X.402

One of the users and DLs the originator specifies as a message's or probe's intended destinations.

interaction diagram

Rec. Z.100

An *interaction diagram* is a *block diagram, system diagram, channel substructure diagram,* or *block substructure diagram.*

interaction error (man-machine)

Suppl. No. 6 (II.3)

An *error* in the response of an *item* caused by a *mistake* during its use.

interaction management

Rec. X.200

A facility of the session-service which allows correspondent presentation-entities to control explicitly whose turn it is to exercise certain control functions.

interaction request output

Rec. Z.341

System output inviting further *user actions.*

interactive

Rec. Z.341

A condition where *information entry* can be done by the *user.*

interactive mode

Rec. F.200

The exchange in real time of user information during a call or series of calls between calling and called equipment.

interactive mode

Rec. T.62

This mode allows only for interactive dialogue. No document transfer can take place. Procedures applying to this mode are for further study.

interactive operating sequence

Rec. Z.317

The interactive operating sequence may consist of a single command entry sequence terminated by an optional end statement or of a series of command entry sequences or special actions. The latter occurs when, as a result of partial execution of a function, the system requests the supply of further information in the form of special actions or further commands for which human judgement and/or decision is required.

interactive operating sequence

Rec. Z.341

A *sequence* which may consist of a single *command entry sequence* terminated by an optional *end statement* or of a series of command entry *sequences* and/or *manual responses.* The latter occurs when, as a result of partial execution of a *function,* the *system* requests the *user* to supply it with further information in the form of *manual responses* or further *commands* for which *user* judgement and/or decision is required.

interactive service

Rec. I.113

A service which provides the means for bidirectional exchange of information between users or between users and hosts. Interactive services are subdivided into three classes of services: **conversational services, messaging services** and **retrieval services.**

interactive videography

See:

videotex; interactive videography.

inter-activity defined context set

Rec. X.216

A set of presentation contexts which is defined for a presentation-connection when the (session) activity management functional unit is selected. It initially takes the value of the defined context set at presentation-connection establishment, and is further modified only by P-ALTER-CONTEXT service primitives issued outside of activities.

interband telegraphy

Rec. R.140

A form of carrier transmission in which the telegraph channel is situated in a narrow band between two telephone channels.

interception of calls service

Suppl. No. 1 (II.2)

Calls which, for reasons such as those listed below, cannot reach the wanted number may be intercepted and diverted to an operator, an answering machine, or a tone to give the caller the appropriate information:

- change of a particular number including indication of new number;
- renumbering of a group of numbers or a change of dialling code;
- wrong information in telephone directory;
- dialling of an unallocated code;
- dialling of a number or numbers allowed by the numbering plan but not yet allocated or no longer in service;
- route(s) out of order;
- route(s) congested;
- subscriber's line temporarily out of order;
- suspension of service owing to nonpayment.

interchange

Rec. T.411

The process of transferring a document from an originating system to a receiving system.

interchange data element

Rec. T.411

A data structure representing a constituent of a document.

interchange format

Rec. T.411

The rules for representing a document for the purpose of interchange.

interchange format class

Rec. T.411

A form of interchange format suitable to a specific application.

Note – In the T.410 series of Recommendations, the defined classes differ by the ordering of the interchange data elements or by the coding.

inter-character space

Rec. T.411

An additional amount of spacing that is included between adjacent character images.

intercommunication

Rec. F.200

In the context of Teletex, a relationship between services, where one of the services is Teletex, enabling the user of the Teletex service to communicate with users of other services.

intercommunication

Rec. F.710

Intercommunication in the teleconference area implies to have the capability (this capability could be distributed between networks or terminals) to translate the presentation of information given for a service to information available to be presented in another service and, if necessary, interworking between networks.

This is valid between services used in the TC environment and between TC service and another service.

intercommunication

Recs. F.400, X.400

In the context of message handling, a relationship between services where one of the services is a message handling service, enabling the user of the message handling service to communicate with users of other services.

Note – Examples are the intercommunication between the IPM service and the telex service, the intercommunication between message handling services and physical delivery services.

intercommunication

Rec. F.500

In the context of directory services a relationship between services, where one of the services is a directory service, enabling the user of a service to communicate with the directory.

Note – The term also applies for the relation between public and private directories, for the relation between directory services of different service providers and for the relation between directory management domains.

interconnected store-and-forward

Suppl. No. 1 (II.4)

Where the store-and-forward unit in country A is connected to the store-and-forward unit in country B for the transmission of messages between the two countries.

interconnected transit store-and-forward

Suppl. No. 1 (II.4)

Where the store-and-forward unit in country A accesses the store-and-forward unit in country B for further transmission of messages to other countries.

intercontinental circuit

Rec. D.000

An international circuit between two international exchanges in different continents.

intercontinental circuit

Recs. F.68, U.140

One connecting two exchanges situated in different countries in different continents.

intercontinental connection

Rec. F.68

Connection established between two different continents.

intercontinental transit circuit

Rec. F.68

An intercontinental circuit used primarily for routing intercontinental transit traffic.

intercontinental transit exchange

Rec. F.68

An exchange of this type would be directly connected to intercontinental transit circuits and would provide facilities to interconnect intercontinental transit circuits and trunks to terminal exchanges. It would also provide facilities for the interconnection of intercontinental transit circuits.

interface; physical interface

Recs. G.960, I.430

The common boundary between physical equipment.

interface

Recs. G.701, I.112, M.60

The common boundary between two associated systems.

interface

Rec. Q.9

A shared boundary, for example, the boundary between two subsystems or two devices.

Note 1 – An interface is used to specify once the interconnection between the two sides of it. The specification includes the type, quantity and function of the interconnecting means and the type, form and sequencing order of the signals to be interchanged via those means.

Note 2 – Recommendation G.703, as an example, refers to physical, functional and electrical characteristics of interfaces that are necessary to interconnect digital network components to form a digital path or connection.

interface

*Series X**

A shared boundary between two functional units, defined by functional characteristics, common physical interconnection characteristics, signal characteristics, and other characteristics, as appropriate.

Note – The concept involves the specification of the connection of two devices having different functions.

interface adaptor

Gloss. (VI.3)

A unit required between the signalling terminal and the digital channel to provide for holdover clock, loss of frame alignment indication and where necessary, for clock and data rate conversion.

interface bit rate

See:
interface rate; interface bit rate.

interface control functions

Rec. Z.341

Functions used to force specific *actions* relating to the interface.

interface overhead

Rec. I.113

The remaining portion of the bit stream after deducting the information payload. The interface overhead may be essential (e.g. framing for an interface shared by users) or ancillary (e.g. performance monitoring).

interface payload

Rec. I.113

The portion of the bit stream of a framed interface which can be used for telecommunication services. Any signalling is included in the interface payload.

interface rate

Rec. V.7

The transfer rate of the bit stream found on the physical interchange circuits.

interface rate; interface bit rate

Rec. I.113

The gross bit rate at the interface, e.g. the bit rate at the boundary between the physical layer and the physical medium.

interface specification

Recs. I.112, Q.9

A formal statement of the type, quantity, form and order of the interconnections and interactions between two associated systems, at their interface.

interface structure; ISDN user-network interface structure

Rec. I.112

The number and type of the access channels that appear at an ISDN user-network interface.

interface units

Rec. Q.9

Units of an exchange on which lines and/or interexchange circuits are terminated, and which are involved in the processing of traffic to/from those lines and/or circuits.

interim INIC

Rec. E.167

A string of 4 digits. Each different string of digits may be used to identify an individual ISDN. The first digit I distinguishes the INIC from a DNIC. This digit is followed by the country code from the E.163/E.164 numbering plan which has a length of one, two or three digits (see Recommendation E.163). The E.163/E.164 country code is followed by enough additional digits, X, to make the total length of the INIC 4 digits. The format is shown in Table 1/E.167.

intermediate character

Rec. T.51

A character the bit combination of which occurs between that of the ESCAPE character and that of the final character in an escape sequence consisting of more than two bit combinations.

intermediate distribution frame

Rec. Q.9

A *distribution frame* intermediate between the main distribution frame and the switchboard, or the switching apparatus or intermediate between two ranks of switches in an automatic exchange.

intermediate equipment

*Series X**

Auxiliary equipment that may be inserted between the data terminal equipment (DTE) and the signal conversion equipment to perform certain additional functions before modulation or after demodulation.

Intermediate Service Part

Glos. (VI.7, VI.8, VI.9)

An element of transaction capabilities which supports TCAP for connection-oriented messages. It represents OSI layers 4 to 6.

intermittent fault

See:
fault; intermittent fault.

intermittent fault

Rec. M.60, Suppl. No. 6 (II.3)

A fault of an item which persists for a limited time duration following which the item recovers the ability to perform a required function without being subjected to any action of corrective maintenance.

Note – Such a fault is often recurrent.

internal blocking

Rec. E.600

The probability that a connection cannot be made between a given point in a network and any suitable idle resource in an external pool of resources owing to call congestion within the portion of the network being considered.

internal connection

Rec. Q.9

An exchange connection for a call between subscriber lines or channels on the same exchange.

internal disabled state

See:
down state; internal disabled state.

internal freephone service

Rec. D.115

A service where the subscriber can be allocated a special (freephone) number and the charges for all calls to this number are paid by the respective subscriber instead of by the originating caller.

Note – For technical or other reasons, some originating Administrations may apply a small utilization charge to the calling party.

internal loss probability

Rec. E.543

For any call attempt, it is the probability that an overall connection cannot be set up between a given incoming circuit and any suitable free outgoing circuit within the switching network.

The loss grade of service is to be met by every pair of incoming and outgoing trunk groups averaged over all inlets of the incoming group.

internal network number indicator

Rec. Q.762

Information sent to the destination exchange indicating whether or not the call is allowed should the called party number prove to be an internal network number (e.g. mobile access point).

internal reference

Rec. X.518

A knowledge reference containing an internal pointer to an entry held in the same DSA.

internal routing

Rec. X.402

A routing preparatory to an internal transfer (i.e., a transfer within a MD).

internal traffic

Rec. E.600

Traffic originating and terminating within the network considered.

internal transfer

Rec. X.402

A transfer involving MTAs within a single MD.

internal videotex application provider

Rec. F.300

An application provider whose applications and/or whose facilities are provided by means of the service provider's host computer(s).

international alphabet No. 5 (IA5)

Rec. R.140

An alphabet using a two-condition eight-unit code with seven primary information elements and one parity check element, comprising in particular upper and lower case characters, diacritical signs and miscellaneous control functions.

Note – The character coding rules using the seven primary elements are the subject of Recommendations T50 and V.4.

international automatic circuit

Rec. M.60

The whole of the international line and the outgoing and incoming equipment (or both-way equipments) proper to the automatic circuit considered. The ends of this circuit are defined by the circuit access points (see definition for *circuit access points*).

international call indicator

See:

national/international call indicator.

international chain

Recs. G.101, Q.40

An international chain is made up of one more 4-wire international circuits. These are interconnected on a 4-wire basis in the international centres which provide for transit traffic and are also connected on a 4-wire basis to national systems in the international centres.

See figures 1/G.101 or 1/Q.40.

international chain

Recs. M.60, M.560

An international chain is made up of one or more 4-wire international circuits. These are connected on a 4-wire basis to other international circuits in transit international centres or to national systems in terminal international centres.

See Figure 1/M.560.

international circuit

Rec. D.000

A circuit between two international exchanges situated in different countries.

international circuit

Rec. F.68

One connecting two exchanges in different countries, whether or not they are in different continents.

international circuit

U.140

A circuit directly connecting two exchanges situated in different countries.

international connection

Rec. F.68

Any connection between two stations situated in different countries, whether established between different continents or one continent.

international connection

See:
connection; international connection.

international data number

Rec. X.121

In the context of the international numbering plan for public data networks, the address information comprising the data country code (DCC) and the national number, or the data network identification code (DNIC) and the (national) network terminal number, according to Recommendation X.121.

international data number format

Rec. X.121

In the context of the international numbering plan for public data networks, a numbering plan format comprising of the digits of the international data number, according to Recommendation X.121.

international exchange

Rec. E.100

The exchange (at the end of an international telephone circuit) which switches a call destined to or originating from another country.

Administrations shall designate the exchanges in the territory they serve which are to be regarded as international exchanges.

international exchange

Rec. F.68

A centre where international circuits, and in general national circuits, terminate.

international exchange

Rec. Q.9

A transit exchange where international circuits and, in general, national circuits terminate.

international freephone service (IFS)

Rec. E.152

Service which nables a subscriber, in one country, to be allocated, through his own Administration, one or more special telephone numbers in one or more countries which allow users in this or these countries to call the subscriber free of charge. All service and call charges are paid by the subscriber to the service.

international information service (prefix 12)

Recs. E.216, F.126

Prefix 12 will connect the caller to the international information service. The prefix may be followed by a country code. If so, the procedure for servicing the call is described in Recommendation E.216, § 4.3 and Recommendation F.126, § 4.3.

international leased circuit

Recs. M.60, M.1010

The whole of the assembly of lines and apparatus connecting the renter's terminal equipment (e.g. data modem) in one country to the renter's terminal equipment in another. The interfaces between the circuit and the renter's terminal equipment will be defined by the respective Administrations.

See Figure 2/M.1010.

international leased group or supergroup link

Rec. M.900

The whole of the transmission path – as defined in Recommendation M.300 – provided between defined test access points at an interface at the renter's premises. The renter's terminal equipment is therefore not included in the link.

See Figure 1/M.900.

international line

Recs. M.60, M.1010

The whole of the assembly of international and national circuit sections between terminal international centres.

See Figure 2/M.1010.

international line

Rec. M.60

The transmission system contained between the line acess points (see § 2 of Recommendation M.565) of the two terminal international centres. Where a digital international centre is interfaced by primary (or higher order) digital paths, a line access point on a per circuit basis may not exist. In such cases, the international line is deemed to end at the digital path access point nearest the international centre.

international link

Recs. M.60, M.1010

The whole of the assembly of international and national circuit sections between terminal national centres.

See Figure 2/M.1010.

international link
See:
link; international link.

international main section

Recs. M.60, M.900

The whole of the assembly of national and international group or supergroup sections, between the defined test access points at the two terminal international centres (see Recommendation M.460). These access points should be the same points as those for the ends of the national main sections involved in the leased link.

See Figure 1/M.900.

international mobile station identity

Rec. Q.1001

The mobile station's identification uniquely identifies the MS internationally. The identity is composed as defined in Recommendation E.212.

international mobile station identity (IMSI)

Rec. Q.1003

It consists of three parts MCC, MNC and MSIN. The MCC consists of 3 digits and the MNC consists of 1 or 2 digits. The IMSI has variable length depending on national requirements. The maximum length is 15 digits.

Only numerical characters (0 through 9) are used in the IMSI.

The IMSI is permanent subscriber data. (Also defined in Rec. E.212, § 3.5).

international mobile station identity (IMSI)

Recs. E.212, Q.9

The mobile station identification uniquely identifying the mobile station internationally.

The IMSI consists of the mobile country code (MCC) followed by the national mobile station identity (NMSI).

international mobile station number

Rec. Q.1003

It is a PSTN/ISDN number and has a variable length which complies with the requirements of the PSTN/ISDN in each country.

The international mobile station number is permanent subscriber data.

international multiple destination sound-programme circuit

Rec. N.1

The unidirectional transmission path from one ISPC to two or more other ISPCs comprising sound-programme circuit sections (national or international) one of which is an international multiple destination circuit section, together with any necessary audio equipment. (See Note 2 to Recommendation N.1 and Figure 4/N.1.)

international multiple destination sound-programme circuit section

Rec. N.1

The unidirectional sound-programme transmission path from one frontier station to two or more of the frontier stations at which interconnection is made at audio frequencies. (See Note 2 to Recommendation N.1 and Figure 4/N.1.)

international multiple destination sound-programme connection

Rec. N.1

The unidirectional transmission path between the broadcasting organization (send) and two or more broadcasting organizations (receive) comprising the international multiple destination sound-programme link extended at its ends over national sound-programme circuits to the broadcasting organizations. (See Note 2 above and Figure 5/N.1.)

international multiple destination sound-programme link

Rec. N.1

The unidirectional transmission path between the ISPCs of the terminal countries involved in an international multiple destination sound-programme transmission. The international multiple destination sound-programme link comprises international sound-programme circuits, one of which is an international multiple destination sound-programme circuit. (See Note 2 to Recommendation N.1 and Figure 5/N.1.)

international multiple destination television circuit

Rec. N.51

The unidirectional transmission path from one ITC to two or more other ITCs comprising television circuit sections (national or international) one of which is an international multiple destination circuit section, together with any necessary video equipment. (See Note 2 to Recommendation N.51 and Figure 4/N.51.)

international multiple destination television circuit section

Rec. N.51

The unidirectional television transmission path from one frontier station to two or more of the frontier stations at which interconnection is made at video frequencies. (See Note 2 to Recommendation N.51 and Figure 4/N.51.)

international multiple destination television connection

Rec. N.51

The unidirectional transmission path between the broadcasting organization (send) and two or more broadcasting organizations (receive) comprising the international multiple destination television link extended at its end over national television circuits to the broadcasting organizations. (See Note 2 to Recommendation N.51 and Figure 5/N.51.)

international multiple destination television link

Rec. N.51

The unidirectional transmission path between the ITCs of the terminal countries involved in an international multiple destination television transmission. The international multiple destination television link comprises international television circuits, one of which is an international multiple destination television circuit. (See Note 2 to Recommendation N.51 and Figure 5/N.51.)

international network management

Rec. E.410

Function of supervising the international network and taking action when necessary to control the flow of traffic.

Network management requires real-time monitoring and measurement of current network status and performance, and the ability to take prompt action to control the flow of traffic.

international number

Rec. E.160

The number to be dialled following the international prefix to obtain a subscriber in another country.

The international number consists of the country code of the required country followed by the national (significant) number of the called subscriber.

Examples:

Subscriber	*International number*
123 45 67 in Bruxelles	32 2 123 45 67
12 34 56 in Düsseldorf	49 211 12 34 56
870 12 34 in Montréal	1 514 870 12 34
12 34 in Perranporth	44 872 57 12 34
248 45 67 in London	44 1 248 45 67

Note – Where several countries are included in one integrated numbering plan, the international number is not used on calls from one of these countries to another. [See the Note to the definition national (significant) number].

international number

Rec. Q.10

The number to be dialled following the international prefix to obtain a subscriber in another country.

The international number consists of the country code of the required country followed by the national (significant) number of the called subscriber.

international outgoing operator (prefix 11)

Recs. E.216, F.126

Prefix 11 will connect the caller to an international operator position. The prefix may be followed by a country code. If so, the procedure for servicing the call is described in Recommendation E.216, § 4.3 and Recommendation F.126, § 4.3.

international point-to-multipoint telecommunication service via satellite

Rec. F.140

Service provided to a customer by Administrations for the transmission for example, of text, photographs or data via a satellite for the reception at a multiplicity of destinations by receive-only earth stations.

international point-to-multipoint telecommunications service via satellite

Rec. D.185

Consists of making one or more analogue or digital international telecommunication links available to a customer exclusively dedicated to the use for which they have been authorized on the terms and conditions set out in a lease agreement between the customer and the Administrations of the countries at each end of the link. The Administrations are in no way responsible for transmission content or enforcement of copyright laws.

Note – (For the purposes of Recommendation D.185 the customer is the individual or entity that leases one or more international links from an Administration and is responsible for payment of all charges or rentals due to that Administration.)

This service may be provided in the following basic categories, subject to the agreement of the Administrations concerned:

a) point-to-multipoint;

b) full-time, part-time, occasional;

c) non-pre-emptible protected, non-pre-emptible unprotected, and pre-emptible, taking into account the availability of the space segment to the Administrations.

international portion call set-up delay

Rec. X.135

The call set-up delay between the boundaries delimiting an international portion, e.g., B_5 and B_{n-2} in Figure 2/X.135.

international portion clear indication delay

Rec. X.135

The delay between the boundaries delimiting an international portion, e.g., B_5 and B_{n-2} in Figure 2./X.135.

international portion data packet transfer delay

Rec. X.135

The delay between the boundaries delimiting an international portion, e.g., B_5 and B_{n-2} in Figure 2/X.135.

international portion of an international virtual connection

Rec. X.134

The set of basic sections between the two national portions. An international portion may be a single internetwork circuit section crossing a national border or it may be two (or more) internetwork circuit sections together with one (or more) transit network sections.

There is one international portion of any international virtual circuit and that international portion will cross one or more national borders.

international prefix

Recs. E.160, Q.10

The combination of digits to be dialled by a calling subscriber making a call to a subscriber in another country to obtain access to the automatic outgoing international equipment.

Example:

00 in Switzerland.

Note 1 – In some countries two or more international prefixes may be used:

- to reach different groups of countries;
- to obtain different classes of call (e.g., station call or personal call).

In the first case the use of two or more international prefixes allows the use of different groups of switching equipment and the use of *abbreviated* dialling (i.e., shorter country codes) for the calls to a defined group of countries (see the definition of *country code*).

Note 2 – Where several countries are included in one integrated numbering plan, the international prefix is not used on a call from one of these countries to another.

international public facsimile service

Rec. F.160

A telecommunication service between facsimile stations in different countries. These services may be classified in three categories:

a) public facsimile service between subscribers' stations (use of a public telecommunication network);

b) public facsimile service between Administrations' public bureaux (see the definition of *public facsimile bureau*) (use of a public telecommunication network or dedicated circuits);

c) public facsimile service between Administrations' public bureaux and subscribers' stations, and vice versa (use of a public telecommunication network).

international satellite transmission centre (ISTC)

Rec. N.51

A centre at a transmitting country responsible for the national extension and up-link to satellite. This term is applicable only for transmission to TVROs not related to an ITC (see Figure 6/N.51).

international section

Rec. M.300

The digital, group, supergroup, etc., sections between two adjacent frontier stations in different countries constitute an international section. Some international sections may be a single digital, group, supergroup, etc., section routed over long submarine cable systems. If the international group, supergroup, etc., is routed via intermediate countries without the digital path being demultiplexed to its characteristic bit rate/basic frequency band, the frontier stations at the ends of the international digital, group, supergroup, etc., section are still considered to be adjacent.

international selection sequence

U.140

First sequence of digits in an international two-stage selection.

international signalling network

Glos. (VI.7, VI.8, VI.9)

A network used for signalling, consisting of international signalling points and common channel signalling links connecting them.

international signalling point

Glos. (VI.7, VI.8, VI.9)

A signalling point which belongs to the international signalling network.

international signalling point code

Glos. (VI.7, VI.8, VI.9)

A part of the label in a signalling message that uniquely identifies each signalling point which belongs to the international signalling network. It consists of a sub-field for the signalling area/network code (11-bit) and a sub-field which identifies a signalling point in a specific area or network (3-bit).

international sound programme centre (ISPC)

Rec. D.180

A centre at which at least one international sound-programme circuit terminates and in which international sound-programme connections can be made by the interconnection of international and/or national sound-programme circuits.

The ISPC is responsible for setting up, lining up and maintaining international sound-programme connections and for the supervision of the transmissions made on them.

international sound-programme centre (ISPC)

Rec. J.13

A centre at which at least one international sound-programme circuit terminates and in which international sound-programme connections can be made by the interconnection of international and national sound-programme circuits.

The ISPC is responsible for setting up and maintaining international sound-programme links and for the supervision of the transmissions made on them.

international sound-programme centre (ISPC)

Rec. N.1

A centre at which at least one *international sound-programme circuit* terminates and in which *international sound-programme connections* can be made up by the interconnection of international and national sound-programme circuits.

The responsibilities of an ISPC are described in Recommendation N.5.

international sound-programme circuit

Rec. J.13

The unidirectional transmission path between two ISPCs and comprising one or more sound-programme circuit sections (national or international), together with any necessary audio equipment (amplifiers, compandors, etc.). See Fig. 1/J.13.

international sound-programme circuit

Rec. N.1

The transmission path between two ISPCs which comprises one or more sound-programme circuit sections (national or international), together with any necessary audio equipment. The transmission path may be established via terrestrial or single destination satellite routing. (See Note 2 to Recommendation N.1 and Figures 1/N.1 and 3/N.1.)

international sound-programme connection

Rec. J.13

The unidirectional path between the broadcasting organization (send) and the broadcasting organization (receive) comprising the international sound-programme link extended at its two ends over national sound-programme circuits to the broadcasting organizations (see Figure 2/J.13).

The assembly of the "international sound-programme link" and the national circuits between the broadcasting organizations, constitutes the "international sound-programme connection". Figure 3/J.13 illustrates, by way of example, an international sound-programme connection as it might be encountered in practice.

international sound-programme connection

Rec. N.1

The unidirectional transmission path between the broadcasting organization (send) and the broadcasting organization (receive) comprising the international sound-programme link extended at its two ends over national sound-programme circuits to the broadcasting organization. (See Note 2 to Recommendation N.1 and Figure 2/N.1.)

international sound-programme link

Rec. J.13

The unidirectional path for sound-programme transmissions between the ISPCs of the two terminal countries involved in an international sound-programme transmission. The international sound-programme link comprises one or more international sound-programme circuits interconnected at intermediate ISPCs. It can also include national sound-programme circuits in transit countries. See Fig. 2/J.13.

international sound-programme link

Rec. N.1

The unidirectional transmission path between the ISPCs of the two terminal countries involved in an international sound-programme transmission. The international sound-programme link comprises one or more international sound-programme circuits (see Figures 1/N.1 and 3/N.1) interconnected at intermediate ISPCs. It can also include national sound-programme circuits in transit countries. (See Note 2 to Recommendation N.1 and Figure 2/N.1.)

international sound-programme transmission

Rec. J.13

The transmission of sound over the international telecommunication network for the purpose of interchanging sound-programme material between broadcasting organizations in different countries. Such a transmission includes all types of programme material normally transmitted by a sound broadcasting service, for example, speech, music, sound accompanying a television programme, etc.

international sound-programme transmission

Rec. N.1

The transmission of sound signals over the international telecommunication network for the purpose of interchanging sound-programme material between broadcasting organizations in different countries.

international store-and-forward

Suppl. No. 1 (II.4)

Where a subscriber in country A accesses the store-and-forward unit in country B for the transmission of messages to that country.

international switching centre (ISC)

Rec. Q.1100

The exchange (at the end of an international circuit) which switches calls destined to or originating from another country.

international telegraph alphabet No. 1 (ITA1)

Rec. R.140

A telegraph alphabet using a two-condition five-unit code, used in Baudot synchronous telegraphy.

Note – This alphabet is specified by Article 16 of the Telegraph Regulations, Geneva 1958.

international telegraph alphabet No. 2 (ITA2)

Rec. R.140

An alphabet using a two-condition five-unit code, used in start-stop telegraphy generally for teleprinters.

Note – This alphabet is specified in Recommendation S.1.

international telegraph alphabet No. 3 (ITA3)

Rec. R.140

An alphabet using the two-condition seven-unit constant-ratio code.

Note – This alphabet is defined by CCIR Recommendation 342-2 or CCITT Recommendation S.13 (1972).

international telegraph alphabet No. 4 (ITA4)

Rec. R.140

An alphabet using a two-condition six-unit code for the time division multiplex synchronous telegraphy, comprising in particular two code combinations corresponding to the permanent conditions A and Z, so that the multiplex channel can be operated in a switched network.

Note – This alphabet is defined in Recommendation R.44 (1968).

international telephone connection

Recs. G.101, G.40

Consists of three parts, as shown in Figure 1/G.101 or 1/Q.40. The division between these parts is determined by the *virtual analogue switching points* in the originating/terminating international switching centres (ISCs). These are theoretical points with specified relative levels (see Figure 2/G.101 or 2/Q.40 and §§ 5.1 and 5.2 of Recommendation G/101).

The three parts of the connection are:

- Two national systems, one at each end, and
- An international chain made up of one or more 4-wire international circuits.

international telephone connection

Rec. M.560

A complete international telephone connectionhas three parts, as shown in Figure 1/M.560:

- an *international chain*;
- two *national systems*, one at each end.

international telephone connection

See:

connection; international telephone connection.

international television centre (ITC)

Rec. N.51

A centre at which at least one *international television circuit* terminates and in which *international television connections* can be made up by the interconnection of international and national television circuits.

international television circuit

Rec. N.51

The transmission path between two ITCs which comprises one or more television circuit sections (national or international) together with any necessary video equipment. The transmission path may be established via terrestrial or single destination satellite routing. (See Note 2 to Recommendation N.51 and Figures 1/N.51 and 3/N.51.)

international television connection

Rec. N.51

The unidirectional transmission path between the broadcasting organization (send) and the broadcasting organization (receive) comprising the international television link extended at its two ends over national television circuits to the broadcasting organization. (See Note 2 to Recommendation N.51 and Figure 2/N.51.)

international television link

Rec. N.51

The unidirectional transmission path between the ITCs of the two terminal countries involved in an international television transmission. The international television link comprises one or more international television circuits (see Figures 1/N.51 and 3/N.51) interconnected at intermediate ITCs. It can also include national television circuits in transit countries. (See Note 2 to Recommendation N.51 and Figure 2/N.51.)

international television programme centre (ITPC)

Rec. D.180

A centre at which at least one international television circuit terminates and in which international television connections can be made by the interconnection of international and/or national television circuits.

The ITPC is responsible for setting up, lining up and maintaining international television connections and for the supervision of the transmissions made on them.

The centre at the end of an international satellite television circuit is sometimes referred to as the satellite international television-programme centre (SITPC).

international television transmission

Rec. N.51

The transmission of video signals over the international telecommunication network for the purpose of interchanging television material between broadcasting organizations in different countries.

international telex position

Rec. F.60

Manual position in an international telex centre for establishing telex calls between two countries.

international transferred account (TA) service

Rec. D.30

A service in which the Administrations concerned agree that the charges for calls set up via the international packet-switched data communication service may be paid by a third party that has accepted responsibility for payment rather than being charged to the caller. It is an optional facility and depends on mutual agreement between Administrations.

international transferred account telegraph and telematic service

Recs. D.98, F.41

A service in which the Administrations concerned agree that the charge for telegraph and telematic services be paid by a party that has accepted responsibility for payment, instead of being paid by the sender. This service is called the *TA Service.*

international transit exchange

Rec. E.100

An international exchange chosen to establish telephone calls between two countries other than its own is called an international transit exchange.

international transit store-and-forward

Suppl. No. 1 (II.4)

Where a subscriber in country A accesses a store-and-forward unit in country B for the transmission of messages to other countries.

international two-stage selection

U.140

The process of establishing international calls using two sequences of digits, the first sequence characterizing the called country or network, and the second sequence characterizing the called subscriber in that country or network.

international user class of service

*Series X**

A category of public data transmission service in a certain network in which the data signalling rate, control signalling rates and other parameters are specified with reference to the services, the interfaces and the terminal operating mode.

international videotex gateway

Rec. F.300

A function of a computer providing access to a foreign Videotex service with all its capabilities and according to the international videotex protocol. It may include protocol selection and/or protocol conversion and/or dialogue handling functions. In addition, the gateway is the point where the administrative data for the international Videotex services are handled, such as the data for international accounting, billing information in case of frame/application or additional communication charges, information about the subscriber status in case of videotex messaging and service data concerning the service profiles or terminal profiles. The gateway can also give access to the directory of Videotex service available in the foreign country.

international X.121 format

Rec. X.121

In the context of the international numbering plan for public data networks, a format consisting of digits which are to be transferred across international boundaries, according to Recommendation X.121.

Note 1 – See also "international data number format".

Note 2 – Escape codes, if required, are part of the international X.121 format and are allowed by digits of another international numbering plan.

Note 3 – Prefixes do not belong to the international X.121 format.

internetwork circuit section

Rec. X.134

The physical circuit or set of circuits connecting a DTE in one network with a DSE in a different network. It does not include any parts of either DSE. Recommendations X.134 to X.137 assume that X.75 procedures are used on an internetwork circuit section.

interpersonal message (IPM)

Rec. X.420

A member of the primary class of information object conveyed between users in interpersonal messaging.

```
IPM ::= SEQUENCE {
        heading     Heading,
        body        Body }
```

It has the following components:

a) heading: A set of heading fields (or fields), each an information item that gives a characteristic of the IPM (e.g., its importance);

b) body: A sequence of body parts, each an information object that the IPM is intended to convey between users (e.g., a document).

   Body ::= SEQUENCE OF BodyPart

The structure of an IPM is depicted in Figure 1/X.420.

interpersonal messaging service

Recs. F.400, X.400

Messaging service between users belonging to the same management domain or to different management domains by means of message handling, based on the message transfer service.

interpolation gain (IG)

Rec. G.763

The trunk channel multiplication ratio which is achieved through DSI. The IG is the ratio of the number of trunk channels to the number of DCME bearer channels where the same signal encoding rate is used for trunk and bearer channels. The achievable gain depends on the ensemble activity and the system size.

INTERROGATE:

Rec. Z.333

Provide a display of the current values of the items in one or more data sets.

interrogate

Rec. Z.341

An *action* to provide a display of the current value of the items of one or more *data sets.*

interrupt; interruption

Rec. Q.9

A suspension of a process, such as the execution of a computer program, caused by an event external to that process and performed in such a way that the process can be resumed.

interruption

Recs. M.60, O.61

For the purpose of Recommendation O.61, an interruption shall be regarded as a break in transmission or drop in the level of a test tone below a designated threshold.

interruption

Recs. M.60, O.62

For the purpose of Recommendation O.62, an interruption shall be regarded as a break in transmission or drop in the level of a 2 kHz test tone below a designated threshold.

interruption
See:
interrupt; interruption.

interruption; break of service

Recs. E.800, M.60

Temporary inability of a service to be provided persisting for more than a given time duration, characterized by a change beyond given limits in at least one parameter essential for service.

Note 1 – An interruption of a service may be caused by disabled states of the items used for the service or by external reasons such as high service demands.

Note 2 – An interruption of a service is generally an interruption of the transmission, which may be characterized by an abnormal value of power level, signal distortion, error rate, etc.

interruption control

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A system which monitors a pilot for interruptions on FDM systems and which transmits an indication to the switching equipment.

interruption duration

Rec. E.800

The *time duration* of an *interruption.*

interruption of a call in progress service

Suppl. No. 1 (II.2)

Intervention by an operator, interrupting a call in progress, in order to allow another incoming call to be offered.

intersection

Rec. T.411

The common area of two or more layout objects that overlap each other partially or fully on the presentation medium.

intersystem crosstalk

Recs. G.960, I.430

Crosstalk between lines sharing the same cable and on which different types of transmission systems are used on each line.

inter-telex SFU messages (IM)

Rec. U.82

Messages transferred between telex SFUs to complete the function of message transfer.

interworking

Rec. F.710

The relationship between systems, networks, terminals and their components, primarily refers to signalling, protocols (lower levels) and other technical means for provisioning services.

interworking

Rec. I.510

Within the scope of the I.500-Series of Recommendations, the term *interworking* is used to express interactions between networks, between end systems, or between parts thereof, with the aim of providing a functional entity capable of supporting an end-to-end communication. The interactions required to provide a functional entity rely on functions and on the means to select these functions.

interworking

Rec. Q.602

Interworking is defined to be:

- the controlled transfer of signalling information across the interface between different signalling systems where the significance of the transferred information is identical or where the significance is translated in a defined number, and
- the performance of appropriate switching procedures in association with the transfer.

interworking

See:

interworking between Teletex and other services.

interworking between networks

U.140

The means whereby terminals connected to a telecommunication network may communicate with terminals of another network.

interworking between Teletex and other services

Recs. F.200, F.201, Suppl. No. 1 (II.4)

The facility of sending and receiving information between a teletex equipment and an equipment/user of another service, such as telex, interpersonal messaging, Videotex, etc.

interworking by call control mapping

Rec. X.300

Technique of interworking where all call control (including addresing) information carried by the protocol(s) used for switching by the one subnetwork is mapped into the call control (including address) information carried by the protocol(s) used for switching by the other subnetwork.

interworking by port access

Rec. X.300

Technique of interworking where all call control (including addressing) information carried by the protocol(s) used for switching by the one subnetwork is used to select/address the interworking point. Subsequently, a convergence protocol is used over this subnetwork carrying all call control (including addressing) information that will be mapped into the addressing information carried by the protocols used for switching by the other subnetwork.

interworking function

Rec. X.300

The interworking functions (IWFs) considered in this Recommendation are functional entities involved for the establishment of a call between two end systems, whenever two networks are involved between those two end systems.

Note 1 – The description of IWFs in examples given in furthersections of this Recommendation does not make any assumption on the implementation of such functions: either within one network involved, or as a separate piece of equipment. Also several IWFs between two networks may be combined into one single piece of equipment.

Note 2 – An IWF may be involved in cases where two dissimilar networks are involved, or in cases where two networks of the same type are involved.

Note 3 – An IWF only acts for the transparent transfer of information (independent of any application).

Note 4 – An access unit (AU), packet handler (PH) or ISDN terminal adapter may also be considered an IWF.

In some cases of interconnection between two networks, several IWFs may be involved. However, for a given communication between two end systems, only one fo those IWFs is involved.

Figure 3-4/X.300 illustrates an example of interworking between two network by means of IWFs. There may be other cases, where more than two networks would be involved, possibly with more IWFs.

interworking functions (IWFs)

Rec. I.510

The functions referred to in the Interworking definition above, which include the conversion of physical and electrical states and the mapping of protocols. An IWF may be implemented in the ISDN, in the other network(s), at the user's premises, through a third-party service provider, or in some combination of these.

interworking in the Teletex service between different networks

Rec. F.200

The facility of making calls from a teletex equipment served by one network to a Teletex equipment served by a different (and possibly a different type of) network.

interworking indicator

Rec. Q.762

Information sent in either direction indicating whether or not Signalling System No. 7 is used in all parts of the network connection.

intraband transmission

Rec. R.140

A carrier telegraphy in a narrow band of frequencies appropriated inside the frequency band of a telephone channel to permit simultaneously a telephone transmission and a transmission by a discretely-timed signal.

intrasystem crosstalk

Recs. G.960, I.430

Crosstalk between lines sharing the same cable on which the same type of transmission system is used on each line.

intrasystem crosstalk

Rec. G.961

Crosstalk noise in general results due to finite coupling loss between pairs sharing the same cable, especially those pairs that are physically adjacent. Finite coupling loss between pairs causes a vestige of the signal flowing on one DLL (disturber DLL) to be coupled into an adjacent DLL (disturbed DLL). This vestige is known as crosstalk noise. Near-end crosstalk (NEXT) is assumed to be the dominant type of crosstalk. Intrasystem NEXT or self NEXT results when all pairs interfering with each other in a cable carry the same digital transmission system. Intersystem NEXT results when pairs carrying different digital transmission systems interfere with each other. Definition of intersystem NEXT is not part of Recommendation G.961.

intrinsic ... ; inherent ...

Suppl. No. 6 (II.3)

Value of a *measure* determined when maintenance and operational conditions are assumed to be ideal.

intrusion tone

Rec. E.182

A tone advising participants during a call that the privacy of the conversation has been breached, e.g. by the intervention of an operator.

invalid presentation-protocol-data-unit

Rec. X.226

A presentation-protocol-data-unit which does not comply with the requirements of Recommendation X.226 for structure and encoding.

invalid SPDU

Rec. X.225

An SPDU which does not comply with the requirements of Recommendation X.225 with respect to structure and encoding.

invalid TPDU

Rec. X.224

A TPDU which does not comply with the requirements of Recommendation X.224 for structure and encoding.

inverse video

Rec. Z.341

A *video attribute* by which information can be displayed by inverting the image of the characters, such as going from light characters on a dark background to dark characters on a light background.

invoke

Rec. Q.9

A type of component (in a protocol) used to specify particular operations to be carried out between groups of messages having similar functions.

invoke

See:
to invoke.

invoker

See:
invoking-application-entity; invoker.

invoking-application-entity; invoker

Rec. X.219

The application-entity that invokes the remote operation.

I/O device

Rec. Z.341

Device for entering or receiving data to or from a *system.* Can be controlled manually for entering or receiving data.

I/O devices

See:
input/output devices; I/O devices.

IP-message

Recs. F.400, X.400

The content of a message in the IPM Service.

IPMS user answerback

Rec. U.204

In the case of one-stage selection, the answerback that is returned to the telex network on receipt of a WRU signal and which uniquely identifies the registered IPM user to the telex network.

irregularity reflection coefficient

Rec. G.601

The reflection coefficient measured at one end of a section of a transmission medium, for a specified mode of propagation, under conditions allowing for the elimination of the effects of reflections other than those due to irregularities inherent in the section concerned.

ISDN access capability

See:
access capability; ISDN access capability.

ISDN access indicator

Rec. Q.762

Information sent in either direction indicating whether or not the access signalling protocol is ISDN.

ISDN address

Rec. F.500

An attribute type which specifies an ISDN address associated with an object.

ISDN basic access

See:
basic access; ISDN basic access.

ISDN connection

Rec. I.112

A connection that is established through an ISDN between specified ISDN interfaces.

ISDN connection attribute

See:

connection attribute; ISDN connection attribute.

ISDN connection element

See:

connection element; ISDN connection element.

ISDN customer access

Recs. G.960, I.430

The equipment providing the concatenation of all functional groups relevant to an individual or group of related access connection elements (i.e. customer equipment and access connection element).

Note – This term should not imply or restrict ownership or responsibility for providing equipment.

ISDN local exchange

See:

local exchange; ISDN local exchange.

ISDN subscriber access (deprecated)

See:

ISDN customer access.

ISDN user-network interface structure

See:

interface structure; ISDN user-network interface structure.

ISDN user part (ISDN-UP)

Glos. (VI.7, VI.8, VI.9)

A protocol of Signalling System No. 7 which provides the signalling functions necessary to basic bearer services and supplementary services for voice and non-voice applications in the ISDN.

ISDN user part (ISUP)

Rec. Q.1100

This encompasses the signalling functions in SS No. 7 required to provide switched services and user facilities for voice and non-voice applications in an ISDN (see Recommendation Q.761).

ISDN user part indicator

Rec. Q.762

Information sent in either direction to indicate that the ISDN user part is used in all preceding parts of the network connection. When sent in the backward direction, the preceding parts are those towards the called party.

ISDN user preference indicator

Rec. Q.762

Information sent in the forward direction indicating whether or not the ISDN user part is required or preferred in all parts of the network connection.

isochronous

Rec. G.701

The essential characteristic of a time-scale or a signal such that the time intervals between consecutive significant instants either have the same duration or durations that are integral multiples of the shortest duration.

Note – In practice, variations in the time intervals are constrained within specified limits.

isochronous

Rec. R.140

Pertaining to a signal or a time-varying phenomenon characterized by significant instants separated by time intervals having a duration theoretically equal to the duration of a unit interval or to an integral multiple of this duration.

item ; entity

Rec. E.800, Suppl. No. 6 (II.3)

Any part, device, subsystem, functional unit, equipment or system that can be individually considered.

Note 1 – An *item* may consist of hardware, software or both, and may also include people, e.g. operators in a telephone operator system.

Note 2 – In French, the term *entité* replaces the term *dispositif* previously used in this meaning, because the term *dispositif* is also the common equivalent for the English term "device".

Note 3 – In French, the term *individu* is used mainly in statistics.

item description

Rec. Z.341

A brief description of the nature of the item in a *menu.*

item identifier

Rec. T.411

A string of characters preceding the first line of characters in a content portion that is used to identify the subsequent text.

item selection procedure

Rec. Z.341

A procedure to select an item out of a list of items on a *menu output.*

itemization

Rec. T.416

This attribute specifies the placement of an item identifier which shall begin the basic component (see Rec. T.416, § 5.2.9).

items

Rec. X.208

Named sequences of characters from the ASN.1 character set, specified in Recommendation X.208, § 8, which are used to form the ASN.1 notation.

iteration

Rec. Z.341

A *symbol* of the *decomposition meta-language* which indicates that a repetitive use of one or more *information entities* is possible.

J

jitter

Rec. G.810

Short-term variations of the significant instants of a digital signal from their reference positions in time.

jitter

Rec. G.701

Short-term non-cumulative variations of the significant instants of a digital signal from their ideal positions in time.

job

Rec. Z.332

A discrete administrative activity within a telecommunications business which is designated as a part of the overall plan for running the business and characterized by man-machine communication and/or manual actions.

job

Rec. Z.341

A discrete administrative activity within a telecommunications business which is designated as a part of the overall plan for running the business and characterized by *man-machine communication.*

job area

Rec. Z.341

A collection of jobs particular to a given *functional area,* e.g. subscriber line maintenance, trunk line maintenance, call routing administration, etc.

judder (longitudinal)

Rec. T.0

Effect due to the irregular rotation of the drum or helix causing, on the reproduced picture, slight waviness or breaks in lines that are regular on the original document.

judder (transverse)

Rec. T.0

Effect due to irregularity of the scanning pitch resulting in concurrent overlapping and underlapping in the reproduced picture.

junctor (in the crossbar system)

Rec. Q.9

In crossbar systems, a junctor is a circuit extending between frames of a switching unit and terminating in a switching device on each frame.

justifiable digit time-slot

Rec. G.701

A digit time-slot that is provided for the purpose of justification and which may contain either an information digit or a justifying digit.

justification

Rec. G.701

The process of changing the digit rate of a digital signal in a controlled manner so that it can accord with a digit rate different from its own inherent rate, usually without loss of information.

justification rate

Rec. G.701

The rate at which justifying digits are inserted, or at which information digits are transmitted by other means.

justification ratio

Rec. G.701

The ratio of the actual justification rate to the maximum justification rate.

justification service digit

Rec. G.701

A digit that transmits information concerning the status of a justifiable digit time-slot.

justified

Rec. T.411

The result of a layout or imaging process that varies the width of the space character and/or the inter-character space to produce a simultaneously start aligned and end-aligned presentation of the text.

justifying digit

Rec. G.701

A digit inserted in a justifiable digit time-slot when that time slot is not required for an information digit.

K

kern

Rec. T.411

The part of a character which extends beyond its position point or escapement point.

kerning offset

Rec. T.416

This attribute specifies the kerning offset as a pair of integer values in SMUs (see Rec. T.416, § 5.1.6). The parameter "start edge offset" specifies the distance from the edge of the basic layout object to the start edge of the positioning area. The parameter "end edge offset" specifies the distance from the edge of the basic layout object to the end edge of the positioning area.

key; tag; label

Rec. Q.9

One or more characters within or attached to a set of data, that contains information about the set, including its identification.

key parameter

Rec. Z.341

A term used in data base techniques to uniquely identify a data record.

keyboard perforator

Rec. S.140

A perforator in which the punching is controlled by an alphanumeric keyboard.

keyboard selection

U.140

In automatic telegraph switching, the use of telegraph alphabet signals sent from the teleprinter's keyboard or from an automatic equipment to form the selection sequence.

keyboard transmitter

Rec. S.140

A telegraph transmitter controlled by an alphanumeric keyboard.

keyed numeral

Rec. Z.341

A *numeral* in a *numbering system* based on keypad *input*, represented by the characters 0 (zero), 1, 2, 3, 4, 5, 6, 7, 8, 9, *, #, A, B, C, D, optionally preceded by K' (K apostrophe).

keyword

Rec. Z.100

A *keyword* is a reserved *lexical unit* in the *concrete textual syntax.*

knowledge information

Rec. F.500

An attribute type which specifies a human-readable accumulated description of knowledge mastered by a specific DSA.

knowledge information

Rec. X.518

The information which a particular DSA has about the entries it holds and how to locate other entries in the directory.

knowledge reference

Rec. X.518

Knowledge which associates, either directly or indirectly, a DIT entry with the DSA in which it is located.

knowledge tree

Rec. X.518

The conceptual model of the knowledge information that a DSA holds to enable it to perform distributed name resolution.

KP signal (Signalling System No. 5)

See:

start-of-pulsing signal (sent in the forward direction; KP signal (Signalling System No. 5.

KP signal; start-of-pulsing signal (sent in the forward direction)

Rec. Q.310

This register signal is sent subsequent to the recognition of a start-dialling signal and is used to prepare the incoming multifrequency register for the receipt of subsequent interregister signals.

L

label

Gloss. (VI.3)

The 11-bit binary code within a signal message used to identify the particular speech circuit with which the message is associated. The label is subdivided into a band number and a circuit number.

label

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Information within a signalling message used to identify typically the particular circuit, call or management transaction to which the message is related.

label

Rec. Z.100

A *label* is a *name* followed by a colon and is used in the *concrete textual syntax* for connection purposes.

label

See:

key; tag; label.

labelled channel

Rec. I.113

A temporally-ordered collection of all block payloads having a common label value.

labelled deterministic channel

Rec. I.113

A labelled channel that, in each successive interval of specified constant duration, contains on the average a constant number of blocks.

labelled interface structure

Rec. I.113

An interface structure in which all services and signalling are provided by labelled channels. A labelled interface structure can be accommodated within a framed interface or a self-delineating labelled interface.

labelled multiplexing

Rec. I.113

The multiplexing of labelled channels by concatenating the blocks of the different channels.

labelled statistical channel

Rec. I.113

A labelled channel in which the payload of the successive blocks of the channel is random and/or the block durations are random.

laboratory test

Suppl. No. 6 (II.3)

A *compliance test* or a *determination test* made under prescribed and controlled conditions which may or may not simulate field conditions.

land earth station

Rec. X.350

An *eart station* in the *fixed-satellite service* or, in some cases, in the *mobile-satellite service,* located at a specified fixed point or within a specified area on land to provide a *feeder link* for the (Article 1, § 4.10A of the Radio Regulations, as modified by MOB-WARC 1987).

land station charge

Rec. D.90

The charge relating to the use of facilities provided by the land station in the maritime mobile services or by the earth station in the Maritime Mobile-Satellite Service. In the Maritime Mobile-Satellite Service, this charge shall include all space segment costs. An Administration may also choose to present its total land station charge in its component parts.

landline charge

Rec. D.90

The charge relating to transmission over the general network of telecommunication channels, national and international.

language digit

See:

language or discriminating digit (sent in the forward direction.

language or discriminating digit (sent in the forward direction)

Rec. Q.400

A numerical signal occupying a predetermined position in the sequence of address signals indicating:

- in semi-automatic working, the service language to be used in the incoming international exchange by the incoming, delay and assistance operators when they come in the circuit (language digit);
- the automatic working or any other special characteristic of the call (discriminating digit).

late distortion

Rec. R.140

Telegraph distortion characterized by the fact that a significant instant appears later than the corresponding ideal instant.

latent fault

Suppl. No. 6 (II.3)

An existing *fault* that has not yet been recognized.

layer

Rec. I.112

A conceptual region that embodies one or more functions between an upper and a lower logical boundary within a hierarchy of functions.

Note – The Open Systems Interconnection (OSI) reference model has seven layers.

layer

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A group of one or more entities contained within an upper and lower logical boundary. Layer (N) has boundaries to the layer ($N + 1$) and to the layer ($N - 1$).

layer 4 – 7 protocol

Rec. I.140

These attributes characterize the protocol on the user information transfer channel at a given access point or reference point.

layer interface

Rec. I.112

The interface between adjacent layers of hierarchy of layers.

layer interface

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The boundary between two adjacent layers of the model.

layer-management

Rec. X.200

Functions related to the management of the (N)-layer partly performed in the (N)-layer itself according to the (N)-protocol of the layer (activities such as activation and error control) and partly performed as a subset of systems-management.

layer service

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A capability of the (N) layer and the layers beneath it, which is provided to ($N + 1$) entities, at the boundary between the (N) layer and the ($N + 1$) layer.

(layer) service

Rec. Q.9

A set of functions offered or performed by an entity at one layer in a protocol on behalf of an entity at another layer.

layer service element

Rec. Q.9

An indivisible component of the layer service made visible to the service user via layer service primitives.

layer service elements

Glos. (VI.7, VI.8, VI.9)

An indivisible component of the layer service made visible to the service user via layer primitives.

layer service primitives

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A means for specifying in detail the adjacent layer interactions.

layout category

Rec. T.411

The association of basic logical objects with lowest level frames such that the content of these basic logical objects is placed in the appropriate frames.

layout category

Rec. T.412

This attribute specifies the name of the layout category of the logical object.

A layout category is a name which may be associated with basic logical component descriptions and with frame component descriptions in order to specify and restrict the layout objects into which the content associated with basic logical objects may be placed.

layout object

Rec. T.411

An element of the specific layout structure of a document, for example, page, block.

layout object class

Rec. T.411

An element of the generic layout structure from which a set of layout objects with common characteristics may be derived, for example, pages with common headers and footers.

layout object class

Rec. T.412

This attribute specifies the class of a layout object into which the content associated with this logical object and all its subordinates is to be laid out. The content must be laid out within a single instance of a layout object derived from the referenced layout object class, and no other part of the content of the document may be laid out within the same layout object.

This attribute may only be used to specify layout object classes of object type document layout root, page set, page or frame.

layout option

Rec. Z.341

A combination of *format effectors* and/or *graphic characters* used to bound elements of the *output* in a clear and readable form.

layout path

Rec. T.412

In the case of lowest-level frames this attribute specifies the direction of progression of the allocation of any immediately subordinate blocks during the layout process, relative to the horizontal direction.

In the case of higher-level frames this attribute specifies the direction of progression of the allocation of any immediately subordinate frames with variable positions during the layout process, relative to the horizontal direction.

This attribute has no meaning in the case of immediately subordinate frames or blocks with fixed positions.

layout process

Rec. T.411

The stage of a document processing that consists of the document layout process and the content layout process.

Note – This is also referred to as formatting.

layout stream

Rec. T.411

A set of basic logical objects pertaining to the same layout category.

layout structure

Rec. T.411

1) The result of dividing and subdividing the content of a document into increasingly smaller parts, on the basis of the presentation, for example, into pages, blocks.

2) All layout objects and associated content portions forming the layout hierarchy of a document.

layout style

Rec. T.411

A constituent of the document, referred to/from a logical component, that guides the creation of a specific layout structure.

layout style

Rec. T.412

This attribute is used to establish a relationship between a logical component and a layout style.

layout style identifier

Rec. T.412

This attribute identifies a layout style uniquely within the context of the document.

leading edge

Rec. T.411

The edge of a frame or block that is orthogonal to the direction of the layout path and that is met first, from the outside of the frame or the block, in the opposite direction of the layout path.

leak time

Rec. G.165

The interval between the instant a test signal is removed from the receive-in port of a fully-converged echo canceller and the instant the echo path model in the echo canceller changes such that, when a test signal is reapplied to R_{in} with the convergence circuitry inhibited, the returned echo is at a defined level.

This definition refers to echo cancellers employing, for example, leaky integrators in the convergence circuitry.

learning process

Suppl. No. 6 (II.3)

Growth in experience and familiarity by personnel with design or constructional techniques, which reduces the risk of future *mistakes.*

lease

Rec. D.000

An agreement whereby a certain facility is made available by an Administration or Administrations to a customer or customers for his or their exclusive use.

leased circuit data transmission service

*Series X**

A service whereby a circuit (or circuits) of the public network is (are) made available to a user or group of users for his (or their) exclusive use.

Note – Where only two data circuit terminating equipments are involved, it is known as a point-to-point facility and where more than two are involved, it is known as a multipoint facility.

leased supergroup link

See:
international leased group or supergroup link.

lecture call service

Suppl. No. 1 (II.2)

A lecture call is an established connection between one caller and two or more parties, in which the speech path is used in a unidirectional way from the caller to the other connected parties. The call may be set up either by an operator, or by an automatic device programmed by the caller from his own telephone.

left hand edge

Rec. T.411

The edge of a frame or block that is parallel to the direction of the layout path and that is met first, from the outside of the frame or the block, in the direction at an angle of 270° counterclockwise relative to the direction of the layout path.

length indicator (LI)

Glos. (VI.7, VI.8, VI.9)

A six-bit field which differentiates between message signal units, link status signal units and fill-in signal units and in the case that its binary value is less than 63 indicates the length of a signal unit.

length indicator (LI)

Rec. T.62

Represents the length in octets of an associated field or group of fields.

length indicator (LI)

Rec. X.225

An indicator that represents the length of an associated parameter field.

length octets

Rec. X.209

Part of a data value encoding following the identifier octets which is used to determine the end of the encoding.

letter

Recs. Q.9, Z.341

A *character* of the *character set* representing the alphabet, listed in Table 1/Z.314, columns 4, 5, 6 and 7 excluding table positions 5/15 and 7/15.

letter-shift signal

Rec. S.140

The signal which conditions a telegraph receiver to translate all signals received as primary *characters* or functions or *letters case.*

letters case

Rec. S.140

One of the cases into which the *characters*, predominantly letter characters and functions of a *telegraph code* with *case shift* are grouped.

letters shift

Rec. S.140

A *case shift* resulting in a *translation* of signals as primary *characters* predominantly letter characters, or functions of *letters case.*

level (deprecated)
See:
layer.

level
See:
level of abstraction; level.

level of abstraction; level

Rec. Z.100

A *level of abstraction* is one of the levels of a *block tree diagram.* A description of a *system* is one *block* at the highest *level of abstraction* and is shown as a single *block* at the top of a *block tree diagram.*

level of maintenance

Suppl. No. 6 (II.3)

The *maintenance action* to be carried out at a specified *indenture level.*

Note – Examples of a *maintenance action* are replacing a component, a printed circuit board, a subsystem, etc.

lexical rules

Rec. Z.100

Lexical rules are rules which define how *lexical units* are built from characters.

lexical unit

Rec. Z.100

Lexical units are the terminal *symbols* of the *concrete textual syntax.*

limit

Rec. X.413

A component in the selector parameter which identifies the maximum number of selected entries to be returned in the result of an abstract-operation.

limit test

See:

test; limit test.

limits for maintenance purposes

Recs. G.100, G.102

In service, the performance of an item or assembly of items may deteriorate for various reasons: aging, excessive loading, excessive environmental conditions, operations errors, components failures, etc. and there is an economic penalty in service costs if such deterioration is always to be kept negligibly small. Therefore design objectives are chosen to confer as great a margin as possible to assure a satisfactory in-service performance.

With transmission impairments, there is often no value which represents a clear boundary between "tolerable" and "unusable" performance and in practice a range of impairments in excess of those provided by design objectives will give satisfactory service to customers. This is the case for telephony but for other services may be different.

Nevertheless it is often expedient to define a particular value of impairment above which the item is deemed to be "unusable" and at which the item will be withdrawn from service at the first opportunity so that remedial action can be taken to restore the performance to comply with some defined limit (e.g. limit for prompt maintenance action).

It is often useful to define a performance limit at which attention is alerted but (perhaps) no action is taken immediately (e.g. limit for deferred maintenance action).

These limits are usually independent of the type of service carried by that particular entity. However, it is sometimes necessary to define a performance limit for a particular type of service, beyond which the customer is no longer offered a satisfactory service quality. This limit may differ for various services; some may coincide with a prompt maintenance limit (service limit).

These limits (and others, if necessary) would fall above the design objective. These limits are illustrated in Figure 1/G.102 and a generic title for them is "maintenance limits".

line

Recs. G.960, I.430

The transmission medium between line terminations. The term may be qualified by the type of medium used, for example:

- metallic line: a pair of metallic (usually copper) wires,
- optical line: one optical fibre (bi-directional transmission), or one pair of fibres (uni-directional transmission).

line access points

Recs. M.60, M.565

Points used by the CCITT to define the limits of an international line, and from which measurements are made. Only one "line access point" exists at each end of an international line. The precise location of each such point depends on the Administration concerned.

line activation

Recs. G.960, I.430

The function which requires the digital line transmission system to be activated but which may also activate the user-network interface.

line box

Rec. T.411

A rectangular area within which a sequence of character images are positioned.

line code

Rec. G.701

A code chosen to suit the characteristics of a channel, that defines the equivalence between sets of digits presented for transmission and the corresponding sequence of signal elements transmitted over that channel.

line concentrator

U.140

A switching equipment remotely located in a local line network and enabling the traffic between the subscriber serving exchange and a number of subscribers to be carried by a smaller number of lines.

Note – A compatible equipment must normally be provided at the subscriber serving exchange.

line concentrator; stand-alone concentrator

Rec. Q.9

A switching device which concentrates traffic from a number of circuits or subscribers' lines onto a smaller number of circuits to a parent local exchange, where a similar switching device deconcentrates the traffic to the original number of lines. In the case of subscribers' lines, the correspondence of the lines before concentration and after deconcentration must be maintained. The system is both-way working, i.e., traffic from the exchange is concentrated onto the same circuits and deconcentrated to the subscribers as well. (See Figure 1/Q.9.)

line digit rate

Rec. G.701

The number of signal elements of the line signal transmitted per unit time.

Note 1 – The baud is usually used to quantify this, one baud being equal to one single element per second.

Note 2 – Modulation rate is the term used in telegraphy and data communication; it is the reciprocal of the duration of the unit interval.

line group

Recs. Z.334, Z.341

A line group is a group of lines of a multi-line subscriber with some common line characteristics, e.g. incoming, outgoing, bothway.

line home position

Rec. T.411

The point within a line box that is used for positioning that line box.

line hunting

Recs. I.250, Q.82

A supplementary service which enables incoming calls to a specific ISDN number to be distributed over a group of interfaces.

line identification by the network

Suppl. No. 2 (II.4)

Transmission by the network, in response to a request from either of two connected parties, of an appropriate line or address identification.

line layout table

Rec. T.416

This attribute specifies the positions and types of a sequence of tabulation stops (see Rec. T.416, § 5.2.3). The value of the parameter "tab position" specifies the distance in SMUs, in the direction of the character path, from the start edge of the positioning area to the tabulation stop.

line link using coaxial pairs radio-relay link

See:

line link (using symmetric pairs, coaxial pairs, radio-relay link, etc.).

line link (using symmetric pairs, coaxial pairs, etc.)

Rec. G.211

A transmission path, however provided, together with all the associated equipment, such that the bandwidth available, while not having any specific limits, is effectively the same throughout the length of the link.

Within the link there are no direct filtration points nor any through-connection points for groups, supergroups, etc., and the ends of the link are the points at which the band of line frequencies is changed in some way or other. See Figures 2/G.211 and 3/G.211

line link (using symmetric pairs, coaxial pairs, radio-relay link, etc.)

Rec. M.300

A transmission path, however provided, together with all the associated equipment, such that the bandwidth available, while not having any specific limits, is effectively the same throughout the length of the link.

Within the link there are no direct filtration points nor any through-connection points for groups, supergroups, etc., and the ends of the link are the points at which the band of line frequencies is changed in some way or other.

See Figures 2/M.300 to 4/M.300.

line of maintenance

See:

maintenance echelon; line of maintenance.

line-only activation

Rec. G.960

The function which requires the activation of only the digital line transmission system and does not activate the user-network interface.

line-only activation

Rec. I.430

The function which requires the activation of only the digital line transmission system and does not activate the user-network interface.

line-out-of-service signal

Rec. Q.254

A signal sent in the backward direction indicating that the called party's line is out-of-service or faulty.

line progression

Rec. T.411

1) The direction of progression of successive line boxes within a basic layout object (character content architectures see Recommendation T.416).

2) the direction of progression of successive lines of pels within a basic layout object (raster graphics content architectures see Recommendation T.417).

line progression

Rec. T.416

This attribute specifies the line progression (see Rec. T.416, § 5.1.2).

line progression

Rec. T.417

This attribute specifies the direction of the progression of successive lines, relative to the pel path.

line signalling

Rec. Q.9

A signalling method in which signals are transmitted between equipments which terminate and continuously monitor part or all of the traffic circuit.

line spacing

Rec. T.416

This attribute only applies when proportional line spacing is not to be done by the content layout process. In this case, it specifies the line spacing which applies at the beginning of the basic component (see Rec. T.416, § 5.3).

line termination (LT)

Recs. G.960, I.430

The functional group containing at least the transmit and receive functions terminating one end of a digital transmission system.

line termination (LT)

Rec. Q.9

Group or functional block containing at least the transmit and receive functions terminating one end of a digital transmission system. See Figure 2/Q.9.

line terminator

Rec. T.411

A control function or combination of control functions that indicates the end of a line or the end of a character sequence.

line-up period

Rec. N.4

The period during which the Administrations line up the international sound-programme link before handing it over to the broadcasting organizations.

line-up period

Rec. N.54

The period during which the telecommunication Administrations line up the international television link before handing it over to the broadcasting organizations.

See Figure 1/N.54.

linear analogue control

Rec. G.701

Analogue control in which the clock control signal is proportional to the phase difference between clocks, at least over a limited range.

lines spacing

Rec. T.411

1) The distance between two adjacent reference lines within a basic layout object (character content architectures see Recommendation T.416).

2) The distance between two adjacent lines of pels within a basic layout object (raster graphics content architectures see Recommendation T.417).

link

Rec. Q.9

A telecommunication path with specified characteristics between two points.

Note – The nature of the specified characteristics may be added in the form of a qualifier, e.g., digital link, co-axial link, radio link.

link

See:
link; international link.

link (in the crossbar system)

Rec. Q.9

A link is a circuit extending between the primary and secondary selectors of a selection stage.

link (in programming)

Rec. Q.9

A part of a program that passes control and parameters between separate portions of the program.

link

See:
to link.

link-by-link signalling

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure for the exchange of signalling information directly between two signalling points that are either directly connected or via signalling transfer points.

link-by-link signalling

Rec. Q.9

A signalling method in which signals are transmitted one link at a time in a multi-link connection and requiring processing at each intermediate switching point for subsequent transmission.

link state control (LSC)

Glos. (VI.7, VI.8, VI.9)

Coordinates functions of the signalling link including signal unit delimitation, signal unit alignment, error detection, error correction, initial alignment, signalling link error monitoring and flow control.

link status signal unit (LSSU)

Glos. (VI.7, VI.8, VI.9)

A signal unit which contains status information about the signalling link in which it is transmitted.

linked operation

Glos. (VI.7, VI.8, VI.9)

An operation invoked from one end of a dialogue that is linked to another operation previously invoked by the other end.

linked-operations

Rec. X.219

A set of operations formed by one parent-operation and one or more child-operations.

lip plane

Recs. P.10, P.51

Outer plane of the lip ring.

lip ring

Rec. P.10

Circular ring of thin rigid rod, used for localizing the equivalent lip position of artificial mouths.

lip ring

Rec. P.51

Circular ring of thin rigid rod, having a diameter of 25 mm and less than 2 mm thick. It shall be constructed of non-magnetic material and be solidly fixed to the case of the artificial mouth. The lip ring defines both the reference axis of the mouth and the mouth reference point.

Note – The provision of the lip ring for locating the lip planes and the reference axis is not mandatory. However, when not provided, adequate markings or other suitable geometric reference shall be alternatively available.

list

Rec. F.500

An operation in the directory system to obtain a list of immediate subordinates of an explicitly identified entry. Under some circumstances, the list returned may be incomplete.

Note – This directory system operation is considered to be an optional user facility in the service context.

list abstract-operation

Rec. X.413

An abstract-operation which allows a selection of entries from an information-base and requested attribute information to be returned for those entries.

listed

Rec. X.413

An entry-status value.

listener echo; receive end echo

Rec. G.100

Echo produced by double reflected signals and disturbing the listener, receiving voice-band data equipment, etc.

Note 1 – The term "received end echo" is a term preferred by some Administrations.

Note 2 – With small delay against the wanted signal (less than about 3 ms) listener echo may cause *hollowness* in telephony. In transmission of voice-band data signals, listener echo may cause bit errors and, in any case, reduces the margin against other disturbances.

listener echo loss; receive echo loss

Rec. G.100

Degree of attenuation of the double reflected signal with respect to the wanted signal. In terms of the absolute losses of both signals, the listener echo loss is (see Figure 1/G.100): $LE = L_2 - L_1$.

Note – For practical purposes the listener echo loss is equal to the *open-loop loss* (valid if the latter exceeds 8 dB). The listener echo loss characterizes the degree of disturbance by *hollowness*, as well as the disturbing effect on voice-band data modem receivers.

listener sidetone rating (LSTR)

Rec. P.10

The loudness of a diffuse room noise source as heard at the subscriber's (earphone) ear via the electric sidetone path in the telephone instrument, compared with the loudness of the intermediate reference system (IRS) overall, in which the comparison is made incorporating a speech signal heard via the human sidetone path (L_{MEHS}) as a masking threshold.

literal

Rec. Z.100

A *literal* denotes a *value.*

load

Rec. Q.543

The total number of call attempts presented to an exchange during a given interval of time (i.e. offered load).

load capacity

Rec. G.701

The level of a sinusoidal signal whose positive and negative peaks coincide with the virtual decision values.

load carrying capacity

Rec. P.84

The load carrying capacity is defined as the maximum offered speech load plus "overhead" load (see Recommendation P.84, § 1.2.19) that the DCME channels can carry without forced loss of any speech samples. DCME overload is defined to occur when the instantaneously offered load exceeds the carrying capacity of the DCME bearer channels.

load level

See:
absolute zero power level (dBm0); load level.

load sharing (general)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A process by which signalling traffic is distributed over two or more signalling or message routes, to provide for traffic equalization or security.

load transfer

Gloss. (VI.3)

The transfer of signalling traffic from one signalling link to another.

load-transfer-acknowledgement signal

Rec. Q.255

A signal sent on a link in response to a load-transfer signal or to an emergency-load-transfer signal to indicate that the load-transfer will take place to that particular link.

load transfer signal

Rec. Q.255

A signal sent on a link to indicate that the error rate on that link has met the requirements of the *one-minute proving period* and that signalling traffic should be transferred to that particular link.

loading coil

Recs. G.960, I.430

A device used to modify the electric characteristics of a line to give relatively constant attenuation over the voice-frequency range, but which gives relatively high attenuation beyond that range.

local central office (deprecated)

See:

exchange; switching exchange; switching centre.

local circuit

See:

local (telephone) system; local.

local communication network (LCN)

Rec. M.30

The LCN is a communication network within a TMN which supports the DCF normally at the reference points q_1 and q_2.

local conductor

Rec. F.710

Who has the main function in TCS to direct locally the conference. A meeting conductor may be provided for each meeting location. Every meeting conductor is identified by a number.

local end (with its termination)

Rec. S.140

That part of a connection including the apparatus, lines, telegraph repeaters and any control units between the apparatus and the first, or last point in that connection where the transmission quality can be measured.

local exchange; ISDN local exchange

Recs. G.960, I.430

The exchange which, in addition to the switching function, contains the exchange termination for the ISDN customer accesses.

local exchange

Rec. Q.9

An exchange in which subscribers' lines terminate. (See Figure 1/Q.9.)

local exchange call request delay (originating outgoing and internal traffic connections)

Rec. Q.543

For ANALOGUE SUBSCRIBER LINES, call request delay is defined as the interval from the instant when the off-hook condition is recognizable at the subscriber line interface of the exchange until the exchange begins to apply dial tone to the line. The call request delay interval is assumed to correspond to the period at the beginning of a call attempt during which the exchange is unable to receive any call address information from the subscriber.

For DIGITAL SUBSCRIBER LINES using overlap sending, call request delay is defined as the interval from the instant at which the SETUP message has been received from the subscriber signalling system until the SETUP ACKNOWLEDGE message is pased back to the subscriber signalling system.

Note – In this case this parameter is equivalent to the user signalling acknowledgement delay (see Recommendation Q.543, § 2.4.1).

For DIGITAL SUBSCRIBER LINES using en-bloc sending, call request delay is defined as the interval from the instant at which the SETUP message is received from the subscriber signalling system until the call proceeding message is passed back to the subscriber signalling system.

local line

Recs. G.960, I.430

An individual line which is continuous between the line termination (LT) and the customer premises, passing through the exchange, main, distribution and installation cables.

local line distribution network

Recs. G.960, I.430

A network of cables and wires which are currently installed between a local exchange and customer premises.

local line network

Rec. P.10

All the *subscribers' telephone lines* and ancillary equipment provided to connect *subscribers* to their *local switching entity.*

local matter

Rec. X.224

A decision made by a system concerning its behaviour in the Transport Layer that is not subject to the requirements of this protocol.

local matter

Rec. X.225

A decision made by a system concerning its behaviour in the session layer that is not subject to the requirements of this protocol.

local matter

Rec. X.226

A decision made by a system concerning its behaviour in the presentation layer that is not subject to the requirements of Recommendation X.226.

local mode

Rec. F.200

That state of an equipment that permits operation of some of its functions independently of any network functions.

local node

Rec. G.810

A synchronous network node which interfaces directly with customer equipment.

local number

Rec. F.68

In national telex networks, when abridged call numbers are used for local or short-distance traffic, the abridged number is called the *local number.*

local postal attributes

Recs. F.400, X.400

Standard attributes of a post O/R address as a means to distinguish between places with the same name (e.g., by state name, county name, or geographical attribute) in a postal address.

local record

Rec. S.140

Display of a transmitted *message* made on a receiver associated with the transmitting apparatus.

local reference

Rec. Q.762

Information sent in the connection request, indicating the local reference allocated by the signalling connection control part to an end-to-end connection.

local reference

Glos. (VI.7, VI.8, VI.9)

A local number, unambiguously identifying an SCCP connection within one SCCP entity.

local reference number (source/destination)

Rec. Q.712

The "local reference number (source/destination)" parameter field uniquely identifies in a node a signalling connection. It is an internal working number chosen by each node independently from the destination node. At least one local reference number is to be found in any message exchanged on a signalling connection section.

Note – Remote reference number is used to reflect the local reference number at the remote end of a connection section.

local scope

Rec. F.500

A service control which restricts the scope of directory operations.

Note – The definition of local scope is itself a local matter, and may, for example, mean a limit within a single DSA or a single DMD.

local system

See:

local (telephone) system; local.

local telephone circuit

See:

local (telephone) system; local.

local (telephone) system ; local (telephone) circuit

Rec. P.10

The combination of *subscriber's station, subscriber's line* and *feeding bridge* if present.

Note 1 – This term is used in the context of *transmission* planning and *performance.*

Note 2 – In CCITT English texts, the term "local (telephone) system" is preferred.

local telex number

U.140

A sequence of digits shorter than the national subscriber's telex number used to connect a called subscriber situated in a restricted geographical area.

local test methods

Rec. X.290

Abstract test methods in which the PCOs are directly at the layer boundaries of the IUT.

local-title

Rec. X.200

A title which is unique within a title-domain.

local variable

Rec. X.225

A local variable within the SPM which is used as a means of clarifying the effects of certain actions and clarifying the conditions under which certain actions are permitted.

locality name

Rec. F.500

An attribute type which specifies a locality. When used as a component of a directory name, it identifies a geographical area or locality in which the named object is physically located or with which it is associated in some other important way.

localization of faults

See:
fault localization; localization of faults.

location

Rec. Q.762

Information sent in either direction indicating where an event (e.g. release) was generated.

location area

Recs. Q.9, Q.1001

The location area is defined as an area in which a mobile station may move freely without updating the location register. A location area may comprise several cells.

location area identification

Rec. Q.1003

Consists of three parts: MCC, MNC and LAC, where MCC is the mobile country code and MNC is the mobile network code of Recommendation E.212 and LAC is a location area code identifying a location area within a PLMN. MCC and MNC are composed of numerical characters (0 through 9). LAC may have a variable length and may be coded using full haxadecimal representation.

The overall length of the location area identification is for further study.

The location area identification is temporary subscriber data.

location information

Rec. Q.1001

The location register should as a minimum contain the following information about a mobile station:

- international mobile station identity;
- actual location of the mobile station (e.g. PLMN, MSC area, location area, as required).

location register

Rec. Q.1001

To establish a call to a mobile station the network must know where this mobile station is located. This information is stored in a function named location register. A mobile station is registered at one location register which functions as its home centre for charging and billing purposes and for administering its subscriber parameters.

location register

Rec. Q.9

A network data base used for handling of calls in a PLMN.

logical channel

*Series X**

In packet mode operation, a means of two-way simultaneous transmission across a *data link*, comprising associated send and receive channels.

Note 1 – A number of logical channels may be derived from a *data link* by packet interleaving.

Note 2 – Several logical channels may exist on the same *data link*.

logical loopback

Recs. G.960, I.430, M.60, M.125

A loopback which acts selectively on certain information within a specified channel or channels and may result in some specified modification of the looped information. Logical loopbacks may be defined to apply at any layer, depending on the detailed maintenance procedures specified.

logical object

Rec. T.411

An element of the generic logical structure of a document which may have a meaning that is significant to the application or user, for example, chapter, section, paragraph.

logical object class

Rec. T.411

An element of the generic logical structure from which a set of logical objects with common characteristics may be derived, for example, composite logical objects representing sections with a common internal structure.

logical signalling channel

Rec. I.113

A logical channel for signalling information with a defined maximum capacity, which is contained within an information channel or a physical signalling channel.

logical source

Rec. T.412

This attribute is specified for a layout object class if the content associated with each of the layout objects of that class is to be supplied by a logical object class, for example, the content associated with a header or footer frame on a page.

The attribute identifies the logical object class description concerned.

logical structure

Rec. T.411

1) The result of dividing and subdividing the content of a document into increasingly smaller parts, on the basis of the human-perceptible meaning of the content, for example, into chapters, sections, paragraphs.

2) All logical objects and associated content portions representing the logical hierarchy of a document.

logical structure editing process

Rec. T.411

The process that creates a new specific logical structure or modifies a previous specific logical structure and allocates or re-allocates content to basic logical objects.

logically separate (C-plane information)

Rec. I.122

Logically separate means that C-plane information is sent separately from U-plane information in one of the following ways:

1) on a physically separate interface;
2) on another channel (time slot) within the same interface; or
3) on a separate logical link within the same channel (e.g., D-channel).

logistic delay

Suppl. No. 6 (II.3)

That *accumulated time* during which a *maintenance action* cannot be performed due to the necessity to acquire *maintenance* resources, excluding any *administrative delay.*

See Figure 3, Suppl. No. 6 (II.3) *Note – Logistic delays* can be due to, e.g. travelling to unattended installations, awaiting the arrival of spare parts, specialists or test equipment.

logistic delay

Rec. M.60

The logistic delay is the period of time between the fault localization and arrival of the maintenance staff on site. In case of an ISDN, the logistic delay will depend on the type of failures and how they are reported, i.e. by prompt maintenance alarm (PMA), deferred maintenance alarm (DMA) or maintenance event information (MEI).

lone signal unit (LSU)

Gloss. (VI.3)

A signal unit carrying a one-unit message.

loop (deprecated)

See:
line.

loop back acknowledgement message (LPA)

Rec. Q.762

A message sent in the backward direction in response to a continuity check request message indicating that a loop (or transceiver in the case of a 2-wire circuit) has been connected.

loop connection

See:
trombone (loop) connection.

loopback ; digital loopback

Recs. G.960, I.430

A mechanism incorporated into a piece of equipment whereby a bi-directional communication path may be connected back on itself so that some or all of the information contained in the bit stream sent on the transmit path is returned on the receive path.

loopback

Rec. M.30

A procedure used in fault location whereby a signal is returned to its source along the same path on which it was received.

loopback

Rec. M.60

A mechanism incorporated into a terminal or into the network whereby the transmit path of a communication may be connected back upon the receive path.

loopback ; transparent loopback

Rec. M.60

A transparent loopback is one in which the signal transmitted beyond the loopback point (the forward signal) when the loopback is activated, is the same as the received signal at the loopback point.

loopback

Rec. R.140

Connection of the forward channel with the corresponding backward channel to enable the observation on the backward channel of signals which have been emitted on the forward channel in order to check the quality of transmission.

loopback application

Recs. G.960, I.430, M.60

The maintenance phase for which the loopback operation is used.

loopback application

Rec. M.125

The maintenance phase for which the loopback operation is used, as defined in Recommendation M.20.

loopback control mechanism

Recs. G.960, I.430, M.60, M.125

The means by which the loopback is operated and released from the loopback control point.

loopback control point

Recs. G.960, I.430, M.60, M.125

The point which has the ability to directly control loopbacks. The loopback control point may receive requests for loopback operation from several loopback requesting points.

loopback point

Recs. G.960, I.430, M.60, M.125

The precise location of the loopback.

loopback requesting point

Recs. G.960, I.430

The point which requests the loopback control point to operate loopbacks.

loopback requesting point

Recs. M.60, M.125

The loopback requesting point is the point which requests the loopback control point to operate loopbacks.

Note 1 – Loopback requests should be subject to identification and authorization.

Note 2 – Possible locations of loopback requesting points are: in the network, in the TMN, in maintenance service providers (MSP).

loopback test pattern

Recs. G.960, I.430, M.60, M.125

The information transmitted during the operation of the loopback in the channel or channels which are to be redirected by the loopback.

loopback type

Recs. G.960, I.430

The characteristic of a loopback which specifies the relationship between information entering the loopback and the information leaving the loopback in the contra-direction.

loop/disconnect signalling

Rec. Q.9

A direct current signalling method in which the signals are represented by the breaking of a loop circuit.

loss distorsion

See:

attenuation frequency distortion; loss distortion.

loss distortion with frequency

Rec. Q.45 bis

The loss distortion with frequency is the logarithmic ratio of output voltage at the reference frequency, $U(\text{Ref})$, divided by its value at frequency f, $U(f)$:

$$LD = 20 \log \left| \frac{U(\text{Ref})}{U(f)} \right|$$

(See Supplement No. 1, Fascicle VI.5)

loss of frame alignment detector

Gloss. (VI.3)

A monitoring unit, designed to indicate to the signalling terminal that frame alignment of the PCM system has been lost.

lost call

U.140

A request for a connection which is rejected due to network congestion.

lost frames

Rec. I.122

A transmitted frame is declared to be a lost frame when the frame is not delivered to the intended destination user within a specified timeout period, and the network is responsible.

lost time

Rec. T.0

The portion of the scanning line period which cannot be used for picture signal transmission.

Note – In the case of drum apparatus, this is the same as the dead sector scanning time.

lost traffic; abandoned traffic

Rec. E.600

That part of the blocked traffic which does not result in reattempts.

loudness rating

Rec. P.10

A measure, expressed in decibels, for characterizing the *loudness* performance of *complete telephone connections* or of parts thereof such as *sending system, line, receiving system.*

Note – (added by the CCITT) – This definition is very general and corresponds to what is described as *loudness loss* in CCITT texts; in those texts, the term "loudness rating" should be confined to measurements in conformity with Recommendation P.76, and may be abbreviated as LR.

loudness rating

Suppl. No. 19 (V)

The amount of frequency-independent gain that must be inserted into a system under test so that speech sounds from the system under test and a reference system are equal in loudness (see Suppl. No. 19 (V) § 1.3.2).

loudspeaking (telephone) set

Rec. P.10

A handset *telephone* using a *loudspeaker* associated with an amplifier as a *telephone receiver.*

low layer compatibility information

Rec. I.515

Information defining the lower layer characteristics of a TE or TA.

low level language

Rec. Q.9

A programming language that reflects the structure of a computer or that of a given class of computers.

low rate encoding (LRE)

Rec. G.763

A voice-band signal encoding method, e.g. adaptive differential pulse code modulation (ADPCM), which results in a bit rate less than 64 kbit/s, e.g. 40 kbit/s, 32 kbit/s, or 24 kbit/s.

Note – Conversion between speech signals encoded in PCM at 64 kbit/s and those encoded in ADPCM must be carried out by means of transcoding processes given in Recommendations G.721 and G.723.

low rate encoding (LRE)

Rec. P.84

Speech coding methods with bit rates less than 64 kbit/s, e.g. the 32 kbit/s ADPCM transcoder (see Recommendation G.721). This is one technique commonly used in DCME to increase the circuit capacity.

lower tester

Rec. X.290

The abstraction of the means of providing, during test execution, control and observation at the appropriate PCO either below the IUT or remote from the IUT, as defined by the chosen abstract test method.

lower window edge

Rec. X.224

The lowest sequence number in a transmit window.

LRE gain; DSI gain; DCME gain

Rec. P.84

LRE gain is the factor by which the 64 kbit/s rate of the incoming circuits is reduced when LRE is used for coding within the DCME. For example, when a transcoder conforming to Recommendation G.721 is used, the LRE gain will equal 2. The LRE gain is 1 when no transcoding is used.

DSI gain is the ratio of the number of active speech input circuits to the number of bearer channels used to transport this speech, where the same encoding rate is used for circuits and bearer channels. The DSI gain is constrained by the number of input circuits and the speech activity factor and other input speech characteristics. The DSI gain is 1 when DSI is not used.

The DCME gain is the product of the LRE and DSI gain factors.

M

m : n pattern

Rec. R.140

An uninterrupted sequence of binary signal elements of which the significant conditions alternate between m and n unit interval durations.

machine

See:

system; machine.

machine langage

See:

computer language; machine language.

macro

Rec. Z.100

A *marcro* is a named collection of syntactic or textual items, which replaces the *macro call* before the meaning of the *SDL* representation is considered (i.e., a *macro* has meaning only when replaced in a particular context).

macro call

Rec. Z.100

A *macro call* is an indication of a place where the *macro definition* with the same *name* should be expanded.

macro definition

Rec. Z.100

A *macro definition* is the definition of a *macro* in *SDL/PR.*

macro diagram

Rec. Z.100

A *macro diagram* is the definition of a *macro* in *SDL/GR.*

macroinstruction; macro (instruction)

Rec. Q.9

An instruction in a source language that is to be replaced by a defined sequence of instructions in the same source language.

Note – The macroinstruction may also specify values for parameters in the instructions that are to replace it.

main cable

Recs. G.960, I.430

A cable used in the local line distribution network between the main distribution frame and a cross connection point.

main distribution frame

Rec. Q.9

A *distribution frame* to which are connected on one side the lines exterior to the exchange, and on the other side the internal cabling of the exchange.

main-entry

Rec. X.413

For each successful abstract-operation which creates information-base entries, there is always one main-entry. Further, or more detailed, information resulting from the same abstract-operation can be stored in child-entries.

main repeater station

Rec. G.211

A station, always the terminal of a line link [see definition of *line link* (using symmetric pairs, coaxial pairs, etc.)], where direct line filtering or demodulation or both together may take place. As a consequence, in such a station there are equalizers and it is possible to find points which are of uniform relative level independent of frequency ("flat points").

Such a station, where all the supergroups, for example, are demodulated and brought into the basic supergroup position, is called a "main terminal station" and is of necessity at the end of a regulated-line section. A "main intermediate station" is a station within a regulated-line section where a direct through-connection takes place.

main section

Rec. M.300

The sections into which a digital path or group, supergroup, etc., link is divided by the digital path, group, supergroup, etc., control and subcontrol stations are called main sections. A main section is the portion of the digital path or, group, supergroup, etc., link between two adjacent stations having control functions. In many cases, these two stations are in different countries. In the case of a country which has elected to have more than one station with control functions, a main section will lie wholly within that country.

See Figure 2/M.460.

maintainability

Suppl. No. 6 (II.3)

The *probability* that a given active *maintenance action*, for an *item* under given conditions of use can be carried out within a stated *time interval*, when the *maintenance* is performed under stated conditions and using stated procedures and resources.

Note – In French the term *maintenabilité* is also to denote the performance quantified by this *probability.*

maintainability allocation; maintainability apportionment

Suppl. No. 6 (II.3)

A procedure applied during the design of an *item* intended to apportion the requirements for *maintainability performance measures* for an *item* to its sub-items according to given criteria.

maintainability apportionment

See:

maintainability allocation; maintainability apportionment.

maintainability demonstration

Suppl. No. 6 (II.3)

A *maintainability verification* performed as a *compliance test.*

maintainability model

Suppl. No. 6 (II.3)

A mathematical model used for *prediction* or *estimation* of *maintainability performance measures* of an *item* or for similar purposes.

Note – An example is the *maintenance tree.*

maintainability performance

Rec. M.60, Suppl. No. 6 (II.3)

The ability of an *item* under stated conditions of use, to be retained in, or restored to, a state in which it can perform a *required function*, when *maintenance* is performed under given conditions and using stated procedures and resources.

Note – The term *maintainability* is used as a *measure* of *maintainability performance.*

maintainability prediction

Rec. M.60, Suppl. No. 6 (II.3)

An activity performed with the intention to forecast the numerical values of a *maintainability performance measure* of an *item*, taking into account the *maintainability performance* and *reliability performance measures* of its sub-items, under given operational and maintenance conditions.

maintainability programme

Suppl. No. 6 (II.3)

A detailed plan, including the human and material resources, procedures, tasks and responsibilities during the life of an *item*, intended to determine the fulfilment of the requirements for *maintainability performance measures* for an *item* and facilitate the planning of the *maintenance*.

maintainability verification

Suppl. No. 6 (II.3)

A procedure applied for the purpose of determining whether the requirements for *maintainability performance measures* for an *item* has been achieved or not.

Note – The procedures may range from analysis of appropriate data to a *maintainability demonstration*.

maintenance

Rec. M.60, Suppl. No. 6 (II.3)

The combination of all technical and corresponding administrative actions, including supervision actions, intended to retain an *item* in, or restore it to, a state in which it can perform a *required function*.

maintenance

Rec. M.60

The whole of the operations required for setting up and maintaining, within prescribed limits, any element entering into the setting-up of a connection. In the international automatic telephone service, maintenance is particularly concerned with circuits and automatic switching equipment. Circuit and automatic equipment maintenance includes:

a) carrying out setting-up measurements and adjustments;
b) planning and programming a maintenance scheme;
c) carrying out the prescribed routine preventive maintenance measurements and all other tests and measurements deemed necessary;
d) locating and clearing faults.

maintenance (M)

Rec. Q.791

Maintenance of the signalling network resources may involve the monitoring of the facility and equipment resources and maintaining network performance by expediting preventive and corrective effort when the measurements indicate a problem.

maintenance action; maintenance task

Suppl. No. 6 (II.3)

A sequence of *elementary maintenance activities* carried out for a given purpose.

Note – Examples are *fault diagnosis, fault localization* and *function check-out* or combinations thereof.

maintenance centre

Rec. F.710

A national administrative centre where notification is taken from irregularities and from where action is taken for resolving these irregularities.

maintenance echelon; line of maintenance

Suppl. No. 6 (II.3)

The position in an organization where specified *levels of maintenance* are to be carried out on an *item*.

Note 1 – Examples of *maintenance echelons* are: field, repair shop, manufacturer.

Note 2 – The *maintenance echelon* is characterized by the skill of the personnel, the facilities available, the location, etc.

maintenance entity

Suppl. No. 6 (II.3)

A sub-item of a given *item* defined with the intention that an alarm – caused by a *fault* in that sub-item – will be unambiguously referrable to the sub-item.

maintenance entity (ME)

Rec. M.60

Maintenance entities are defined by the following principles:

- The different equipments of the telecommunications network constituting the MEs are interconnected to consecutive and easily identifiable interface points, at which points the interface conditions defined for these equipments apply and which possesses the means of detecting maintenance events and failures;
- if the telecommunication equipment supports bidirectional transmission, normally consisting of telecommunications equipment trasmitting in both directions, then both directions are considered part of the same ME;
- when a failure occurs within a network it is desirable that the maintenance alarm information indication appears at the failed maintenance entity. When this is not practical, the indication should appear at the closest possible entity;
- maintenance alarm information indications in an entity should not cause related alarm information indications at other entities. In the event that such indications are permitted to occur, they should clearly indicate that the failure has occurred upstream, and not in the other entities displaying the information.

maintenance entity assembly (MEA)

Rec. M.60

The maintenance entity assembly is defined by the following principles:

- An MEA contains a group of MEs assembled for additional maintenance purposes;
- Principles that apply to MEs apply also to MEAs;
- An MEA may detect failures and maintenance event information which can not be detected by MEs;
- An MEA may provide end-to-end maintenance alarm information which can not be provided by MEs.

End-to-end information may be collected by using additional supervision means.

maintenance event information (MEI)

Rec. M.60

This information has to be generated as a consequence of events when no immediate actions by the maintenance staff are required, because the total performance is not endangered. The maintenance actions can be performed on a scheduled basis or after the accumulation of maintenance event information indications.

maintenance man-hours (MMH)

Suppl. No. 6 (II.3)

The accumulated durations of the *maintenance times*, expressed in hours, used by all maintenance personnel for a given type of *maintenance action* or over a given *time interval*.

maintenance philosophy

Rec. M.60, Suppl. No. 6 (II.3)

A system of underlying principles for the organization and execution of the *maintenance*.

maintenance policy

Rec. M.60, Suppl. No. 6 (II.3)

A description of the interrelationship between the *maintenance echelons*, the *indenture levels* and the *levels of maintenance* to be applied for the *maintenance* of an *item*.

maintenance service provider (MSP)

Recs. I.601, M.36, M.60

The MSP represents a group of functions, equipment and maintenance staff, which together have the responsibility for maintaining a subscriber installation or a part of the subscriber installation. A MSP cannot control the maintenance functions of the subscriber access. If authorized, it can request an SAMC to perform these functions.

maintenance strategy

Rec. M.60

A plan for the organization and execution of maintenance.

maintenance sub-entity (MSE)

Rec. M.60

The maintenance sub-entity is defined by the following principles:

- the different parts of an MSE constituting the MEs are interconnected at consecutive and easily identifiable interface points;
- when a failure occurs within an MSE it is desirable that the maintenance alarm information indication appears at the failed maintenance entity containing the MSE;
- a failed MSE should be identified as failed by the fault location process, but should lead only to the identification of the failed ME by the supervision process;
- An MSE generally corresponds to the item which is replaceable during routine operations in the event of failure.

maintenance support performance

Rec. M.60, Suppl. No. 6 (II.3)

The ability of a maintenance organization, under given conditions, to provide upon demand the resources required to maintain an *item*, under a given *maintenance policy*.

Note – The given conditions are related to the *item* itself and to the conditions under which the *item* is used and maintained. See Figure 1, Suppl. No. 6 (II.3)

maintenance task

See:
maintenance action; maintenance task.

maintenance time

Suppl. No. 6 (II.3)

The *time interval* during which a *maintenance action* is performed on an *item* either manually or automatically, including *technical delays* and *logistic delays*.

See Figure 3, Suppl. No. 6 (II.3) *Note* – *Maintenance* may be carried out while the *item* is performing a *required function*.

maintenance tree

Suppl. No. 6 (II.3)

A logic diagram showing the pertinent alternative sequences of *elementary maintenance activities* to be performed on an *item* and the conditions for their choice.

major defect

Suppl. No. 6 (II.3)

A *defect* that is likely to result in a *failure* or to reduce materially the usability of the *item* for its intended purpose.

major defective item

Suppl. No. 6 (II.3)

An *item* which contains one or more *major defects.*

major fault

Suppl. No. 6 (II.3)

A *fault* which affects a function considered to be of major importance.

make!

Rec. Z.100

Make! is an operation only used in *data type* definitions fo form a *value* of a complex type (e.g., *structured sort*).

malicious call identification request indicator

Rec. Q.762

Information sent in the backward direction to request the identity of the calling party for the purpose of malicious call idenification.

malicious call identification services

Suppl. No. 1 (II.2)

At the discretion of the Administration, assistance is given to ascertain the origin of malicious, nuisance or obscene calls.

man

See:
user.

man-machine communication

Rec. Z.341

The interchange of data between *user* and *system.*

man-machine interface

Rec. Z.341

The set of *inputs, outputs,* and special *actions* as well as the man-machine interaction mechanism, including *diaglogue procedures* and the interrelationships identified for these entities in the various *functional areas.*

man-machine language (MML)

Rec. Q.9

A language designed to facilitate direct user control of a computer.

CCITT man-machine language (MML)

Rec. Z.341

The *man-machine language* (MML) developed by the International Telegraph and Telephone Consultative Committee (CCITT) for *stored program-controlled systems* and *operation and maintenance systems.*

man-machine language (MML)

See:

CCITT man-machine language.

man-machine language (MML)

Rec. Z.341

The means of expression used in communication between the *user* and the *system.*

man-machine terminal

Rec. Z.341

An *input/output device*, that enables the *user* and the *system* to communicate with each other, e.g., visual display terminal, printer.

managed object

Rec. Q.940

A managed object is a collection of data objects and telecommunications or information processing resources that may be managed by means of the management protocol specified in Recommendation Q.940.

management domain (MD)

Recs. F.400, X.400

In the context of message handling, a set of messaging systems – at least one of which contains, or realizes, an MTA – at that is managed by a single organization. It is a primary building block used in the organizational construction of MHS.

It refers to an organizational area for the provision of services.

Note – A management domain may or may not necessarily be identical with a geographical area.

management domain name

Recs. F.400, X.400

Unique designation of a management domain for the purpose of sending and receiving messages.

management entities

Rec. M.60

Management entities are groups of capabilities that collectively provide management functions, such as operations, administration, maintenance and provisioning. For the network part, the functions may be implemented by a combination of capabilities in the network elements and operations systems. For the subscriber part, management functions may be contained within the subscriber installations.

management inhibiting

Glos. (VI.7, VI.8, VI.9)

A procedure included in signalling traffic management used to keep a signalling link unavailable to User Part generated signalling traffic, except for test and maintenance traffic.

management signals

Gloss. (VI.3)

Signals concerning the management or maintenance of the speech circuit network and the signalling network.

mandatory attribute

Rec. T.411

An attribute which, when applicable to a constituent, must be specified explicitly in that constituent.

mandatory M component

Rec. X.413

A ASN.1 element which shall always be present in an instance of its class. See the definition of grade.

Mandatory Fixed Part

Glos. (VI.7, VI.8, VI.9)

Part of a message that contains those parameters that are mandatory and of fixed length.

Mandatory Variable Part

Glos. (VI.7, VI.8, VI.9)

Part of a message that contains mandatory parameters of variable length.

manual answering

Suppl. No. 2 (II.4)

Answering in which a call is established only if the called user signals his readiness to receive it by means of a manual operation.

manual-changeover-acknowledgement signal

Rec. Q.255

A signal sent in response to a manual-changeover signal to indicate that manual changeover can take place.

manual-changeover signal

Rec. Q.255

A signal sent to initiate a changeover to a reserve signalling link or to initiate the removal of full-time synchronized reserve link from service availability because of need for rearrangements, changes, maintenance, etc.

manual demand operating

See:
demand operating.

manual observation

Rec. E.421

Monitoring of telephone calls by an observer without using any automatic data-recording machine.

manual response

Rec. Z.341

A *user* response to a *system* invitation that may comprise the actuation of keys on *terminals* or switch frames, replacement of equipment, etc.

manual transmission rerouting

See:

transmission restoration function: manual transmission rerouting.

manufacturing defect

Suppl. No. 6 (II.3)

A *defect* due to nonconformance in manufacture to the design of an *item* or to specified manufacturing processes.

manufacturing failure

Suppl. No. 6 (II.3)

A *failure* due to a *manufacturing defect.*

manufacturing fault

Suppl. No. 6 (II.3)

A *fault* due to a *manufacturing defect.*

map (over)

See:

to map (over.

margin (of a receiver or terminal)

Rec. S.140

The maximum value of a degree of individual distortion compatible with correct translation by a printer receiver or terminal, when the signals arrive at the input under specified conditions.

margin (of a start-stop apparatus)

Rec. S.140

The maximum value of the degree of gross start-stop distortion compatible with the correct translation by a start-stop apparatus of all the character signals appearing either singly, or at the maximum rapidity corresponding to the standard modulation rate.

margin of a synchronous receiver

Rec. S.140

The margin of a synchronous receiver determined by the degree of isochronous distortion.

maritime account

Rec. D.90

The account issued by the Administration operating a land station in respect of telecommunication traffic exchanged between the land station and a mobile station.

maritime assistance (prefix 39)

Recs. E.216, F.126

Prefix 39 provides connection to the appropriate national authority in case maritime assistance is required (e.g. tow, oil pollution).

maritime centre

Rec. G.473

A satellite earth station which provides a 4-wire analogue interface for connection to a maritime terrestrial circuit.

See Figure 1/G.473. *Note 1* – For some nontransmission functions, a maritime centre may be classified as a CT. For the purpose of Recommendation G.473, a maritime centre is not regarded as a CT, but is an intermediate point in a maritime system.

Note 2 – The term *maritime centre* used for the purpose of Recommendation G.473, id defined as *coast earth station* in the Radio Regulations (Article 1, No. 71).

maritime enquiries (prefix 31)

Recs. E.216, F.126

Prefix 31 may be used for special enquiries such as ship location, authorization, all telegrams, etc.

maritime local circuit

Suppl. No. 3 (II.4)

A circuit between an on-board DTE and the ship earth station.

maritime local system

Rec. G.473

All equipment between the 4-wire or 2-wire interface (which may be a switching device) at a maritime terminal, and a 2-wire or a 4-wire telephone within the boundary of that terminal. It may include a 4-wire or 2-wire switching device using analogue switching. See Figure 1/G.473.

maritime local system

Rec. M.1100

All the equipment between the 4-wire test circuit access point on a *ship earth station* and a 2-wire or 4-wire telephone served by that ship earth station. It may include 4-wire to 2-wire termination sets, echo control equipment, data interfaces, and 4-wire or 2-wire switching devices.

See Figure 1/M.1100.

Maritime Mobile-Satellite Service

Recs. E.210, F.120

As defined in the *Radio Regulations.*

maritime mobile satellite system; maritime system

Rec. G.473

All of a temporary connection between a telephone at a *maritime terminal,* and the 4-wire virtual analogue switching points of an international switching centre. It comprises a *maritime terrestrial circuit,* a *maritime satellite circuit* and a *maritime local system.* See Figure 1/G.473.

Maritime Mobile (Terrestrial) Service

Recs. E.210, F.120

Conventional Maritime Mobile Services such as the HF Maritime Service, the MF Maritime Service and the VHF Maritime Service (as defined in the *Radio Regulations*).

maritime satellite circuit

Suppl. No. 3 (II.4)

A circuit between the ship earth station and the coast earth station. It comprises all elements required for establishing, maintaining and clearing the maritime satellite circuit including the network coordination station.

maritime satellite circuit

Rec. G.473

A 4-wire circuit between an analogue interface at a maritime centre, via a satellite repeater to a 4-wire or 2-wire analogue interface (which may be a switching device) at a *maritime terminal.* See Figure 1/G.473.

maritime satellite circuit

Rec. M.1100

A 4-wire circuit between a maritime virtual switching point at a *coast earth station* and the 4-wire circuit test access point at a *ship earth station,* via a satellite repeater.

See Figure 1/M.1100.

maritime satellite message transmission system

Suppl. No. 3 (II.4)

A means for the establishment of temporary connections between an on-board DTE and a maritime satellite store-and-forward unit. The maritime satellite message transmission system comprises a maritime local circuit, a maritime satellite circuit, a maritime terrestrial circuit, and a maritime store-and-forward unit. The general configuration is shown in Figure 1.

maritime-satellite store-and-forward unit (MSSFU)

Rec. F.127

The functional interface between the maritime-satellite message transmission system and a public telex network.

maritime satellite store-and-forward unit (MSSFU)

Suppl. No. 3 (II.4)

The functional interface between the maritime satellite message transmission system and a public network.

The MSSFU provides the following functions:

- interworking between the signalling systems used in the maritime satellite transmission message transmission system and the relevant public network;
- routing and call control for calls to and from ships;
- effects message transfer to and from ships by store-and-forward;
- charging.

maritime satellite system

Rec. M.1100

In the Maritime Mobile-Satellite Service, all of the temporary connection between a telephone at a ship earth station and the maritime virtual switching point at a coast earth station. It comprises a *maritime satellite circuit* and a *maritime local system.* The general arrangement is shown in Figure 1/M.1100.

maritime system

See:

maritime mobile satellite system; maritime system.

maritime terminal

Rec. G.473

A terminal station (in a maritime mobile satellite system) which provides a 4-wire analogue interface for connection to a maritime local system. See Figure 1/G.473. *Note* – The term *maritime terminal* used for the purpose of Recommendation G.473, is defined as *ship eart station* in the Radio Regulations (Article 1, No. 73)

maritime terrestrial circuit

Suppl. No. 3 (II.4)

A circuit between the coast earth station and the maritime satellite store-and-forward unit. The coast earth station and the maritime satellite store-and-forward unit may be co-located or remote from one another.

maritime terrestrial circuit

Rec. G.473

A 4-wire circuit in a wholly-terrestrial transmission medium, between a 4-wire switch at an international exchange and an analogue 4-wire interface at a *maritime centre.* In some situations it may traverse a national boundary so that for the purpose of Recommendation G.473 it is not regarded as a national circuit. See Figure 1/G.473.

maritime test terminal (MTT)

Rec. M.1100

A *ship earth station* and a *maritime local system* installed at a coast earth station and used for test purposes.

See Figure 1/M.1100.

mark ; space ; marking ; spacing

Rec. R.140

Designation of the two significant conditions of a binary modulation (or restitution).

The English term "marking" or "mark"	*French term*
1. In Morse, corresponds to those portions of dot and dash signals that, for example, when actuating a Morse inker, will cause the inker to mark the paper.	**1. Travail**
2. In printing telegraphy, corresponds to the significant condition that results in an active selecting operation in a receiving apparatus.	**2. Repos** or **travail** according to the system
Note 1 – In start-stop automatic transmission, the term corresponds to the perforation of a hole in the tape.	idem
Note 2 – In standardized start-stop telegraphy the term corresponds to the "stop" element.	**Repos**
3. In isochronous systems, the term that is arbitrarily assigned to one or the other of the two signalling conditions.	**3. Repos** or **travail** according to the system
The English term "spacing" or "space"	
1. In Morse, corresponds to the spaces separating marking signals and to the spaces separating complete characters.	**1. Repos**
2. In printing telegraphy, corresponds to the significant condition that results in a passive selecting operation in a receiving apparatus.	**2. Travail** or **repos** according to the system
	French term
Note 1 – In start-stop automatic transmission the term corresponds to the absence of perforation in the tape.	**Travail** or **repos** according to the system
Note 2 – In standardized start-stop telegraphy the term corresponds to the "start" element.	**Travail**
3. In isochronous systems, the term that is assigned to the non-marking signalling condition.	**3. Travail** or **repos** according to the system

The CCITT has recommended that those terms should not be used in telegraph circuit diagrams, but that the letters A and Z should be used to represent the two significant conditions of a binary modulation (see Definition position A position Z).

	The French term "travail" applies to the significant condition that:	*English term*
1.	In Morse corresponds to the recording of an impression on the paper;	**1. Mark**
2.	In International Telegraph Alphabet No. 2, corresponds to the "start" element of a start-stop signal and to the absence of perforation in the tape in start-stop automatic transmission.	**2. Space**

	The French term "repos" applies to the significant condition that:	
1.	In Morse corresponds to spaces;	**1. Space**
2.	In International Telegraph Alphabet No. 2, corresponds to the "stop" element of a start-stop signal and to the perforation of the tape in start-stop automatic transmission.	**2. Mark**

mark condition (in Morse code only)

Rec. R.140

Designation given to one of the two significant conditions in Morse code.

marker

Rec. F.710

It is a conference tool used to draw attention to a particular part of a displayed image.

marker

Rec. T.150

Marked representation of a single position in a telewriting image.

Note – A marker is not a permanent part of a telewriting image, but exists only as long as it is activated.

marking

See:
mark; space; marking; spacing.

master clock

Rec. G.701

A clock that is used to control the frequency of other clocks.

mastergroup

Rec. M.300

A mastergroup consists of a mastergroup link terminated at each end by terminal equipments. These terminal equipments provide for the setting-up of five supergroup links or sections occupying frequency bands separated by 8 kHz in a 1232 kHz band.

See Figures 1/M.300 to 4/M.300. The basic mastergroup consists of supergroups 4, 5, 6, 7 and 8 within the band of frequencies 812 kHz to 2044 kHz.

See Figure 1/M.340.

mastergroup link

Recs. G.211, M.300

The whole of the means of transmission using a frequency band of specified width (1232 kHz) connecting two terminal equipments, for example, supergroup translating equipments, wideband sending and receiving equipments (modems, etc.). The ends of the link are the points on mastergroup distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more mastergroup sections.

See Figures 3/G.211, 1/M.300 to 4/M.300.

mastergroup section

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (1232 kHz) connecting two consecutive mastergroup distribution frames (or equivalent points) via at least one line link.

See Figure 3/G.211 *Note* – As translating procedure 2 described in Recommendation G.211, § 1 above does not enable mastergroups to be set up, the "mastergroup section" concept applies only in procedure 1.

mastergroup section

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (1232 kHz) connecting two consecutive mastergroup distribution frames (or equivalent points).

See Figures 1/M.300 to 4/M.300.

matching

Rec. X.413

The process of comparing the value supplied in an attribute-value-assertion with the value of the indicated attribute-type stored in the MS or deciding whether the indicated attribute-type is present.

maximum justification rate

Rec. G.701

The maximum possible justification rate that can be accommodated by a justification process.

Note – In practice the tolerance limits of the original signal and of the system used to convey the justified signal might be such that the maximum justification rate is never realized.

maximum stuffing rate (deprecated)

See:
maximum justification rate.

maximum theoretical numerical aperture

Rec. G.651

A theoretical value of numerical aperture calculated using the values of refractive index of the core and cladding given by:

$$NA_{t\max} = (n_1^2 - n_2^2)^{\frac{1}{2}}$$

where

n_1 = maximum refractive index of the core,

n_2 = refractive index of the innermost homogeneous cladding.

Note – The relationship between NA (§ A.21) and NA is given Section I of Annex B, § B.2.2.

mean ...; average ... (deprecated)

Suppl. No. 6 (II.3)

1) The value obtained as the *expectation* of a *random variable.*

2) The normalized integral of a time dependant quantity.

mean (of a random variable)

See:
expectation (of a random variable); mean (of a random variable.

mean access delay

Rec. E.800

The *expectation* of the *time duration* between the first *call attempt* made by a *user* of a telecommunication network to reach another *user* or a *service* and the *instant of time* the *user* reaches the wanted other *user* or *service,* within specified tolerances and under given operational conditions.

mean accumulated down time (MADT)

Suppl. No. 6 (II.3)

The *expectation* of the *accumulated down time.*

mean active repair time (MART)

Suppl. No. 6 (II.3)

The *expectation* of the *active repair time.*

mean administrative delay (MAD)

Suppl. No. 6 (II.3)

The *expectation* of the *administrative delay.*

mean availability $\overline{A}(t_1, t_2)$

Suppl. No. 6 (II.3)

The normalized integral of the *instantaneous availability* in a given *time interval* (t_1, t_2).

Note – The *mean availability* is related to the *instantaneous availability* as

$$\overline{A}\ (t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t} A(t)\ \mathrm{d}t.$$

mean down time (MDT)

Suppl. No. 6 (II.3)

The *expectation* of the *down time.*

mean dynamic frequency

Rec. R.140

In a FMVFT system the mean frequency at the modulator output when reversals are applied to its input.

mean exchange service inaccessibility

Rec. E.550

The average of instantaneous exchange service inaccessibility over a prespecified observation period (e.g. one year).

as:

$$\bar{z}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} z(t)\, dt.$$

mean failure intensity $\bar{z}(t1, t_2)$

Suppl. No. 6 (II.3)

The normalized integral of the *instantaneous failure intensity* over a given *time interval*, (t_1, t_2).

Note – The *mean failure intensity* is related to *instantaneous failure intensity* as

$$\bar{z}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} z(t)\, dt.$$

mean failure rate $\bar{\lambda}(t1, t_2)$

Suppl. No. 6 (II.3)

The normalized integral of the *instantaneous failure rate* over a given *time interval*, (t_1, t_2).

Note – The *mean failure rate* relates to *instantaneous failure rate* as

$$\bar{\lambda}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \lambda(t)\, dt.$$

mean holding time per seizure

Rec. E.411

This is the total holding time divided by the total number of seizures and can be calculated on a circuit group basis or for switching equipment.

mean interruption duration (MID)

Recs. E.800, E.855

The expectation of interruption duration.

mean logistic delay (MLD)

Suppl. No. 6 (II.3)

The *expectation* of the *logistic delay.*

mean maintenance man-hours

Suppl. No. 6 (II.3)

The *expectation* of the *maintenance man-hours.*

mean one-way propagation time

Rec. G.100

In a connection, the mean of the propagation times in the two directions of transmission.

Note – The use of this concept is explained in Recommendation G.114.

mean repair rate $\bar{\mu}(t_1, t_2)$

Suppl. No. 6 (II.3)

The normalized integral of the *instantaneous repair rate* over a given *time interval* (t_1, t_2).

Note – The *mean repair rate* is related to *instantaneous repair rate* as:

$$\bar{\mu}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \mu(t)\, dt.$$

mean repair time (MRT)

Suppl. No. 6 (II.3)

The *expectation* of the *repair time.*

mean service access delay

Rec. E.800

The *expectation* of the *time duration* between an initial *bid* by the *user* for the acquisition of a *service* and the *instant of time* the user has access to the *service*, the *service* being obtained within specified tolerances and other given operating conditions.

mean service provisioning time

Rec. E.800

The *expectation* of the *duration* between the *instant of time* a potential *user* requests that an organization provides the necessary means for a *service*, and the *instant of time* when these means are furnished.

mean static frequency

Rec. R.140

In a FMVFT channel the mean value of the actual characteristic frequencies of that channel.

mean time between failures (MTBF)

Suppl. No. 6 (II.3)

The *expectation* of the *time between failures.*

mean time between interruptions (MTBI)

Recs. E.800, E.855

The expectation of the time between interruptions.

mean time between service outages

Rec. X.137

Mean time between service outages (MTBSO) applies to both virtual call and permanent virtual circuit services. The mean time between service outages for a virtual connection section is the average duration of any continuous interval during which the virtual connection section is available. Consecutive intervals of schedules service time are concatenated.

mean time to failure (MTTF)

Suppl. No. 6 (II.3)

The *expectation* of the *time to failure.*

mean time to first failure (MTTFF)

Suppl. No. 6 (II.3)

The *expectation* of the *time to first failure.*

mean time to recovery

See:
mean time to restoration.

mean time to repair (deprecated)

See:
mean time to restoration.

mean time to restoration (MTTR); mean time to recovery; mean time to repair (deprecated)

Suppl. No. 6

The *expectation* of the *time to restoration.*

mean time to service restoral (MTTSR)

Rec. X.137

The average duration of unavailable service time intervals.

mean unavailability $\overline{U}(t_1, t_2)$

Suppl. No. 6 (II.3)

The normalized integral of the *instantaneous unavailability* in a stated *time interval* (t_1, t_2).

Note – The *mean unavailability* is related to the *instantaneous unavailability* as

$$\overline{U}\ (t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} U(t)\ \mathrm{d}t.$$

mean up time (MUT)

Suppl. No. 6 (II.3)

The *expectation* of the *up time.*

measure (as applied in the study of reliability performance and related areas)

Suppl. No. 6 (II.3)

A function or quantity used to describe a *random variable* or a *random process.*

Note – For a *random variable,* examples of *measures* are the *distribution function* and the *mean.*

measurement

Rec. M.60

The numerical assessment, in suitable units, of the value of a simple or complex quantity or magnitude.

measurement day

See:

test/measurement day.

measurement of the amount of traffic carried

Rec. E.500

The average Erlang value during a certain period of time (e.g. 15 min., 1 hour).

measurement of the number of bids

Rec. E.500

A count of this entity during a certain period of time.

measurement signal (MS)

Rec. N.13

Sine-wave signal at 1020 Hz at a level 12 dB below the alignment signal level, which should be used for long-term measurements and measurements at all frequencies.

mediation device

Rec. Q.9

A unit or function that is situated between a Network Element and an Operations System in the Telecommunications Management Network that translates the information flow between the two entities as required, provides multiplexing, etc.

mediation device (MD)

Recs. M.30, M.60

The MD is the stand alone device which performs mediation functions (MFs). MDs can be implemented as hierarchies of cascaded devices.

mediation function (MF) block

Recs. M.30, M.60

The MF block acts on information passing between network element function blocks (NEFs) and operations system function blocks (OSFs) to achieve smooth and efficient communication. Major MFs include communication control, protocol conversion and data handling, communication of primitive functions, processes involving decision making, and data storage. Details of the MF are given in § 5.4 of Recommendation M.30.

medical advice (prefix 32)

Recs. E.216, F.126

Prefix 32 provides connection to national medical facilities (hospital, etc.) for obtaining medical advice or consultation. The prefix may be followed by a country code.

medical assistance (prefix 38)

Recs. E.216, F.126

If the condition of an ill or injured person aboard ship requires his urgent delivery ashore or the delivery of a doctor aboard ship, prefix 38 provides connection to the appropriate national authority responsible for this kind of activity.

medium type

Rec. T.412

This attribute defines the type of presentation media that is to be used for imaging the page.

meeting

Rec. F.710

Coming together of a number of people at a certain time in a place to participate at a conference.

meeting location

Rec. F.710

A place in which a meeting is set up.

member

Rec. F.500

An attribute type which specifies a group of names associated with the object.

member recipient

Rec. X.402

A user or DL to which a message (but not a probe) is conveyed as a result of DL expansion.

members

Recs. F.400, X.400

In the context of message handling, the set of users and distribution lists implied by a distribution list name.

menu

Rec. Z.341

A list of items, from which a selection can be made by the *user.*

menu identity

Rec. Z.341

An identity unique to a *menu* so that it can be distinguished from other *menus.*

menu item

Rec. Z.341

A brief description of an item in a *menu,* optionally accompanied by a *selection identity,* in order to allow a choice to be made by inputting such an identity.

menu-item selection

Rec. Z.341

The activity of selecting an item using the item selection procedure and the repetition of this activity for subsequent *menus* until ultimately the procedure results in something other than further *menu output.*

menu output

Rec. Z.341

An *output* of a *menu,* used in *information entry* procedures.

merge area

Rec. Z.100

A *merge area* is where one *flow line* connects to another.

mesochronous (deprecated)

See:

synchronous.

message

Rec. E.131

A defined entity of information from the subscriber to the exchange pertaining to a call or a control operation for a service sent in one sequence over the signalling medium. A message may consist of one or more characters transmitted in one or more blocks.

message

Recs. F.400, X.400

An instance of the primary class of information object conveyed by means of message transfer, and comprising an envelope and content.

(signal) message

Gloss. (VI.3)

Signal information pertaining to a call, management action, etc., sent at one time on the signalling channel. A message may consist of one or more signals transmitted in one or more signal units.

message

Rec. Q.9

An assembly of information within a protocol transferred as an entity in a telecommunication process.

Note – Specific qualifiers may be used to indicate a particular application, e.g., alarm, message.

message block

Rec. U.82

The portion of the MXU which contains the information to be transferred between the telex SFUs.

message delivery

See:

message deposit/message delivery; text deposit/delivery.

message deposit/message delivery; text deposit/delivery

Rec. F.201, Suppl. No. 1 (II.4)

The message "deposit" is the sending by the calling terminal of the whole message to the store and forward CF before its further "delivery" to the called terminal.

message discrimination

Glos. (VI.7, VI.8, VI.9)

The process which decides, for each incoming message, whether the signalling point is a destination point or if it should act as a signalling transfer point for that message and accordingly, whether the message should be handed to (signalling) message distribution or to (signalling) message routing functions.

message distribution

Glos. (VI.7, VI.8, VI.9)

The process of determining, upon receipt of a signalling message at its destination point, to which User Part the signalling message is to be delivered.

message group

Rec. V.110

The arrangement of octets based on a repeated sequence of command octets followed by a series of three LOW-HIGH data octet pairs. Each message group transfers one octet of the parameter information.

message handling (MH)

Recs. F.400, X.400, X.402

A distributed information processing task that integrates the intrinsically related subtasks of message transfer and message storage.

message handling environment

Recs. F.400, X.400

The environment in which message handling takes place, comprising MHS, users, and distribution lists.

The sum of all components of message handling systems.

Note – Examples of components are:

- message transfer agents,
- user agents,
- message stores,
- access units,
- users.

message handling service

Recs. F.400, X.400, Suppl. No. 1 (II.4)

Service provided by the means of message handling systems.

Note 1 – Service may be provided through administration management domains or private management domains.

Note 2 – Examples of message handling services are:

- interpersonal messaging service (IPM service),
- message transfer service (MT service).

message handling system (MHS)

Recs. F.400, X.400

The functional object, a component of the message handling environment, that conveys information objects from one party to another.

message priority

Suppl. No. 2 (II.4)

A facility within a *store-and-forward*, or *message switching* system that enables a subscriber to attach to his *message* one of a number of levels of priority which has been provided.

message-refusal signal

Rec. Q.254

A signal sent by a signal transfer point in response to the reception of a telephone signal which it is unable to deal with as a consequence of the transfer-prohibited situation.

message relay service

Suppl. No. 1 (II.2)

A caller, whether a subscriber or not, may dictate a message into recording equipment and require that it is passed to a particular telephone number by the following morning

message retrieval service element (MRSE)

Rec. X.413

The application-service-element by means of which a receiving UA effects retrieval of messages from an MS, or any of various related tasks.

message route (signalling-)

Glos. (VI.7, VI.8, VI.9)

The signalling link or consecutive links connected in tandem that are used to convey a signalling message from an originating point to its destination point.

message route

See:

(signalling) message route.

message routing (signalling-)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The process for selecting, for each signalling message to be sent, the signalling link to be used.

message sequencing

Rec. Q.9

The procedures for ensuring that received messages are processed in the correct order.

message signal unit (MSU)

Glos. (VI.7, VI.8, VI.9)

A signal unit containing a service information octet and a signalling information field which is retransmitted by the signalling link control if it is received in error.

message spacing

Suppl. No. 2 (II.4)

A facility whereby a subscriber may request the network to transmit several *line feed* characters to his *terminal* at the end of each successful call, before clear down, for the purpose of providing a blank space between adjacent printed *messages.*

message storage

Recs. F.400, X.400, X.402

The automatic storage for later retrieval of information objects conveyed by means of message transfer. It is one aspect of message handling.

message store (MS)

Recs. F.400, X.400

The functional object, a component of MHS, that provides a single direct user with capabilities for message storage.

message-submission abstract-operation

Rec. X.413

An abstract-operation which allows the UA to submit a message to the MTS via the MS, and/or to forward a message from the MS to the MTS.

message suffix

Rec. E.131

The character indicating the end of the message.

message switching; store-and-forward switching

Rec. Q.9

The process of routing messages comprising, in certain nodes of the network, a receiving, storing as necessary, and forwarding of messages within a telecommunication network so as to minimize queue and idle times of traffic carrying devices.

message switching; store and forward switching

U.140

The process of routing messages comprising, in certain nodes of the network, a receiving, storing as necessary, and forwarding of messages within a telecommunication network.

message switching exchange; switch (message)

U.140

A set of devices associated with a set of circuits intended to receive, store as necessary, and forward messages without providing any exclusive connection between circuits.

message transfer (MT)

Recs. F.400, X.400, X.402

The non-real-time carriage of information objects between parties using computers as intermediaries. It is one aspect of message handling.

message transfer agent (MTA)

Recs. F.400, X.400

A functional object, a component of the MTS, that actually conveys information objects to users and distribution lists.

Message Transfer Part (MTP)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The functional part of a common channel signalling system which transfers signalling messages as required by all the users, and which performs the necessary subsidiary functions, for example error control and signalling security (levels 1, 2 and 3 of Signalling System No. 7).

message transfer part receiving time (T_{mr})

Rec. Q.706, Glos. (VI.7, VI.8, VI.9)

The period which starts when the last bit of the signal unit leaves the signalling data link and ends when the last bit of the message has entered the User Part. It includes the handling time at level 2, the transfer time from level 2 to level 3, the handling time at level 3, the transfer time from level 3 to level 4.

See Figure 10/Q.706.

message transfer part sending time (T_{ms})

Rec. Q.706, Glos. (VI.7, VI.8, VI.9)

The period which starts when the last bit of the message has left the User Part and ends when the last bit of the signal unit enters the signalling data link for the first time. It includes the queueing delay in the absence of disturbances, the transfer time from level 4 to level 3, the handling time at level 3, the transfer time from level 3 to level 2, and handling time in level 2.

See Figure 8/Q.706.

message transfer service

Recs. F.400, X.400

Service that deals with the submission, transfer and delivery of messages for other messaging services.

message transfer system (MTS)

Recs. F.400, X.400

The functional object consisting of one or more message transfer agents which provides store-and-forward message transfer between user agents, message stores and access units.

message transfer time at signalling transfer points (T_{cs})

Rec. Q.706, Glos. (VI.7, VI.8, VI.9)

The period which starts when the last bit of the signal unit leaves the incoming signalling data link and ends when the last bit of the signal unit enters the outgoing signalling data link for the first time. It includes the queueing delay in the absence of disturbances, but not the additional queueing delay caused by retransmission.

See Figure 9/Q.706.

message transfer unit (MXU)

Rec. U.82

The basic element of the inter-telex SFU message transfer procedure.

message waiting indication

Rec. Z.341

A means of announcing, within a *dialogue procedure*, the presence of a high priority *output* addressed to this *man-machine terminal*.

messaging service

Rec. I.113

An interactive service which offers user-to-user communication between individual users via storage units with store-and-forward, mailbox and/or message handling (e.g. information editing, processing and conversion) functions.

messaging services

Rec. I.121

Messaging services offer user-to-user communication between individual users via storage units with store-and-forward, mailbox and/or message handling (e.g. information editing, processing and conversion) functions.

Examples of broadband messaging services are message handling services and mail services for moving pictures (films), high resolution images and audio information.

See Figure 1/I.121

messaging system

Recs. F.400, X.400

A computer system (possibly but not necessarily an open system) that contains, or realizes, one or more functional objects. It is a building block used in the physical construction of MHS.

Meta IV

Rec. Z.100

Meta IV is a formal notation for expressing the *abstract syntax* of a language.

meta-language

Rec. Z.341

Formal means of representation using defined *symbols* according to specific rules.

meta-language (in MML)

Rec. Q.9

A symbolic method for defining *MML input* and *output syntax.*

meteorological reports (prefix 41)

Recs. E.216, F.126

Prefix 41 provides connection to the meteorological office for transmission of ship weather reports.

methodology (for the specification of the man-machine interface)

Rec. Z.341

A five-phase general working procedure that (1) provides for the generation of *MML function semantics* and (2) provides for the creation of an actual *man-machine interface* using *syntax, dialogue procedures,* and *MML function semantics.*

metre air path

Rec. P.10

Measured reference of sound pressure loss over a 1 metre air path. In an anechoic environment, the sound pressure attenuation of such a path is approximately 30 dB measured from the MRP.

MFC signalling

See:
multi-frequency code (MFC) signalling; MFC signalling.

microinstruction

Rec. Q.9

An instruction of a microprogram.

microprogram

Rec. Q.9

A sequence of elementary instruction that corresponds to a specific computer operation, maintained in special storage, whose execution is initiated by the instruction register of a computer.

minor defect; imperfection

Suppl. No. 6 (II.3)

A defect other than a *major defect.*

minor defective item

Suppl. No. 6

An *item* which contains one or more *minor defects* but no *major defects.*

minor fault

Suppl. No. 6 (II.3)

A *fault* other than a *major fault.*

misdelivered frames

Rec. I.122

A misdelivered frame is a frame transferred from a source user to a destination user other than the intended destination user. It is considered inconsequential whether the information is correct or incorrect in content.

mishandling failure

Suppl. No. 6 (II.3)

A *failure* caused by incorrect handling or lack of care of the *item.*

mishandling fault

Suppl. No. 6 (II.3)

A *fault* caused by incorrect handling or lack of care of the *item.*

misrouting probability

Rec. E.800

The *probability* of a *call attempt* being misrouted following receipt by the exchange of a valid code.

mistake; error (deprecated in this sense)

Suppl. No. 6 (II.3)

A human action that produces an unintended result.

misuse failure

Suppl. No. 6 (II.3)

A *failure* due to induced stresses during use which are beyond the stated capabilities of the *item.*

misuse fault

Suppl. No. 6 (II.3)

A *fault* due to induced stresses during use which are beyond the stated capabilities of the *item.*

mixed analogue/digital channel

Rec. M.300

A mixed analogue/digital channel is a one-way transmission capability provided over an analogue transmission system with transmultiplexer equipment at one end and transmultiplexer or analogue translating equipment at the other end. Where the end of the channel is provided by transmultiplexer equipment, the channel appears as a 64 kbit/s time slot on a digital distribution frame at the output of the transmultiplexing equipment in a digital path at a specified level of the digital hierarchy. Where the end of the channel is provided by analogue translating equipment, it appears at voice frequency.

See Figures 8/M.300 amd 9/M.300.

mixed document

Rec. I.113

A document that may contain text, graphics, data, image, and moving picture information as well as voice annotation.

mixed mode

Rec. I.240

This service provides combined text and facsimile communication (mixed mode) for end-to-end transfer of documents containing mixed information of text and fixed images. The high layer attributes are based on the Recommendations for Teletex and Telefax 4.

mixed mode (MM)

Rec. F.230

Allows the interchange of documents containing fully laid out pages containing character-coded and raster-graphic coded information. These documents cannot be further processed after delivery to the recipient.

The complete definition of this mode includes:

- the definition of the document features which can be interchanged between equipment supporting MM. These features are functionally as well as technically defined in Recommendation T.501;
- the definition of the protocol elements to be used for the transfer of documents and for the negotiation of optional features between equipment supporting MM. This definition is technically specified in Recommendation T.522;
- the specification of the equipment characteristics to be supported by MM. These characteristics are defined in Recommendation T.561.

mixed mode of operation

Rec. F.200, Suppl. No. 1 (II.4)

In the teletex service, the mixed mode of operation provides the user, in addition to the basic features of the teletex service, with means for transferring documents containing graphical information encoded using techniques other than those defined for the basic teletex service.

CCITT MML

Rec. Q.9

The man-machine language (MML) for stored program controlled switching systems developed by the International Telegraph and Telephone Consultative Committee (CCITT).

MML

See:

man-machine language.

MML function

See:

class A function; MML function.

MML function decomposition

Rec. Z.341

The division of a *function* into its constituent parts.

MML function semantics

Rec. Z.341

Semantics peculiar to one or more *MML functions* within the *functional areas* (or sub-areas) that were generated by the application of the *methodoly* for the specification of the *man-machine interface.* It is based upon *actions, objets, information entities* and their interrelationships.

MML syntax and dialogue procedures meta-language

Rec. Z.341

A graphical *meta-language* for representing MML *input* and *output syntax* as well as *dialogue procedures.*

mnemonic abbreviation

Rec. Q.9

A representation of an entity typically consisting of one or more *characters* chosen to assist the human memory.

mnemonic O/R address

Recs. F.400, X.400

An O/R address that mnemonicly identifies a user or distribution list relative to the ADMD through which the user is accessed or the distribution list is expanded. It identifies an ADMD, and a user or distribution list relative to that ADMD.

Mobile Application Part (MAP)

Glos. (VI.7, VI.8, VI.9)

The application entity dedicated to the communication aspects of the mobile application.

mobile country code (MCC)

Recs. E.212, Q.9

The part of the mobile station identification uniquely identifying the country of domicile of the mobile station.

mobile earth station

Rec. X.350

An *earth station* in the *mobile-satellite service* intended to be used while in motion or during halts at unspecified points (Article 1, § 4.9], of the Radio Regulations, ITU, Geneva, 1982).

See Figure 1/X.350.

mobile local circuit

Rec. X.350

A circuit between the *mobile earth station* and a mobile DTE.

See Figure 1/X.350.

mobile network code (MNC)

Recs. E.212, Q.9

A digit or a combination of digits in the national part of the mobile station identification uniquely identifying the home public land mobile network (PLMN) of the mobile station.

mobile satellite circuit

Rec. X.350

Circuit between the *mobile earth station* and the *land earth station.* It comprises all elements required for establishing, maintaining and clearing the mobile satellite circuit including the *network coordination station.*

See Figure 1/X.350.

mobile satellite data switching exchange (MSDSE)

Rec. X.350

The functional interface between the *public maritime satellite data transmission system* and a public data network.

The MSDSE provides the following functions:

- interworking between the signalling systems used in the *public mobile satellite data transmission system* and the PDN,
- routing and call control for calls to and from mobile station,
- charging.

See Figure 1/X.350.

mobile satellite data switching exchange (MSDSE)

Rec. X.352

The functional interface between the public mobile satellite data transmission system and a packet switched public data network.

The MSDSE provides the following functions:

- interworking between the signalling systems used in the public mobile satellite data transmission system and the PSPDN;
- routing and call control for calls to and from mobile earth stations;
- charging.

See Figure 1/X.352.

mobile satellite data transmission system

Rec. X.350

a means for the establishment of temporary connections between a data switching exchange (DSE) in a public data network (PDN) and a mobile DTE. The maritime satellite data transmission system comprises a *mobile satellite circuit*, a *mobile local circuit*, a *mobile satellite data switching exchange (MSDSE)*, and a *mobile terrestrial circuit*. The general maritime mobile satellite configuration is shown in Figure 1/X.350.

mobile satellite switching centre (MSSC)

Recs. Q.9, Q.1100

Indicates the signalling interworking point between the fixed networks and the mobile satellite system which works to a single ocean area. The MSSC may be located at the antenna site of the aeronautical ground earth station or coast earth station, in which case it may operate as an independent international switching centre (ISC) connected to one or more ISCs, on national switching centres. It may also be located remotely from the antenna site, as a supplement to, or a part of an ISC. The term MSSC may also indicate a *maritime* satellite switching centre, with an identical functional definition to the above.

mobile service switching centre-A (MSC-A) (controlling MSC)

Recs. Q.9, Q.1001

The MSC which first established the radio connection to or from a mobile station for mobile terminating or originating calls respectively. This MSC will be the call controlling MSC for the duration of the call also in cases where a call is handed over to another MSC.

mobile service switching centre-B (MSC-B)

Recs. Q.9, Q.1001

The first MSC to which a call is handed over.

mobile service switching centre-B′ (MSC-B′)

Recs. Q.9, Q.1001

The second (or subsequent) MSC to which a call is handed over.

mobile services switching centre

Rec. Q.1001

In an automatic system the mobile services switching centre (MSC) constitutes the interface between the radio system and the public switched telephone network. The MSC performs all necessary signalling functions in order to establish calls to and from mobile stations.

mobile services switching centre (MSC)

Rec. Q.9

An exchange which performs all necessary signalling and switching functions in order to establish calls to and from mobile subscribers located in its area.

mobile services switching centre (MSC) area

Recs. Q.9, Q.1001

The part of the network covered by an MSC. An MSC area may consist of several location areas.

mobile station

Rec. Q.1001

The mobile station (MS) is the interface equipment used to terminate the radio path at the user side. It includes terminal functions required to provide services to the user, e.g. terminal equipment and terminal adaptors.

mobile station (MS)

Rec. Q.1003

A physical equipment or a card for which subscriber data are stored.

mobile station (MS)

Rec. Q.9

The interface equipment used to terminate the radio path at the user side.

mobile station charge

Rec. D.90

The charge collected on board by the mobile station relating to the use of facilities provided by the mobile station.

mobile station identification number (MSIN)

Recs. E.212, Q.9

The part of the mobile station identification following the mobile network code uniquely identifying the mobile station within a public land mobile network (PLMN).

mobile station roaming number

Recs. E.213, Q.1003

A number allocated to a land mobile station for the purpose of rerouting calls to that station when it has roamed out of the area covered by the PLMN [maritime switching centre (MSC)] in which the station is permanent registered.

mobile station roaming number

Recs. Q.9, Q.1001

The network internal number used for routing of calls to the mobile station. See Recommendation E.213.

mobile subscriber international ISDN number

Recs. Q.9, Q.1001

The mobile subscriber international ISDN number is defined as the number which has to be dialled in order to reach a mobile subscriber in a service area. See also Recommendations E.164 and E.213.

mobile terrestrial circuit

Rec. X.350

A circuit between the *land earth station* and the *mobile satellite data switching exchange* if used.

See Figure 1/X.350.

modal distance

Rec. P.10

Distance between the centre of the microphone protective grid or front sound opening on a handset, and the centre of the guard-ring.

modal gauge

Rec. P.10

Template used to check a guard-ring position on a handset relative to the receiver *earcap reference plane.*

modal position

Rec. P.10

Prescribed position and inclination of a handset relative to a fixed sound source.

mode

Rec. M.30

The alarm characteristic of being either continuous or self-retiring.

mode field

Rec. G.652

The mode field is the single-mode field distribution giving rise to a spatial intensity distribution in the fibre.

mode field centre

Rec. G.652

The mode field centre is the position of the centroid of the spatial intensity distribution in the fibre.

Note 1 – The centroid is located at $\bar{r}_c$, and is the normalized intensity-weighted integral of the position vector $\vec{r}$.

$$\bar{r}_c = \iint_{\text{AREA}} \vec{r}\ I(\vec{r})\ \mathrm{dA} \ / \ \iint_{\text{AREA}} I(\vec{r})\ \mathrm{dA}$$

Note 2 – For fibres considered in Recommendation G.652, the correspondence between the position of the centroid as defined and the position of the maximum of the spatial intensity distribution requires further study.

mode field concentricity error

Rec. G.652

The distance between the mode field centre and the cladding surface centre.

mode field diameter

Rec. G.652

The mode field diameter $2w$ is found by applying one of the following definitions. The integration limits are shown to be 0 to ∞, but it is understood that this notation implies that the integrals be truncated in the limit of increasing argument. While the maximum physical value of the argument q is $\frac{1}{\lambda}$, the integrands rapidly approach zero before this value is reached.

i) FAR-FIELD DOMAIN: In this domain there different measurement implementations are possible:

a) FAR-FIELD SCAN: The far-field intensity distribution $F^2(q)$ is measured as a function of the far-field angle θ, and the mode field diameter (MDF) at the wavelength λ is

$$2w = \frac{2}{\pi}\left[2\,\frac{\int_0^\infty q^3F^2(q)dq}{\int_0^\infty qF^2(q)dq}\right]^{-1/2}, \text{ where } q = \frac{1}{\lambda}\sin\theta \tag{1}$$

b) KNIFE-EDGE SCAN: The knife-edge power transmission function $K(x)$ is measured as a function of knife-edge lateral offset x with the plane of the knife-edge separated by a distance D from the fibre, and the MFD is

$$2w = \frac{2}{\pi}\left[4\,\frac{\int_0^\infty K'(x)q^2dq}{\int_0^\infty K'(x)dq}\right]^{-1/2}, \text{ where } x = D\tan\theta,\ K'(x) = \frac{dK(x)}{dx} \text{ and } q = \frac{1}{\lambda}\sin\theta \tag{2}$$

c) VARIABLE APERTURE TECHNIQUE: The complementary aperture power transmission function $\alpha(x)$ is measured as a function of aperture radius x with the plane of the aperture separated by a distance D from the fibre, and the MFD is

$$2w = \frac{2}{\pi}\left[4\int_0^\infty a(x)qdq\right]^{-1/2}, \text{ where } x = D\tan\theta \text{ and } q = \frac{1}{\lambda}\sin\theta \tag{3}$$

ii) OFFSET JOINT DOMAIN: The power transmission coefficient $T(\delta)$ is measured as a function of the transverse offset δ and

$$2w = 2\left[-2\,\frac{T(0)}{\left[\frac{d^2T}{d\delta^2}\right]_{\delta=0}}\right]^{1/2} \tag{4}$$

iii) NEAR-FIELD DOMAIN: The near field intensity distribution $f^2(r)$ is measured as a function of the radial coordinate r and

$$2w = 2\left[2\,\frac{\int_0^\infty rf^2(r)dr}{\int_0^\infty r\left[\frac{df(r)}{dr}\right]^2 dr}\right]^{1/2} \qquad (5)$$

Note – The mathematical equivalence of these definitions results from transform relations between measurement results obtained by different implementation. These are summarized in Figure A-1/G.652.

mode filter

Rec. G.651

A device designed to accept or reject a certain mode or modes.

mode mixer

See:
mode scrambler; mode mixer.

mode of operation

Rec. Q.1003

Defines whether or not the MS is card operated. Only two possibilities exist:

- card operated; and
- not card operated.

Mode of operation is permanent subscriber data.

mode or type of communication identification

Rec. E.131

Information used to give an instruction to the switching equipment to select the required network or mode of communication, for example in the use of a multifunction terminal (video-telephone, 48 kbit/s wideband switched-network service, etc.).

mode scrambler; mode mixer

Rec. G.651

A device for inducing transfer of power between modes in an optical fibre, effectively scrambling the modes.

Note – Frequently used to provide a mode distribution that is independent of source characteristics.

model

Rec. Z.100

A *model* gives the mapping for *shorthand* notations expressed in terms of previously defined *concrete syntax.*

modification (of an item)

Suppl. No. 6 (II.3)

The combination of all technical and corresponding administrative actions intended to alter the *capability* of an *item* by changing, adding or deleting one or more *required functions.*

modification indicator

Rec. Q.762

Information sent in the call modification indicators parameter indicating whether the call modification is to service 1 or service 2.

modified alternate mark inversion code

Rec. G.701

A line code that is based on an alternate mark inversion code, in which alternate mark inversion violations occur in accordance with a defined set of rules.

modify

Rec. F.500

An operation in the directory system to perform a series of one or more of the following modifications to a single entry:

- add a new attribute;
- remote an attribute;
- add attribute values;
- remove attribute values;
- replace attribute values;
- modify the RDN of a leaf entry;
- modify alias;
- modify entry.

Note – This directory system operation is considered to be an optional user facility in the service context.

modify!

Rec. Z.100

Modify! is an *operator* which is implied in *expressions* when a *variable* is immediately followed by bracketed expressions and then :=. Within axioms *modify!* is used explicitly (see the definition of the term *extract!*)

modify operations

Rec. F.500

These are operations to alter the contents of the directory: add entry, remove entry, modify entry and modify relative distinguished name.

modulation converter

Rec. R.140

A telegraph repeater in which the input and output signals are represented with the same code, but use different types of modulation.

modulation rate

Rec. R.140

The reciprocal of the duration of the unit interval or of the shortest theoretical duration of signal element.

modulation rate

*Series X**

The reciprocal of the measure of the shortest nominal time interval between successive significant instants of the modulated signal.

Note – If this measure is expressed in seconds, this rate is given in bauds.

module

Rec. X.208

One or more instances of the use of the ASN.1 notation for type and value definition, encapsulated using the ASN.1 module notation (see Recommendation X.208, § 9).

monarchic network; monarchic synchronized network

Rec. G.701

A synchronized network in which a single clock exerts control over all the other clocks.

monarchic synchronized network

See:
monarchic network; monarchic synchronized network.

monitor

Rec. Q.9

A functional unit that observes and records selected activities within a system for analysis.

monologue interaction

Rec. X.218

A mode of interaction where only one application-entity may be the sender.

monologue output

Rec. Z.341

Output from the *system* which occurs outside a *dialogue.*

Morse code

Rec. R.140

A two-condition telegraph code in which characters are represented by groups of dots and dashes, these groups being separated by spaces.

mouth reference point (MRP)

Recs. P.10, P.64

Point 25 mm in front of and on the axis of the lip position of a typical human mouth (or artificial mouth).

See Figure A-1/P.64.

mouth reference point (MRP)

Rec. P.51

The point on the reference axis, 25 mm in front of the lip plane.

MS

Rec. X.413

Message store, also used as a shorter form for "MS abstract-service-provider".

MS abstract-service

Rec. X.413

The set of capabilities that the MS offers to its users by means of its ports.

MS abstract-service-provider

Rec. X.413

The MS which provides the MS abstract-service.

MS abstract-service-user

Rec. X.413

The user of the MS abstract-service. This is the UA.

MS channel configuration

Rec Q.1063

Defined by the interface structure that the MS actually uses to transmit or receive information with respect to the BS at a given point in time. This interface structure may change over time.

MS deregistered

See:
MS registered/deregistered.

MS registered/deregistered

Rec. Q.1003

Parameter indicating whether the MS is in the registered or deregistered state. The parameter takes the following values:

- registered, or
- not registered.

The parameter is temporary subscriber data.

MS-user

Rec. X.413

A shorter form for "MS abstract-service-user".

MSC-A

See:
mobile service switching centre-A.

MSC area

See:
mobile services switching centre (MSC) area.

MSC-B

See:
mobile service switching centre-B.

MSC-B′

See:
mobile service switching centre-B′.

MTP overall transfer time, T_0

Rec. Q.716

The overall message transfer time T_o is referred to the signalling relation. T_o starts when the message has left the user part (level 4) at the point of origin and ends when the message has entered the user part (level 4) at the point of destination.

$$T_o = T_{oa} + \sum (Q_t - Q_a)$$

where

$$T_{oa} = T_{ms} + \sum_{i=1}^{n+1} T_{pi} + \sum_{i=1}^{n} T_{csi} + T_{mr}$$

and

T_{oa} overall message transfer time in the absence of disturbances

T_{ms} Message Transfer Part sending time

T_{mr} Message Transfer Part receiving time

T_{cs} Message transfer time at signalling transfer points

n number of STPs involved

T_p data channel propagation time

T_o overall message transfer time in the presence of disturbances

Q_t total queueing delay (see § 4.2)

Q_a queueing delay in the absence of disturbances (see § 4.2)

Note – For $\Sigma(Q_t - Q_a)$, all signalling points in the signalling relation must be taken into account.

MTP routing verification test (MRVT)

Glos. (VI.7, VI.8, VI.9)

A procedure used to determine if the data of the MTP routing tables in the signalling network are consistent.

mu/A law converter

Rec. Q.9

A unit or a function that changes digital signals encoded using either μ or A-law encoding into the corresponding signal for the other.

muldex

Recs. M.300, Q.9

A contraction of multiplexer-demultiplexer. The term may be used when the multiplexer and demultiplexer are associated in the same equipment.

Note – When used to describe an equipment, the function of the equipment should qualify the title, e.g., PCM muldex, data muldex, digital muldex.

muldex

Rec. R.140

An equipment which combines/separates a number of tributary circuits onto/from a fewer number of aggregate bearer circuits, the relationship between the tributary and aggregate circuits being fixed.

muldex/concentrator

Rec. R.140

A muldex with the line concentrating function ensuring that tributary channels are only allocated time slots in the aggregate bit stream for the duration of their seizure.

multi-address call

Suppl. No. 2 (II.4)

A call set up by the network in which more than one called *terminal* is involved.

multi-block

Gloss. (VI.3)

A group of 8 blocks or 96 signal units on the signalling channel.

multi-block acknowledgement signal

Rec. Q.255

A signal sent on a link in response to a multi-block monitoring signal and used by the receiving terminal to verify multi-block synchronism.

multi-block monitoring signal

Rec. Q.255

A signal, required on links where the number of blocks in the error control loop exceeds 8, and sent to check multi-block synchronism.

multi-block synchronizationsignal unit (MSB)

Gloss. (VI.3)

A signal unit carrying a signal concerning the multi-block synchronization of the signalling system.

multicasting

Rec. F.500

This is a special case of distributing simultaneously a request to more than one DSA. See Recommendation X.518.

Note – A set of agreements is required between the domains wanting to interact based on this method.

multicasting

Rec. X.518

A mode of interaction which may optionally be used by a DSA which cannot perform an operation itself. The DSA multicasts the operation, i.e. invokes the same operation of several other DSAs (in series or in parallel) and passes an appropriate outcome to the original requestor.

multi-channel voice-frequency telegraphy (MCVFT)

Rec. R.140

A telegraph transmission within a telephone type channel using frequency-division multiplexing.

multi-clique mode

Rec. G.763

A DCME operational mode in which more than one clique is used when each clique is associated with a different destination.

multi-clique working (point-to-multipoint operation)

Rec. P.84

A single DCME working to more than one DCME each on a point-to-point destination basis; designations are split and are therefore not interactive. Multi-clique working reduces the traffic handling capacity compared with point-to-point operation, due to a reduction in bearer capacity. Single clique working is the equivalent of point-to-point operation.

multi-connection-endpoint-identifier

Rec. X.200

An identifier which specifies the connection-endpoint of a multi-endpoint-connection which should accept the data that is being transferred.

multi-destination mode

Rec. G.763

A DCME operational mode where traffic is exchanged between more than two (2) corresponding DCMEs simultaneously and trunk channel traffic is interpolated over a pool of available bearer channels for all destinations having traffic in the pool. The transmit trunk channels are designated to receive trunk channels at corresponding locations.

multi-destination operation

Rec. P.84

Many DCMEs working over a common bearer capacity pool, enabling interactive working. This is the equivalent of a TDMA satellite system. Traffic handling capacity is drastically reduced since the bearer becomes very small, due to inter-DCME control messages and inter-terminal operation reducing the bearer capacity. Another term for multi-destination DCMS is network-based DCMS. Figure 2/P.84 shows an example of this.

multi-endpoint-connection

Rec. X.200

A connection with more than two connection-endpoints.

multiframe

Rec. G.701

A cyclic set of consecutive frames in which the relative position of each frame can be identified.

multiframe

Rec. Q.9

A set of consecutive frames in which the position of each frame can be identified by reference to a multiframe alignment signal.

The multiframe alignment signal does not necessarily occur, in whole or in part, in each multiframe.

multi-frequency code (MFC) signalling; MFC signalling

Rec. Q.9

A voice-frequency signalling method in which the signalling information is represented by compound signals, each consisting of n frequencies from a set of m frequencies.

multi-layer testing

Rec. X.290

Testing the behaviour of a multi-layer IUT as a whole, rather than testing it layer by layer.

multi-line subscriber line

Recs. Z.334, Z.341

A line between a public exchange and a P(A)BX or a line between a public exchange and a subscriber set belonging to a subscriber line group.

multiple

Rec. Q.9

Interconnection of several inlets or outlets in a switching stage to the same traffic carrying device (e.g., other switching stage or circuit).

multiple channel

Rec. R.140

Pertaining to or designating a telegraph transmission system in which two or more channels are used for transmission of a character signal propagating in the same direction between the same two points.

multiple-destination transmissions

Rec. D.180

Those transmissions which originate in one or more countries, from one or more points of origin, and are transmitted simultaneously to two or more countries.

multiple subscriber number (MSN)

Rec. I.250

A supplementary service which provides the possibility for assigning multiple ISDN numbers to a single interface.

multiplex

Rec. R.140

Designating or pertaining to an installation in which a common transmission channel is divided into several separate channels each capable of transmitting signals independently in the same direction.

multiplex; digital multiplex equipment

Recs. G.960, I.430

The combination of a digital multiplexer and a digital demultiplexer at the same location, operating in opposite directions of transmission.

multiplex interface

*Series X**

A DTE/DCE interface which conveys the bit stream of a number of subscriber channels by means of time division multiplexing.

multiplex link

*Series X**

A means of enabling a DTE to have several access channels to the data network over a single circuit.

Note – Three likely methods have been identified:

a) packet interleaving,

b) byte interleaving,

c) bit interleaving.

multiplexer

Rec. R.140

An equipment which combines a number of tributary channels onto a fewer number of aggregate bearer channels, the relationship between the tributary and aggregate channels being fixed.

multiplexing

Rec. R.140

A process for combining signals from several separate tributary channels for transmission in the same direction over a common bearer channel.

multiplexing

Rec. X.200

A function within the (N)-layer by which one (N – 1)-connection is used to support more than one (N)-connection.

Note – The term multiplexing is also used in a more restricted sense to refer to the function performed by the sending (N)-entity while the term demultiplexing is used to refer to the function performed by the receiving (N)-entity.

multipoint

Rec. I.113

A value of the attribute "communication configuration" which denotes that the communication involves more than two network terminations.

multipoint access

Rec. I.112

User access in which more than one terminal equipment is supported by a single network termination.

multipoint communication

Rec. I.140

This value applies when more than two access points (see Note) are provided by the service. The exact characteristics of the information flows must be specified separately based on functions provided by the ISDN.

Note – The number of access points can be undefined.

multipoint connection

Rec. I.140

This value applies when more than two end points are provided by the connection, and thus many different information flows are possible.

multipoint connection

U.140

A connection established between three or more stations.

multipoint control unit (MCU)

Rec. F.710

A device which enables more than two teleconference terminals to be interconnected. It can be located in a network or it can be considered as a part of terminal giving the possibility of multiple connections to the network.

multi-processor exchange

Rec. Q.9

An exchange design that uses two or more processors to perform call processing functions.

multislot connection

Rec. Q.9

Time slots associated with two or more digital circuits switched in parallel through a digital exchange for use on the same call to provide a wideband service.

multi-station teletex installation

Rec. F.200

A teletex installation that includes more than one work station.

multiterminal service circuit

Recs. M.60, M.100

A telephone or teleprinter (teletypewriter) service circuit serving more than two stations and having at least one branching point. On each branch of this circuit a certain number of stations can be connected in series. Every station served can enter the circuit individually.

See Figure 2/M.100.

multi-unit message (MUM)

Rec. Q.257

Consists of 2, 3, 4, 5 or 6 signal units in tandem. It is designed to transmit a number of related signals (e.g. address signals) in an efficient way. A special case of the multi-unit messages is the initial address message, which is the only one which can have six signal units in tandem and has a minimum of three signal units.

multi-unit message (MUM)

Gloss. (VI.3)

A signal message which consists of more than one signal unit.

multi-valued attribute

Rec. X.413

An attribute which can have several values associated with it.

mutilation

Rec. R.140

A defect such that a signal element becomes changed from one significant condition to another.

mutually synchronized network

Rec. G.701

A synchronized network in which each clock exerts a degree of control on all others.

N

(N)-address; (N)-service-access-point-address

Rec. X.200

An identifier which tells where an (N)-service-access-point may be found.

(N)-address-mapping

Rec. X.200

An (N)-function which provides the mapping between the (N)-addresses and the (N – 1)-addresses associated with an (N)-entity.

n-ary digital group

Rec. G.701

A number of primary digital or PCM groups assembled by digital multiplexing to form a composite signal of specified digit rate, in both directions of transmission.

Note 1 – A secondary digital group may comprise four primary digital or PCM groups to form a composite signal having a digit rate of 8448 or 6312 kbit/s.

Note 2 – A tertiary digital group may comprise four 8448 kbit/s secondary digital groups or five or seven 6312 kbit/s secondary digital groups to form a composite signal having a digit rate of 34368, 32064 or 44736 kbit/s.

Note 3 – A quaternary digital group may comprise four 34368 kbit/s tertiary digital groups to form a composite signal having a digit rate of 139264 kbit/s.

n-ary digital signal

Rec. G.701

A digital signal in which each signal element has one of n permitted discrete values.

(N)-connection

Rec. X.200

An association established by the (N)-layer between two or more (N + 1)-entities for the transfer of data.

(N)-connection-endpoint

Rec. X.200

A terminator at one end of an (N)-connection within an (N)-service-access-point.

(N)-connection-endpoint-identifier

Rec. X.200

An identifier of an (N)-connection-endpoint which can be used to identify the corresponding (N)-connection at an (N)-service-access-point.

(N)-connection-endpoint-suffix

Rec. X.200

A part of an (N)-connection-endpoint-identifier which is unique within the scope of an (N)-service-access-point.

(N)-data-communication

Rec. X.200

An (N)-function which transfers (N)-protocol-data-units (see Recommendation X.200, § 5.6.1.3) according to an (N)-protocol over one or more (N – 1)-connections.

(N)-data-sink

Rec. X.200

An (N)-entity that receives (N – 1)-service-data-units on an (N – 1)-connection.

(N)-data-source

Rec. X.200

An (N)-entity that sends (N – 1)-service-data-units (see Recommendation X.200, § 5.6.1.7) on an (N – 1)-connection.

(N)-data-transmission

Rec. X.200

An (N)-facility which conveys (N)-service-data-units from one (N + 1)-entity to one or more (N + 1)-entities.

(N)-directory

Rec. X.200

An (N)-function by which the global title of an (N)-entity is translated into the (N – 1)-address of an (N – 1)-service-access-point to which the (N)-entity is attached.

(N)-duplex-transmission

Rec. X.200

(N)-data transmission in both directions at the same time.

(N)-entity

Rec. X.200

An active element within an (N)-subsystem.

(N) entity

See:
entity or (N) entity.

(N)-expedited-data-unit

See:
expedited (N)-service-data-unit;.

(N)-facility

Rec. X.200

A part of an (N)-service.

(N)-function

Rec. X.200

A part of the activity of (N)-entities.

(N)-half-duplex-transmission

Rec. X.200

(N)-data transmission in either direction one direction at a time; the choice of direction is controlled by an (N + 1)-entity.

(N)-interface-control-information

Rec. X.200

Information transferred between an (N + 1)-entity and an (N)-entity to coordinate their joint operation.

(N)-interface-data

Rec. X.200

Information transferred from an (N + 1)-entity to an (N)-entity for transmission to a correspondent (N + 1)-entity over an (N)-connection, or conversely, information transferred from an (N)-entity to an (N + 1)-entity after being received over an (N)-connection from a correspondent (N + 1)-entity.

(N)-interface-data-unit

Rec. X.200

The unit of information transferred across the (N)-service-access-point between an (N + 1)-entity and an (N)-entity in a single interaction. Each (N)-interface-data-unit contains (N)-interface-control-information and may also contain the whole or part of an (N)-service-data-unit.

(N)-layer

Rec. X.200

A sub-division of the OSI architecture, constituted by subsystems of the same rank (N).

(N)-mandatory-service

Rec. X.210

A service which must be provided in the (N)-service.

(N)-one-way communication

Rec. X.200

(N)-data communication in one pre-assigned direction.

(N)-protocol

Rec. X.200

A set of rules and formats (semantic and syntactic) which determines the communication behaviour of (N)-entities in the performance of (N)-functions.

(N)-protocol-connection-identifier

Rec. X.200

An identifier which uniquely specifies an individual (N)-connection within the environment of the multiplexed (N − 1)-connection.

(N)-protocol-control-information

Rec. X.200

Information exchanged between (N)-entities, using an (N − 1)-connection, to coordinate their joint operation.

(N)-protocol-data-unit

Rec. X.200

A unit of data specified in an (N)-protocol and consisting of (N)-protocol-control-information and possibly (N)-user-data.

(N)-protocol-identifier

Rec. X.200

An identifier used between correspondent (N)-entities to select a specific (N)-protocol to be used on a particular (N − 1)-connection.

(N)-provider-optional-service

Rec. X.210

A service which may or may not be provided in the (N)-service.

(N)-relay

Rec. X.200

An (N)-function by means of which an (N)-entity forwards data received from one correspondent (N)-entity to another correspondent (N)-entity.

(N)-service

Rec. X.200

A capability of the (N)-layer and the layers beneath it, which is provided to (N + 1)-entities at the boundary between the (N)-layer and the (N + 1)-layer.

(N)-service-access-point

Rec. X.200

The point at which (N)-services are provided by an (N)-entity to an (N + 1)-entity.

(N)-service-access-point-address

See:
(N)-address;.

(N)-service-connection-identifier

Rec. X.200

An identifier which uniquely specifies an (N)-connection within the environment of the correspondent (N + 1)-entities.

(N)-service-data-unit

Rec. X.200

An amount of (N)-interface-data whose identity is preserved from one end of an (N)-connection to the other.

(N)-simplex-transmission

Rec. X.200

(N)-data-transmission in one pre-assigned direction.

(N)-subsystem

Rec. X.200

An element in a hierarchical division of an open system which interacts directly only with elements in the next higher division or the next lower division of that open system.

(N)-suffix

Rec. X.200

A part of an (N)-address which is unique within the (N)-service-access-point.

(N)-two-way alternate communication

Rec. X.200

(N)-data communication in both directions, one direction at a time.

(N)-two-way-simultaneous-communication

Rec. X.200

(N)-data-communication in both directions at the same time.

n-unit code

Rec. R.140

Equal-length code according to which the character signals are composed of n unit elements.

n-unit code alphabet

Rec. R.140

A telegraph alphabet indicating correspondence between a set of characters and a set of n-unit code combinations.

(N)-user-data

Rec. X.200

The data transferred between (N)-entities on behalf of the (N + 1)-entities for whom the (N)-entities are providing services.

(N)-user-optional-service

Rec. X.210

A service which will only be provided if the (N)-service-user requests it, and it is available in the (N)-service.

name

Rec. F.500

In the context of a directory, the designation of entries and parts thereof. A name must be unambiguous, that is, denote just one object. However, a name need not to be unique, that is be the only name that unambiguously denotes the object.

Note – See X.500-series of Recommendations for further study.

name

Rec. Z.100

A *name* is a *lexical unit* used to name *SDL* objects.

name

See:
(directory) name.

name resolution

Rec. X.518

The process of locating an entry by sequentially matching each RDN in a purported name to a vertex of the DIT.

named-defined parameter

Rec. Z.341

A *parameter* which is identified by its *parameter name.*

naming authority

Recs. F.400, X.400

An authority responsible for the allocation of names.

naming authority

Rec. F.500

An authority responsible for the allocation of names. Each object whose object entry is located at a node in the DIT is, or is closely associated with, a naming authority.

In the context of public directory services, the Administration directory management domain administers the part of the DIT covered by entries of that domain. It may act as naming authority for the distinguished names used in the scope of the domain.

naming authority

Rec. X.213

That which allocated names from a specified naming domain, and which ensures that names so allocated are unambiguous. Where the naming authority allocates addresses, it is called an *addressing authority.*

naming authority

Rec. X.501

An authority responsible for the allocation of names. Each object whose object entry is located at a non-leaf vertex in the DIT is, or is closely associated with, a naming-authority.

naming context

Rec. X.518

A partial sub-tree of the DIT which starts at a vertex and extends downwards to leaf and/or non-leaf vertices. Such vertices constitute the border of the naming context. Non-leaf vertices belonging to the border denote the start of further naming contexts.

naming domain

Rec. X.213

A context within which a name allocated by a naming authority is unambiguous. Where the name is an address, the context within which the name is allocated is called an *addressing domain.*

national/international call indicator

Rec. Q.762

Information sent in the forward direction indicating in the destination national network whether the call has to be treated as an international call or as a national call.

national circuit

Rec. F.68

One connecting two exchanges in the same country.

national circuit

Rec. J.13

The national circuit connects the ISPC to the broadcasting authority; this applies both at the sending and at the receiving end. A national circuit may also interconnect two ISPCs within the same country.

national destination code (NDC)

Recs. E.160, Q.10

A code field, within the E.164 numbering plan, which combined with the subscriber's number (SN) will constitute the national (significant) number of the international ISDN number. The NDC will have a network and/or trunk code selection function.

The NDC can be a decimal digit or a combination of decimal digits (not including any prefix) characterizing a numbering area within a country (or group of countries included in one integrated numbering plan).

The NDC has to be inserted before the called subscriber's number when the calling and called parties are located in different number areas.

NDC assignments are a national responsibility and therefore the NDC structure varies from one country to another. It may take a trunk code format or serve for selection of a destination network.

The NDC can in some instances, provide a combination of both the above functions.

national exchange

Rec. F.68

The termination centre for national circuits only.

national extension

Rec. D.000

The part of the connection which extends from the national side of the international exchange to the subscribers.

national information service (prefix 14)

Recs. E.216, F.126

Prefix 14 will connect the caller to a national or international operator position. The type of information service to be used is decided by the Administration.

Note – Prefix 14 may not be offered on all coast earth stations.

national line

Recs. M.60, M.1010

The whole of the assembly of national circuit sections connecting the terminal national centre to the terminal international centre. When a distinction is needed to indicate the transmission direction in one country the expressions *national sending line*, that is, outgoing from the renter, and *national receiving line*, that is, incoming to the renter, may be used.

See Figure 2/M.1010.

national main section

Recs. M.60, M.900

The whole of the assembly of national group or supergroup sections containing the defined test access points at the terminal national centre and defined test access points at the terminal international centre.

See Figure 1/M.900.

national mobile station identity (NMSI)

Recs. E.212, Q.9

The mobile station identification uniquely identifying the mobile station nationally.

The NMSI consists of the mobile network code (MNC) followed by the mobile station identification number (MSIN).

national-network-congestion signal

Rec. Q.254

A signal sent in the backward direction indicating the failure of the call set-up attempt due to congestion encountered in the national destination network (excluding the busy condition of the called party's line(s)).

national (significant) mobile number

Rec. Q.9

The national (significant) mobile number could have the following form depending upon the way in which the land mobile numbering plan is integrated with the telephone numbering plan:

i) The land mobile numbering plan could be fully integrated with the telephone numbering plan. In this case the mobile stations will be allocated a *subscriber number* as defined in § 5 of Recommendation E.160. The *national (significant) mobile number* then consists of the *trunk code* allocated to the numbering area corresponding to the home area of the mobile station followed by the *subscriber number* allocated to it.

ii) The public land mobile network could be regarded as a separate numbering area within the telephone network. In this case the national (significant) mobile number will consist of the *trunk code* allocated to the PLMN and the *subscriber number* within the PLMN.

national (significant) number

Recs. E.160, Q.10

The number to be dialled following the national (trunk) prefix to obtain a subscriber in the same country (or group of countries included in one integrated numbering plan) but outside the same local network or numbering area.

The national (significant) number consists of the trunk code followed by the subscriber number.

It should be noted that, in some countries, it is customary to consider *for national purposes* that the national (trunk) prefix is included in the national number [which is then not the national (significant) number]. A careful distinction must therefore be made between such national definition or practice and the CCITT definition, which is internationally valid. In order to avoid misunderstanding, the CCITT definition includes the word "significant" between brackets, reading as follows: "national (significant) number".

Examples:

Subscriber	*National (significant) number*
123 45 67 in Bruxelles	2 123 45 67
12 34 56 in Düsseldorf	211 12 34 56
870 12 34 in Montréal	514 870 12 34
12 34 in Perranporth	872 57 12 34
248 45 67 in London	1 248 45 67

Note – Where several countries are included in one integrated numbering plan, only the national (significant) number is to be dialled after the national (trunk) prefix on calls from one of these countries to another.

national operator (prefix 13)

Recs. E.216, F.126

Prefix 13 will connect the caller to a national or international operator position in the country where the coast earth station is located. The type of operator to be used is decided by the Administration.

Note – Prefix 13 may not be offered on all coast earth stations.

national portion call set-up delay

Rec. X.135

The call set-up delay between the boundaries delimiting a national portion, e.g., B_1 and B_5 in Figure 2/X.135.

national portion clear indication delay

Rec. X.135

The delay between the boundaries delimiting a national portion, e.g., B_1 and B_5 in Figure 2/X.135.

national portion data packet transfer delay

Rec. X.135

The delay between the boundaries delimiting a national portion, e.g., B_1 and B_5 in Figure 2/X.135.

national portion of an international virtual connection

Rec. X.134

A collection of adjacent alternating network sections and circuit sections entirely within the borders of one nation. The national portion connects a DTE to an internetwork circuit section that crosses the national border. The national portion includes the access circuit section and excludes the internetwork circuit section that crosses the national border. A national portion always includes one access circuit section and one access network section, and it may include one or more pairs of internetwork circuit sections and transit network sections.

There are two national portions of any international virtual circuit.

national (trunk) prefix

Recs. E.160, Q.10

A digit or combination of digits to be dialled by a calling subscriber, making a call to a subscriber in his own country but outside his own numbering area. It provides access to the automatic outgoing trunk equipment.

Examples:

0 in Belgium, Italy, Japan, Netherlands, Switzerland, United Kingdom;
1 and 0 in Canada and in the USA;
9 in Finland and Spain;
16 in France.

Note – In the case where several countries are included in one integrated numbering plan, the national (trunk) prefix is also used for calls from one of these countries to another.

national section

Rec. M.300

The digital sections and group, supergroup, etc., sections between a station with control or subcontrol functions and a frontier station within the same country are termed comprehensively a national section. A national section will usually comprise several digital, group, supergroup, etc., sections. The digital, group, supergroup, etc., sections between the two stations with control functions within one country also constitute a national section.

national signalling network

Glos. (VI.7, VI.8, VI.9)

A network used for signalling, consisting of national signalling points and the connecting common channel signalling links, including the national signalling point of the gateway exchange connected to the international signalling network.

national signalling point (NSP)

Glos. (VI.7, VI.8, VI.9)

A signalling point which belongs to the national signalling network.

national sound-programme centre (NSPC)

Rec. N.1

A centre at which two or more national sound-programme circuits terminate and at which national sound-programme circuits may be interconnected.

national subscriber's telex number

U.140

A sequence of digits that a caller must normally select to connect to a called subscriber situated in the same country.

national system

Recs. M.60, M.560

This system may comprise one or more 4-wire amplified national circuits with a 4-wire interconnection, and circuits with 2-wire connection to terminal exchanges and subscribers.

See Figure 1/M.560.

national telemessage distribution office

Rec. F.50

An office used for the printing and enveloping of telemessages for subsequent entry into the mail network (or equivalent).

national telemessage input centre

Rec. F.50

An office used for accepting telemessages.

national telephone system

Recs. G.101, Q.40

It may comprise one or more 4-wire national trunk circuits with 4-wire interconnection, as well as circuits with 2-wire connection up to local exchanges and the subscriber sets with their subscriber lines.

See Figure 1/G.101 or 1/Q.40.

national television centre (NTC)

Rec. N.51

A centre at which two or more national television circuits terminate and at which national television circuits may be interconnected.

natural

Rec. Z.100

Natural is a *syntype* defined in a predefined *partial type definition* for which the *values* are the non-negative integers (i.e., 0, 1, 2, ...). The *operators* are the *operators* of the *sort integer.*

natural language description

Rec. Z.110

An example of an informal description technique using one of the languages used by CCITT to publish Recommendations. It may be supplemented with mathematical and other accepted notation, figures, etc.

nature of address indicator

Rec. Q.762

Information sent in association with an address indicating the nature of that address, e.g. ISDN international number, ISDN national significant number, or ISDN subscriber number.

nature-of-circuit indicator

Rec. Q.254

Information sent in the forward direction about the nature of the circuit or any preceding circuit(s) already engaged in the connection:

- *satellite circuit*, or
- *no satellite circuit.*

An international exchange receiving this information will use it (in combination with the appropriate part of the address information) to determine the nature of the outgoing circuit to be chosen.

nature of circuit indicators (sent in the forward direction)

Rec. Q.400

Signals only sent on request by certain backward signals and using a second meaning of some signals, to indicate whether a satellite link is already included in the connection or not.

navigational reports from ships (prefix 42)

Recs. E.216, F.126

Prefix 42 provides connection to a navigational office for transmission of information from shipson any hazards which could endanger safety of navigation (e.g. wrecks, derelicts, floating obstructions, defective radiobeacons or light vessels, icebergs, floating mines, etc.).

near-end crosstalk (NEXT)

Recs. G.960, I.430

Crosstalk where the coupling is occurring at or near to the transmitter.

negative acknowledgement (NACK)

Glos. (VI.7, VI.8, VI.9)

An explicit request for retransmission of signal units, received in a corrupt form.

negative indication tone

Rec. E.182

A tone advising a subscriber that the request for service cannot be accepted.

negative justification

Rec. G.701

A method of justification in which the digit time-slots used to convey a digital signal have a digit rate that is always lower than the digit rate of that original signal.

Note 1 – The deleted digits are conveyed by separate means.

Note 2 – Information which facilitates the recovery of the deleted digits is conveyed by means of the justification service digits.

negative pulse stuffing (deprecated)

See:

negative justification.

negative stuffing (deprecated)

See:

negative justification.

negotiation

Rec. X.225

The process by which two SPMs agree on a common set of functional units and protocol values and on the initial setting of available tokens.

net margin

Rec. S.140

The margin when the modulation rate at the input of the apparatus has its nominal value.

network ; telecommunication network

Recs. I.112, Q.9

A set of nodes and links that provides connections between two or more defined points to facilitate telecommunication between them.

network

Rec. X.300

A set of nodes and links that provide connections between two or more defined port to facilitate telecommunication between them. In particular, a network can for one particular instance of communication:

a) act for transparent transfer of information only (independent of any application), or

b) also act upon the information related to the application itself.

network

Rec. X.300

Any combination ofswitch(es) or exchange(s), and/or networks, and/or IWFs.

network

Rec. Z.337

All the exchanges which are relevant to the service standpoint operated by a company in a country.

network

Rec. Z.341

All the *exchanges* which are relevant from the service standpoint operated by an Administration in a country.

network accessibility

Rec. E.800

The *probability* that the *user* of a *service* after a request receives the proceed-to-select signal within specified conditions.

Note – The proceed-to-select signal is that signal inviting the *user* to select the desired *destination.*

network address

Recs. F.400, X.400

In the context of message handling, a standard attribute of an O/R address form that gives the network address of a terminal. It is comprising the numbering digits for network access points from an international numbering plan.

network addressing authority

Rec. X.213

An addressing authority that assigns and administers Network service access point addresses within one or more network addressing domains.

network addressing domain

Rec. X.213

A subset of the global network addressing domain consisting of all of the Network service access point addresses allocated by one or more addressing authorities.

network analysis point

Rec. M.60

The network analysis point is an element within the general maintenance organization for the international automatic and semi-automatic telephone service associated with one or more international centres.

It receives information concerning service quality and faults not associated with specific circuits. It analyses all relevant information to investigate the problems involved. It may request the fault report point (network) to initiate investigatory and/or remedial actions in one or more maintenance centres in the home country or via a fault report point (network) in another country.

The network analysis point acts as a single point of contact for general enquiries concerning the day-to-day maintenance of the international telephone network, as may be made by the maintenance organizations of other Administrations.

network analysis point

Rec. M.720

The network analysis point is an element within the general maintenance organization for the international automatic and semi-automatic telephone service associated with one or more international centres.

It receives information concerning service quality and faults not associated with specific circuits. It analyses all relevant information to investigate the problems involved. The general considerations for checking the quality of the international telephone service are given in Recommendation E.420.

network clear indication delay (NCID)

Rec. X.130

The delay between transmission of a *clear request* signal by the clearing DTE and the receipt of the DCE *clear indication* signal by the cleared DTE.

network cluster

Rec. E.600

A final circuit group and all the high usage circuit groups which have at least one traffic relation for which the final circuit group is in the last choice route.

network code (SANC)

See:

signalling area/network code.

network coordination station

Suppl. No. 3 (II.4)

A station in the maritime satellite system with the capability to coordinate, supervise and monitor the assignment and utilization of the maritime satellite circuits within a satellite coverage area. The network coordination station is designated by and operated for the satellite system operator (INMARSAT).

network coordination station

Rec. X.350

A station in the public mobile satellite system with the capability to coordinate, supervise and monitor the assignment and utilization of the maritime satellite circuits within a satellite coverage area. The network coordination station is designated and operated by the satellite system operator.

network coordination station (NCS)

Rec. M.1100

A station in the Maritime Mobile-Satellite Service that maintains a pool of frequencies, assigns frequencies on demand from a coast earth station for use in a maritime satellite circuit, and supervises and monitors the use of the frequencies. The network coordination station is normally located at a coast earth station which is designated by the satellite system operator to fulfill these functions.

See Figure 1/M.1100.

network element

Rec. Q.9

An entity in the telecommunications network.

network element

Recs. Z.337, Z.341

Telecommunication equipment which may perform signalling, switching and transmission functions.

network element (NE)

Recs. M.30, M.60

The NE is comprised of telecommunication equipment (or groups/parts of telecomunication equipment) and support equipment that performs network element functions (NEFs) and has one or more standard Q-type interfaces.

network element function (NEF) block

Recs. M.30, M.60

The NEF block communicates with a telecommunication management network (TMN) for the purpose of being monitored and/or controlled. Details of the NEF are given in § 5.5 of Recommendation M.30.

network failure

*Series X**

A circumstance occurring in a network which prevents a service from being offered because the network is not functioning correctly.

network group

Recs. Z.337, Z.341

A group of telecommunication networks relevant to the service standpoint (e.g. different operating companies offering the same service in the same country).

network image

Rec. M.495

Software description of the transmission network to be protected.

network indicator

Glos. (VI.7, VI.8, VI.9)

The part of the subservice field within the service information octet that may be used to discriminate between national and internacional signalling messages.

network-maintenance signals

Rec. Q.256

Management signals used for maintenance purposes.

network management action

Recs. Z.337, Z.341

The activity performed, not necessarily in the network elements, to regulate traffic flow.

network management boundary

Rec. U.82

The boundary within which the telex store and forward service is provided by one or more telex SFUs under the control of one Administration.

network management centre

Recs. Z.337, Z.341

A centre where network management functions are performed (e.g. O and M centre, switching centre).

network management control

Recs. Z.337, Z.341

The capabilities in network elements to regulate traffic flow and network operation in order to insure the maximum utilization of the network capacity in all situations of traffic overload and network element failure.

network management data

Recs. Z.337, Z.341

The set of information necessary to monitor, detect and identify a network problem.

network management indicator

Recs. Z.337, Z.341

A logical result of comparison of network management parameters and thresholds comparison.

network management information

Recs. Z.337, Z.341

The set of information produced in the network management centre describing the network status and performance, the abnormal conditions detected, the problems identity and the active network management controls.

network management object

Recs. Z.337, Z.341

A set of network elements under control of network management functions and/or subject to measurement for network management purposes.

network management parameters

Recs. Z.337, Z.341

Information produced in the network management centre to be used for the production of abnormal condition report and for display on alerting devices.

network-management signals

Rec. Q.256

Information regarding the conditions of circuit groups or equipment sent from one point in the network to one or more other points. This excludes information relevant to individual calls or individual speech circuits.

network management system

Recs. Z.337, Z.341

A system which performs network management functions.

network node interface (NNI)

Rec. I.113

The interface between two network nodes (e.g. synchronous digital multiplex equipments, digital exchanges).

network performance

Rec. E.800

The ability of a network or network portion to provide the functions related to *communications* between *users.*

Note 1 – Network performance contributes to *serveability performance* and *service integrity* (see Figure 2/E.800).

Note 2 – Network performance measures are meaningful to network providers and are quantifiable at boundaries of network portions to which they apply. Quality of service measures are only quantifiable at a service access point.

network performance (NP)

Rec. I.350

The ability of a network or network portion to provide the functions related to communications between users.

Note – The performance of a network and its component parts contributes to servability performance and service integrity performance as defined in Recommendation E.600 and in Supplement No. 6 of Serie E Recommendations, and is characterized by a set of measurable and calculable parameters.

network performance

Rec. I.140

This attribute describes the network performance that relate to an ISDN connection element.

This performance attribute consists of sub-attributes, for example:

- error performance;
- slip performance.

network problem identity

Recs. Z.337, Z.341

Information produced in the network management centre to indicate the type of problem detected and the portion of the network and/or services affected.

network protocol address information

Rec. X.213

Information encoded in a network protocol data unit to carry the semantics of a Network service access point address. (This is known as an "address signal" or as the "coding of an address signal" in the public network environment.)

network raw data

Recs. Z.337, Z.341

Network information provided by network elements and used for the production of network management parameters and for display on alerting devices.

network recall

Suppl. No. 2 (II.4)

The recall of the network by a subscriber during the *message* phase of the call to request facilities.

network reference data

Recs. Z.337, Z.341

Information on the network elements and structure (e.g. circuit groups, number of circuits in a circuit group, routing information, type and quantity of switching system components).

network ressources

See:
(network) resourc.

network section

Rec. X.134

A network consists of the network components that provide a virtual connection between two circuit sections. The network provider is responsible for the performance of the network section.

Network Service Part (NSP)

Glos. (VI.7, VI.8, VI.9)

The combination of the Message Transfer Part and the Signalling Connection Control Part.

network service provider

Rec. X.224

An abstract machine which models the totality of the entities providing the network service, as viewed by a transport entity.

network termination

Rec. I.112

Equipment that provides the functions necessary for the operation of the access protocols by the network.

Note – The network termination provides essential functions for transmission purposes.

network termination (NT)

Recs. G.960, I.430

The functional group on the network side of a user-network interface.

Note – In Recommendations I.430 and I.431, "NT" is used to indicate network terminating layer 1 aspects of NT1 and NT2 functional groups.

network transfer delay

*Series X**

The time which is required by the network to transfer an entity, offered at the originating DTE/DCE interface, to the destination DTE/DCE interface. Depending on the mode of operation the entity may be a bit, a packet or a message.

network utility

*Series X**

An inter-network administrative signalling mechanism in the call control procedure between switched public data networks.

network utility field

*Series X**

A field to transmit the service information for the network utility. The network utility field complements the user facility field and serves to distinguish user service signalling from network administrative signalling.

new

Rec. X.413

An entry-status value.

new layout object

Rec. T.412

This attribute specifies that the content associated with the logical object shall be laid out starting within the next layout object which does not contain any content associated with preceding logical objects, and which is of a specified layout object class or layout category or object type.

newtype

Rec. Z.100

A *newtype* introduces a *sort*, a set of *operators*, and a set of *equations*. Note that the term *newtype* might be confusing because actually a new *sort* is introduced, but *newtype* is maintained for historical reasons.

next transmitted bit

Recs. V.36, V.37

The bit which will be transmitted as a result of scrambling the applied data bit.

no tone probability

Rec. E.800

The *probability* of a *call attempt* encountering no tone following receipt of a valid code by the exchange.

node

Rec. Z.100

In the *abstract syntax*, a *node* is a designation of one of the basic concepts of *SDL*.

node; switching node

Rec. I.112

A point at which switching occurs.

Note – The term "node" is sometimes used to refer to a point at which circuits are interconnected by means other than switching. In such a case a suitable qualification should be used, for example: "synchronization node".

nominal alternating discharge current

Rec. K.12

For currents with a frequency of 15 Hz to 62 Hz, the alternating discharge current which the gas discharge tube is designed to carry for a defined time.

nominal black (white)

Rec. T.0

Level or frequency of the signal corresponding to a pure black (white).

nominal d.c. spark-over voltage

Rec. K.12

The voltage specified by the manufacturer to designate the gas discharge tube (type designation) and to indicate its application with respect to the service conditions of the installation to be protected. Tolerance limits of the d.c. spark-over voltage are also referred to the nominal d.c. spark-over voltage.

nominal impulse discharge current

Rec. K.12

The peak value of the impulse current with a defined wave shape with respect to time for which the gas discharge tube is rated.

nominal justification rate

Rec. G.701

The justification rate that occurs when the digit rates of both the original signal and the justified signal are at their nominal values.

nominal justification ratio

Rec. G.701

The ratio of the nominal justification rate to the maximum justification rate.

nominal loudness ratings (LRs) of the national systems

Rec. G.111

Send and receive loudness ratings, SLRs and RLRs respectively, may in principle be determined at any interface in the telephone network. When specifying SLRs and RLRs of a national system, however, the interface is chosen to lie at the international exchange.

An increasing number of international systems will be connected to national systems via a *digital* interface, where by definition the relative levels are 0 dBr. Therefore, in Recommendation G.111 and in Recommendation G.121, the SLRs and RLRs of the *national systems* are referred to a *0 dBr point* at the international exchange. (See Recommendation G.101, § 5). This convention is applied both for digital and analogue interconnections between the national and international systems (unless otherwise specified in particular cases).

If these interconnections are made on an analogue basis, however, the actual relative levels at the interface may be chosen by the Administration concerned. Thus, if the standardized relative levels at the analogue interface are S dBr and Q dBr for the (national) sending and receiving systems respectively, the relation between the actual LRs at the interface and a 0 dBr point are

$$\text{SLR (Interface)} = SLR - S$$

$$\text{RLR (Interface)} = RLR + Q$$

See Figure 1/G.111.

nominal margin (of a type of apparatus)

Rec. S.140

The minimum value specified for the effective margin of equipment of a given type when working under standard operating and adjustment conditions.

nominal maximum circuit

See:

hypothetical reference circuit; nominal maximum circuit.

nominal page

Rec. T.411

A rectangular area which, as assumed by the sender of a document, has the ideal size of the presentation surface.

Note – Examples of ideal sizes are given in ISO 216.

nominal relative levels at exchange boundaries

Rec. Q.45 bis

For the GO direction of transmission indicated by the heavy line in Figure 1/Q.45 *bis*:

- the nominal relative level at the exchange input port at point A is designated L_i;
- the nominal relative level at the exchange output port at point D is designated L_o.

For the RETURN direction of transmission the input port with its nominal relative level L_i is located at point D and the output port with its nominal relative level L_o is located at point A.

The values of the nominal relative levels L_i and L_o may be different for each 2-wire path of a 4-wire connection through the analogue international exchange.

nominal relative levels at virtual analogue switching points

Rec. Q.45 bis

The nominal relative levels at the virtual analogue switching points are defined to assure stability and to assist maintenance procedures.

The difference of the nominal relative level at the end of the incoming 2-wire path and the nominal international through-connecting level, which is by convention -3.5 dBr, is the stability loss T assigned to a 2-wire path of a 4-wire circuit. By the value of this loss T the nominal transmission loss of a 2-wire path of a connection through an analogue international exchange is referred to its virtual analogue switching point.

nominal stuffing rate (deprecated)

See:

nominal justification rate.

nominal stuffing ratio (deprecated)

See:

nominal justification ratio.

nominal transmission loss

Rec. Q.551

The nominal transmission loss for a connection through an exchange is equal to the difference of the relative levels at the input and the output.

$$NL = (L_i - L_o)\ \text{dB}$$

The nominal transmission loss between the input at an analogue interface and the exchange test point is defined as:

$$NL_i = L_i$$

The nominal transmission loss between the exchange test point and the output of an analogue interface is defined as:

$$NL_o = -L_o$$

This is equal to the nominal "composite loss" (see its definition) at the reference frequency. See also Recommendation G.101, § 5.3 and Supplement No. 1 in Fascicle VI.5 of the CCITT Blue Book.

nominal transmission loss

Rec. Q.45 bis

A connection through an analogue international exchange (see Figure 1/Q.45 *bis*) is established by connecting an input port located at one exchange boundary to an output port located at another exchange boundary in both directions.

The nominal transmission loss of a 2-wire path of a connection through an exchange is equal to the difference of the relative levels at the input and the corresponding output:

$$NL = (L_i - L_o)\ \text{dB}$$

Note – The nominal transmission loss of the exchange may be different in the GO and RETURN direction of transmission.

nominal transmission loss

Suppl. No. 1 (VI.5)

In the field of telecommunications, it is a well-established practice to define the nominal transmission loss (NL) between two points as the difference between the relative levels associated with these points. If, for instance, for a "connection through a digital exchange" the relative level at the input is L_i, and at the output, L_o, then the nominal loss is

$$NL = L_i - L_o \tag{4}$$

Taking into account that according to the definition of the power reference circuit (see Figure 1, Supplement No. 1 (VI.5)), E is frequency-independent, one obtains from equations (3) and (4) of this Supplement the nominal loss.

$$NL = 20 \log \left| \frac{E}{U(1000\ \text{Hz})} \right| + 10 \log \left| \frac{Z_{02}\ (1000\ \text{Hz})}{Z_{01}\ (1000\ \text{Hz})} \right| \tag{5}$$

It may be noted that equation (5) represents the "composite loss" (see its definition) at 1000 Hz. The composite loss is the only measure of attenuation that allows adding of the losses of "half-channels" (i.e. A-D and D-A) regardless of the specific impendances at the input and output ports.

Test circuit is shown in Figure 2 of Supplement No. 1 (VI.5).

nominal white

See:

nominal black (white.

nominated reserved circuit

Rec. R.140

A circuit, normally available for telephone traffic, which is allocated for the operation of a multi-channel telegraph system when the main, or primary, circuit becomes faulty.

non-adjacent signalling points

Glos. (VI.7, VI.8, VI.9)

Two signalling points that are not directly connected by any signalling links.

non-associated mode (of signalling)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The mode where messages for a signalling relation involving two (nonadjacent) signalling points are conveyed, between those signalling points, over two or more signalling links in tandem passing through one or more signalling transfer points.

non-associated mode of operation

Rec. Q.253

In a non-associated mode of operation, the signals are transferred between the two exchanges over two or more common signalling links in tandem, the signals being processed and forwarded through one or more intermediate *signal transfer points.* Following this definition, there may be a range of non-associated modes of operation which vary in the degree of rigidity imposed on the choice of the parth utilized by the signals pertaining to the speech circuit. The ends of this range can be described as fully dissociated mode and quasi-associated mode of operation.

non-associated signalling

Gloss. (VI.3)

A mode of operation in which the signals for a group of speech circuits are sent over two or more common signalling links in tandem. The signals being processed and forwarded to the next link by equipment at one or more signal transfer points.

non-basic

Rec. T.411

A qualifier for attribute values, control function parameter values and other capabilities that are only allowed in document interchange in the context of a given document application profile if their use is declared in the document profile.

non-circularity of cladding

See:
non-circularity of core; non-circularity of cladding.

non-circularity of core; non-circularity of cladding

Rec. G.651

The difference between the diameters of the two circles defined by the core (cladding) tolerance field divided by the core (cladding) diameter.

non-circularity of the cladding surface

Rec. G.652

The difference between the maximum cladding surface diameter D_{max} and minimum cladding surface diameter D_{min} (with respect to the common cladding surface centre) divided by the nominal cladding diameter, D, i.e.,

$$Non\text{-}circularity = (D_{max} - D_{min}) / D$$

Note – The maximum and minimum cladding surface diameters are respectively the largest and smallest distances between the two intersections of a line through the cladding centre with the cladding surface.

non-conducted conference

Rec. F.710

In this kind of conference no (electronic) conductor action is taken. All microphones are open or automatically switched by means of a voice switch for acoustic stability reason.

non-critical defect

Suppl. No. 6(II.3)

A *defect* other than a *critical defect.*

non-critical failure

Suppl. No. 6 (II.3)

A *failure* other than a *critical failure.*

non-critical fault

Suppl. No. 6 (II.3)

A *fault,* other than a *critical fault.*

non-decimal numeral

Rec. Z.341

A *numeral* in a *numbering system* other than *decimal.*

non-delivery

Recs. F.400, X.400

In the context of message handling, a transmittal event in which an MTA determines that the MTS cannot deliver a message to one or more of its immediate recipients, or cannot deliver a report to the originator of its subject message or probe.

non-delivery notification (NDN)

Rec. U.82

A type of SMXU used to provide information on an address or addresses to which the message has not been delivered.

non-delivery notification (NDN) / positive delivery notification (PDN)

Rec. F.201

If the CF has not been able to deliver the message to the called terminal despite the performance of a defined cycle of delivery attempts on the called terminal network (each network has a specific cycle) and within a maximum of a four hours duration, the CF should send a NDN to the calling user to indicate to him that his message has not been delivered to the called terminal and that no further delivery action will be taken by the CF.

Note – The NDN facility is not provided in the one-stage selection method of interworking from telex to teletex.

non-delivery notification (NDN)/positive delivery notification (PDN)

Suppl. No. 1 (II.4)

If the CF has not been able to deliver the message to the called terminal despite the performance of a defined cycle of delivery attempts on the called terminal network (each network has a specific cycle) and within a maximum of a T2-defined duration, the CF should send an NDN to the calling user to indicate to him that his message has not been delivered to the called terminal and that no further delivery action will be taken by the CF.

Note 1 – The NDN facility is not provided in the first method of interworking for the telex to teletex direction.

Note 2 – The PDN facility, i.e. the ability of the CF to send back a proof of the delivery, is for further study.

non-delivery report

Rec. X.402

non-delivery or non-affirmation of the subject message or probe.

non-designation method

Rec. Q.1001

The calling subscriber is not required to know the actual location area of the mobile station. The call is routed according to the dialled information and, if required, rerouted on additional information given by a location register.

non-destructive

Rec. X.216

A service is non-destructive if its invocation does not cause the loss of data.

nonlinear processing loss (A_{NLP})

Rec. G.165

Additional attenuation of residual echo level by a nonlinear processor placed in the send path of an echo canceller.

See Figure 4/G.165.

Note – Strictly, the attenuation of a nonlinear process cannot be characterized by a loss in dB. However, for purposes of illustration and discussion of echo canceller operation, the careful use of A_{NLP} is helpful.

nonlinear processor (NLP)

Rec. G.165

A device having a defined suppression threshold level and in which:

a) signals having a level detected as being below the threshold are suppressed, and

b) signals having a level detected as being above the threshold are passed although the signal may be distorted.

Note 1 – The precise operation of a nonlinear processor depends upon the detection and control algorithm used.

Note 2 – An example of a nonlinear processor is an analogue centre clipper in which all signal levels below a defined threshold are forced to some minimum value.

non-mandatory attribute

Rec. T.411

An attribute which, when applicable to a constituent, need not be specified explicitly; if the attribute is not specified explicitly in a given constituent, the attribute does not apply.

non-operating state

Suppl. No. 6 (II.3)

The state when an *item* is not performing a *required function.*

non-operating time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *non-operating state.*

non-print cycle

Rec. R.140

The operating time of a receiver in an error detecting and feedback system, initiated by the detection of a mutilation or by a signal repetition that has the same duration as a repetition cycle and during which all signals received are prevented from producing printing.

Note – See CCIR Recommendation 342-2.

non-registered access

Recs. F.400, X.400

In the context of message handling services, access to the service through publicly available telecommunications means by users who have neither been explicitly registered by the service provider, nor been allocated an O/R address.

non-relevant failure

Suppl. No. 6 (II.3)

A *failure* to be excluded in interpreting test or operational results or in calculating the value of a *reliability performance measure.*

Note – The criteria for the exclusion should be stated.

non-repaired item

Suppl. No. 6 (II.3)

An *item* which is not repaired after a *failure.*

Note – A *non-repaired item* may be repairable or not.

non-required time

Suppl. No. 6 (II.3)

The *time interval* during which the user does not require the *item* to be in a condition to perform a *required function.* See Figure 3, Suppl. No. 6 (II.3)

non-specific subordinate reference

Rec. X.518

A knowledge reference that holds information about the DSA that holds one or more unspecified subordinate entries.

non-switched connection

Rec. I.112

A connection that is established without the use of switching, for example by means of hard-wired joints.

non-switched connection element; non-switched ISDN connection element

Rec. I.112

An ISDN connection element that is established without switching.

non-switched ISDN connection element

See:

non-switched connection element; non-switched ISDN connection element.

non-synchronized network

Rec. G.701

A network in which signals need not be synchronous.

nonsynchronized network

Rec. Q.9

A network in which the corresponding significant instants of signals need not be synchronized or mesochronous.

non-synchronous

Rec. G.701

The essential characteristic of time-scales or signals such that their corresponding significant instants do not necessarily occur at the same average rate.

non-terminal symbol

Rec. Z.341

Representation, within a *syntax diagram*, of another *syntax diagram* by name. It is an abbreviated *symbol* for a more complex construct.

non-transparent loopback

Recs. G.960, I.430, M.60, M.125

A non-transparent loopback is one in which the signal transmitted beyond the loopback point (the forward signal) when the loopback is activated is not the same as the received signal at the loopback point. The forward signal may be a defined signal or unspecified. See Figures B-2/G.960, E-2/I.430 and 1 b/M.125.

non uniform

Rec. I.140

This value applies when all connections do not have the same attribute values.

non-uniform encoding

Rec. G.701

The generation of code words to represent non-uniformly quantized values. (See Figure 3/G.701.)

non-uniform quantizing

Rec. G.701

Quantizing in which not all the quantizing intervals lying entirely with the working range are equal. (See Figure 2/G.701.)

normal digital block

See:

normal transmission link/equipment; normal digital block, group, supergroup, etc..

normal group supergroup

See:

normal transmission link/equipment; normal digital block, group, supergroup, etc..

normal mode

Rec. X.216

The mode of operation of the presentation layer, which provides the full facilities of the presentation-service.

normal mode

Rec. X.217

The mode of ACSE operation which results in the transfer of ACSE semantics, using the presentation-service.

normal mode

Rec. X.218

A mode of operation of the reliable transfer service element providing full services.

normal (traffic) routing

U.140

Designating in accordance with given rules the set of circuits on a first priority basis from which a circuit is to be selected, provided that a free circuit exists in that set for a given call attempt.

normal routing of (signalling)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The routing of a given signalling traffic flow in normal conditions (i.e. in the absence of failures).

normal transmission equipment

See:

normal transmission link/equipment; normal digital block, group, supergroup, etc..

normal transmission link/equipment; normal digital block, group, supergroup, etc.

Rec. M.495

A transmission link/equipment or a digital block, group, supergroup, etc., which is used for transmission under normal operating conditions.

normalized free-field response (at a given point)

Rec. P.51

Difference between the third-octave spectrum level of the signal delivered by the artificial mouth at a given point in the free field and the third-octave spectrum level of the signal delivered simultaneously at the MRP. The characteristic is measured by feeding the artificial voice (see Recommendtion P.50) a speech-shaped random noise or a pink noise.

normalized obstacle diffraction

Rec. P.51

Difference between the third-octave spectrum level of the acoustic pressure delivered by the artificial mouth at the surface of the reference obstacle and the third-octave spectrum level of the pressure simultaneously delivered at the point on the reference axis, 500 mm in front of the lip plane. The characteristic is defined for positions of the reference obstacle in front of the artificial mouth, with the disc axis coinciding with the reference axis, and is measured by feeding the artificial mouth with a complex signal such as the artificial voice, a speech shaped random noise or a pink noise.

the not-ready condition of the telex terminal

Rec. U.45

The status of a terminal which prevents the return of the call connect signal or answerback sequence in response to a valid incoming call signal or WRU respectively.

Alternatively, the status which develops within a terminal during an established connection as a result of the exhaustion of the printing paper, or equivalent recording medium, and which results in premature clearing of the connection.

note

Rec. Z.100

A *note* is text enclosed by /* and */ which has no *SDL* defined semantics. See the definition of the term *comment.*

notification

Rec. U.81

The forwarding of an advice of delivery/non-delivery of a message to the originating telex subscriber over an international telex circuit.

novel services

Rec. E.508

Novel services are defined as totally new service offerings many of which may be carried over the ISDN.

NSAP address (OSI-)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A global address as defined for OSI which is understandable over any network and can be used to address between networks.

null

Rec. Z.100

Null is the *literal* of *sort PId.*

null hypothesis H_0

Suppl. No. 6 (II.3)

The hypothesis to be rejected or not rejected (accepted) at the outcome of the *statistical test.*

null type

Rec. X.208

A simple type consisting of a single value, also called null.

Note – The null value is commonly used where several alternatives are possible, but none of them apply.

number of discarded pels

Rec. T.417

This attribute specifies the number of pels that are to be ignored at the beginning of each line within a content portion. The positioning of each line is started from the next pel in the line.

number of lines

Rec. T.417

This attribute specifies the number of lines of pels within a content portion.

number of pels per line

Rec. T.417

This attribute specifies the number of pels in each line within a content portion.

number of significant conditions

Rec. R.140

Number of different significant conditions that a signal element can assume in accordance with a code.

number-received signal (sent in the backward direction)

Rec. Q.120

This signal is sent from the incoming international exchange to the outgoing international exchange when the incoming register has recognized that all the digits required for routing the call to the called subscriber have been received.

In the semi-automatic working, the number-received signal may be used to inform the outgoing operator that the international switching operations have been completed.

In automatic working, this signal is essential to show the outgoing register at the outgoing international exchange that it can release, and to set up speech conditions at this exchange. Hence, it is desirable that the signal be sent as soon as possible.

number repetition service

Suppl. No. 1 (II.2)

The possibility for the subscriber to repeat a previously dialled number by dialling a short code.

numbering plan

Rec. X.121

In the context of the international numbering plan for public data networks, the specification given in Recommendation X.121.

Note – Other international numbering plans are contained in Recommendations E.163, E.164 and F.69

numbering plan indicator

Rec. Q.762

Information sent in association with a number indicating the numbering plan used for that number (e.g. ISDN number, Telex number).

numbering plan interworking

Rec. X.121

In the context of the international numbering plan for public data networks, the methods to establish interworking between networks applying different international numbering plans.

Note – Examples of numbering plan interworking are given in Recommendations X.122, E.166 and I.332.

numbering system

Rec. Z.341

Any notation for the representation of numbers.

numeral

Rec. Z.341

A discrete representation of a number within a *numbering system.*

numeric O/R address

Recs. F.400, X.400

In the context of message handling, an O/R address that numerically identifies a user relative to the

ADMD through which the user is accessed. It identifies an ADMD, and a user relative to that ADMD. It is identifying a user of message handling services by means of a numeric keypad.

numeric user identifier

Recs. F.400, X.400

Standard attribute of an O/R address as a unique sequence of numeric information for identifying a user.

numerical aperture

Rec. G.651

The numerical aperture NA is the sine of the vertex half-angle of the largest cone of rays that can enter or leave the core of an optical fibre, multiplied by the refractive index of the medium in which the vertex of the cone is located.

numerical signal (sent in the forward direction)

Recs. Q.120, Q.140

This signal provides an element of information necessary to effect the switching of the call in the desired direction. There is always a succession of numerical signals sent.

O

object

Rec. T.411

An element of the specific layout structure or of the specific logical structure.

object

Rec. Z.341

An *information entity*, usually the *system* part towards which the *action* of a *function* is directed.

object (of interest)

Recs. F.500, X.501

Anything in some "world", generally the world of telecommunications and information processing or some part thereof, which is identifiable (can be named), and which it is of interest to hold information on in the DIB.

object

See:
abstract object; object.

object class

Recs. F.500, X.501

An identified family of objects (or conceivable objects) which share certain characteristics.

Note – See X.500-series of Recommendations for further study.

object class

Rec. T.411

An element of a generic structure from which objects with common characteristics may be derived.

object class

Rec. T.412

This attribute is used to establish a relationship between an object description and its object class description.

object class description

Rec. T.411

A set of attributes that specify the properties of an object class including its relationships, if any, with other components.

object class identifier

Rec. T.412

This attribute identifies an object class description uniquely within the context of the document.

object description

Rec. T.411

A set of attributes that specify the properties of an object including its relationships, if any, with other components.

object descriptor type

Rec. X.208

A type whose distinguished values are human-readable text providing a brief description of an information object.

Note – An object descriptor value is usually, but not always associated with a single information object. Only an object identifier value unambiguously identifies an information object.

object entry

Recs. F.500, X.501

An entry which is the primary collection of information in the DIB about an object, and which can therefore be said to represent that object in the DIB.

object identifier

Rec. T.412

This attribute identifies an object description uniquely within the context of the document.

object identifier

Rec. X.208

A value (distinguishable from all other such values) which is associated with an information object.

object identifier type

Rec. X.208

A type whose distinguished values are the set of all object identifiers allocated in accordance with the rules of this Recommendation.

Note – The rules of this Recommendation permit a wide range of authorities to independently associate object identifiers with information objects.

object language; target language

Rec. Q.9

A language into which statements are translated.

object program

See:
target program; object program.

object type

Rec. T.411

A property of every component that specifies which attributes are permitted in the description to which it applies and indicates the role of the component in the document architecture.

object type

Rec. T.412

This attribute specifies the object type. The object type determines the attributes that may be specified for the object description or object class description.

objective loudness rating (OLR)

Suppl. No. 19 (V)

The rating of a connection or its components when measured according to the methodology described within Suppl. No. 19 (V) § 1.

objects

Rec. M.251

Individual items on which test/measurements are performed (e.g. circuits, group of circuits, transmission equipments, etc.)

observed data

Suppl. No. 6 (II.3)

Values related to an *item* or a process obtained by direct observation.

Note – Values referred to could be events, *time instants, time intervals,* etc.

observed traffic

Rec. E.600

Instantaneous observed traffic is the amount of occupied resources at a given instant. Average observed traffic is the time average of instantaneous observed traffic over a given period.

observed value (in statistics)

Suppl. No. 6 (II.3)

The value of a *characteristic* determined as the result of an observation or *test.*

obstacle effect (obstruction effect)

Rec. P.10

The change in the acoustic field close to a human or artificial mouth as obstacles (e.g. telephone transmitter) are brought into close proximity.

OC curve (for a statistical test plan)

See:

operating characteristic curve; OC curve.

occasional transmissions

Rec. D.180

All those which do not fall within the definition of regular transmissions.

Some occasional transmissions may be subject to special contractual arrangements.

occlusion effect

Rec. P.10

The change in human sidetone that occurs when the ear canal is occluded, e.g. by a telephone receiver.

occupancy

Rec. E.411

Occupancy can be represented in units (for example, erlangs, hundred-call-seconds (CCS) or as a percentage. It can be measured as a total for a destination or for a circuit group and as an average per circuit on a circuit group. Its use for network management purposes is to show usage and to identify unusual traffic levels.

octal numeral

Rec. Q.9

A *numeral* in the octal (base 8) *numbering system*, represented by the *characters* 0, 1, 2, 3, 4, 5, 6, 7, optionally preceded by O' (letter O apostrophe).

octal numeral

Rec. Z.341

A *numeral* in the octal (base 8) *numbering system*, represented by the characters 0 (zero), 2, 3, 4, 5, 6, 7, optionally preceded by O' (letter O apostrophe).

octet

Rec. G.701

A group of eight binary digits or eight signal elements representing binary digits operated upon as an entity.

octet sequence integrity

Recs. G.701, Q.9

The property of a digital transmission channel, telecommunication circuit or connection that permits a digital signal to be conveyed over it without change to the order of any octets.

octetstring type

Rec. X.208

A simple type whose distinguished values are an ordered sequence of zero, one or more octets, each octet being an ordered sequence of eight bits.

Note – Encoding rules do not limit the number of octets in an octet string.

Odd/even indicator

Rec. Q.762

Information sent in association with an address, indicating whether the number of address signals contained in the address is even or odd.

offset

Rec. T.412

This attribute constrains the available area (see Rec. T.412, § 2.4.2) within the immediately superior frame or page in which the content associated with the basic logical object can be placed.

off-site maintenance

Suppl. No. 6 (II.3)

Maintenance performed at a place different from where the *item* is used.

Note – An example is the *repair* of a sub-item at a maintenance centre.

OFFSPRING

Rec. Z.100

OFFSPRING is an *expression* of *sort PId.* When *OFFSPRING* is evaluated in a *process* it gives the *PId-values* of the *process* most recently *created* by this *process.* If the *process* has not *created* any *processes*, the result of the evaluation of *OFFSPRING* is *Null.*

oganizational unit name

Recs. F.400, X.400

Standard attribute of an O/R address as a unique designation of an organizational unit of an organization for the purpose of sending and receiving of messages.

old serving MSC

Rec. Q.1001

The old serving MSC is the MSC which was the serving MSC before a handover, other than MSC-A.

oligarchic network; oligarchic synchronized network

Rec. G.701

A synchronized network in which a few selected clocks are mutually synchronized and exert control over all the other clocks.

oligarchic synchronized network

See:
oligarchic network; oligarchic synchronized network.

omnibus service circuit

Recs. M.60, M.100

A telephone or teleprinter (teletypewriter) service circuit serving more than two stations connected in series, any or all of which may make connection to the service circuit simultaneously.

See Figure 1/M.100.

on-line delivery acknowledgement (ODA)

Rec. F.201, Suppl. No. 1 (II.4)

The on-line delivery acknowledgement facility gives to the waiting telex (i.e. having maintained the connection with the CF after its message deposit) the opportunity to receive "on-line" a proof of the CF's message delivery to the teletex terminal, provided the call establishment to the teletex terminal has been performed within 30 seconds counted after the end of the message input.

on-line documentation

Rec. Z.341

A comprenhensive body of information provided a user on-line about a given subject related to a *function.*

on-line help

See:
solicited guidance; on-line help.

on-line training

Rec. Z.341

A comprenhensive body of information provided a user on-line to supplement or replace other training methods such as classroom instruction, training manuals or video courses.

on-off transmission

Rec. R.140

A two-condition single current transmission where one significant condition is represented by applied zero voltage and no current in the circuit.

on-site maintenance; in situ maintenance; field maintenance

Suppl. No. 6 (II.3)

Maintenance performed at the premises where the *item* is used.

one point five (1.5)/two (2) Mbit/s multiplex system coversion (1.5/2 Mbit/s MSC)

Rec. G.802

A function which embodies the following properties:

1) termination of a digital link operating at a digital hierarchical level of 1544 kbit/s;
2) termination of a digital link operating at a digital hierarchical level of 2048 kbit/s; and,
3) rearrangement of 64 kbit/s channels between 1544 kbit/s and 2048 kbit/s digital terminations.

Note – The hierarchical levels and the frame structures are specified in Recommendations G.702 and G.704, respectively.

one-sided test

Suppl. No. 6 (II.3)

A *statistical test* in which the *statistic* used is one-dimensional and the *critical region* is the set of values lower than, or the set of values greater than, a given number.

one-stage/two-stage selection procedure for telex to teletex direction of interworking

Rec. F.201, Suppl. No. 1 (II.4)

Addressing of the teletex terminal by the telex terminal can be done, either by sending the total selection information in one phase to the CF or by calling first the CF (first stage of the selection), and by sending the teletex address after the connection to the CF has been established (second stage of the selection).

one-step activation

Recs. G.960, I.430

A type of activation which invokes a sequence of actions to activate the digital line transmission system and user-network interface from a single command.

one-step deactivation

Recs. G.960, I.430

Deactivation of the digital line transmission system and user-network interface invoked by a single command.

one-to-one (1 : 1) reversals

Rec. R.140

Periodical signals in which every significant interval is equal to the unit interval.

one-unit message

Rec. Q.257

A message which is transmitted entirely within one signal unit. Such a signal unit is called a lone signal unit (LSU). It is designed to transmit either:

a) a single telephone signal,

b) a signalling-system-control signal, or

c) a management signal.

one-unit message

Gloss. (VI.3)

A signal message which is transmitted entirely within one signal unit.

one way; unidirectional

Rec. E.600

A qualification applying to traffic or circuits which implies that the establishment of a connection always occurs in one direction.

one-way

Rec. Q.9

A qualification applying to traffic which implies that call set-ups always occur in one direction.

one way communication (OWC)

Recs. T.62, T.62 bis

User information is transferred in one direction only during the session, i.e. only one of the terminals will have the right to be the source.

one-way function

Rec. X.509

A (mathematical) function f which is easy to compute, but which for a general value y in the range, it is computationally difficult to find a value x in the domain such that $f(x) = y$. There may be a few values y for which finding x is not computationally difficult.

one-way interaction

Rec. X.200

A form of operation of two-way-alternate interaction in which the turn can never be exchanged.

open-circuit working

Rec. R.140

Single-current transmission in which no current flows in the circuit while the transmitting device is at rest.

open-loop loss (OLL)

Rec. G.100

In a loop formed by a 4-wire circuit (or a cascade connection of two or more 4-wire circuits) and terminated by 2-wire ends (i.e. having "4-wire terminating sets", or hybrids, at both ends), the loss measured by breaking the loop at some point, injecting a signal and measuring the loss incurred in traversing the open loop. All impedance conditions should be preserved while making the measurement.

See Figure 2/G.100.

Note 1 – In practice the OLL is equal to the listener echo loss.

Note 2 – The OLL is also equal to the sum of the two *semi-loop losses* associated with a loop.

open system

Rec. X.200

The representation within the Reference Model of those aspects of a real open system that are pertinent to OSI.

open wire

Recs. G.960, I.430

A pair of suspended and often uninsulated metallic wires which run parallel to each other.

Note – Overhead installation cables in common use between distribution poles and customer premises are not open wires.

operating characteristic curve; OC curve (for a statistical test plan)

Suppl. No. 6 (II.3)

A curve showing, for a given *statistical test* plan, the *probability of acceptance* as a function of the actual value of a given *measure.*

operating state

Suppl. No. 6 (II.3)

The state when an *item* is performing a *required function.*

operating system

Rec. Q.9

Software that controls the management and the execution of programs.

operating time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is an *operating state.*

operation

Suppl. No. 6 (II.3)

Combination of all technical and corresponding administrative actions intended to allow an *item* to perform a *required function,* recognizing necessary adaptation to changes in external conditions.

Note – By external conditions are understood, for example, service demand and environmental conditions.

operation

Rec. Q.775

An operation is defined by:

- its operation code and the type of any parameters associated with the operation request;
- its class;
- if the class requires report of success, the possible results corresponding to successful executions are defined by a list of parameters;
- if the class requires report of failure, the possible results corresponding to situations where the operation could not be executed completely by the remote TC-user. Each such situation is identified by a specific error cause; the list of these error causes is part of the operation definition. Diagnostic information can be added to the error cause: if present, it is part of the definition;
- the list of possible linked operations, if replies consisting of linked operations are allowed for this operation. Linked operations have to be described separately;
- a timer value indicating the interval by which the operation has to be completed. This timer value is used to manage the component ID associated with the operation invocation.

operation (TC-)

Glos. (VI.7, VI.8, VI.9)

The action being requested of the remote end.

operation, administration and maintenance centre (OAMC)

Recs. M.36, M.60

The OAMC is an Administration's centre with the responsibility for the general operation, administration and maintenance of the network. It includes both staff and associated operations systems. The functions may be distributed among many centres and OSs.

operation and maintenance centre (OMC)

Rec. Z.341

A physical location staffed by administration personnel responsible for operation and maintenance (O&M) of *SPC systems.*

operation and maintenance centre processor

Rec. Q.9

A centralized *processor serves one or more switching centres.*

operation and maintenance system

Rec. Z.341

A *system* which supports administration personnel in performing operation and maintenance *jobs* related to *SPC systems.*

operation-interface

Rec. X.219

The interface within an application entity between the user element and the application service elements, defined as a set of application service element services (remote operations) available to the user element in RO-notation.

operation progress

Rec. X.518

A set of values which denotes the extent to which name resolution has taken place.

Operation, Maintenance and Administration Part (OMAP)

Glos. (VI.7, VI.8, VI.9)

The application entity dedicated to the communications aspects of the operation, Administration and maintenance of the Signalling System No. 7 network and which may have an application for the telecommunications management network (TMN).

operational ...

Suppl. No. 6 (II.3)

Value determined under given operational conditions.

operational coordination (prefix 95)

Recs. E.216, F.126

Prefix 95 is used in the maritime satellite service for operational communications between management and maintenance elements of the system.

operational procedure

Rec. Z.341

A process illustrating the interrelationship of *user* and *system* in performing an operation, maintenance, installation or acceptance testing *job.*

operations (O)

Rec. Q.791

The operation of network resources utilizes measurements that are used in real time, or are retained for short time intervals. Operations activities include signalling network surveillance.

Signalling network management "on occurrence" events and measurements include those which monitor and measure the signalling network response to abnormal conditions. (Requires further study.)

Signalling network surveillance measurements include those which monitor and measure the signalling network resources to ensure that the appropriate network performance is maintained.

operations and maintenance centre (OMC)

Rec. Q.9

A control location for an operations sytem, usually attended by operations personnel.

operations system

Rec. Q.9

A system whose function it is to receive operational data from network elements and to analyze such data to provide information and/or commands to facilitate the operation, administration and/or engineering of the network.

operations system function (OSF) block

Recs. M.30, M.60

The OSF block processes information related to telecommunication management to support and/or control the realization of various telecommunication management functions. Details of the OSF are given in Recommendation M.30, § 5.2.

operations systems (OS)

Recs. M.30, M.60

The OS is the stand alone system which performs operation system functions (OSFs).

operator

Rec. Z.100

An *operator* is a denotation for an operation. *Operators* are defined in a *partial type definition.* For example +, −, *, /, are *names* for *operators* defined for *sort Integer.*

operator signature

Rec. Z.100

An *operator signature* defines the *sort(s)* of the *values* to which the *operator* can be applied and the *sort* of the resulting *value.*

opinion score (in telephony)

Rec. P.10

The value on a predefined scale that a subject assigns to his opinion of the performance of the telephone transmission system used either for conversation or only for listening to spoken material.

Note – According to the IEV, the scale generally consists of five values, for example: excellent, good, fair, bad, unfair. This example does not correspond to CCITT practice (see Notes 2 and 3 of Recommendation P.82).

option

Rec. Z.100

An *option* is a *concrete syntax* construct in a generic *SDL system specification* allowing different *system* structures to be chosen before the *system* is interpreted.

optional O component

Rec. X.413

An ASN.1 element which shall be present in an instance of its class at the discretion of the object (e.g. user) supplying that instance. See the definition of grade.

optional part

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Part of a message that contains parameters that may not occur in any particular message type.

Note – Other qualifiers may be used in specific applications, for example, mandatory part.

optional user facilities

Recs. F.400, X.400

In the context of message handling services the elements of service which are selectable by the user either on a contractual basis (agreed period of time) or on a per-message basis.

Note 1 – Optional user facilities are classified as either essential or additional.

Note 2 – Essential optional user facilities are to be made available to all message handling users.

Note 3 – Additional optional user facilities can be made available for national and international use on the basis of bilateral agreement between the service providers.

optional user facility

*Series X**

A service element not belonging to the set of elements forming a basic user service but enhancing it.

Note 1 – Provision of optional user facilities by Administrations may be considered as essential (E) or additional (A). E-facilities shall be made available by Administrations for international service. A-facilities may be made available by Administrations for national service and can be made available internationally on the basis of bilateral agreement.

Note 2 – Offered optional user facilities may be used by subscribers/users at their discretion. In switched services they can be provided for a certain agreed period of time, or on a per call basis (fixed or negotiated).

Note 3 – In the context of interfaces and signalling or other areas, the term "facility" is being used. Those facilities are not necessarily optional user facilities. It also may be noted that the term "facility" is very often used in the meaning of common language use.

O/R address

Recs. F.400, X.400

In the context of message handling, an attribute list that distinguishes one user or DL from another and identifies the user's point of access to MHS or the distribution list's expansion point.

O/R address

Rec. F.500

Address of an originator/recipient of messages in the context of message handling.

O/R name

Recs. F.400, X.400

In the context of message handling, an information object by means of which a user can be designated as the originator, or a user or distribution list designated as a potential recipient of a message or probe. An O/R name distinguishes one user or distribution list from another and can also identify its point of access to MHS.

ordering operators

Rec. Z.100

The *ordering operators* are $<$, $<=$, $>$ or $>=$.

ordinary private telex calls

Rec. F.60

All telex calls other than:

i) service telex calls, including requests for information and franking privilege telex calls;

ii) safety of life telex calls;

iii) government telex calls.

organization name

Recs. F.400, X.400

Standard attribute of an O/R address as a unique designation of an organization for the purpose of sending and receiving of messages.

organization name

Rec. F.500

An attribute type which specifies an organization. When used as a component of a directory name it identifies an organization with which the named object is affiliated.

organization unit name

Rec. F.500

An attribute type which specifies an organizational unit. When used as a component of a directory name it identifies an organizational unit with which the named object is affiliated.

origin

Rec. E.600

The location of the calling user. This may be specified to whatever accuracy is necessary.

origin country (or Administration)

Rec. D.000

The country in which the call is originating or in which a message is deposited.

original activity identifier

Rec. X.226

An attribute of an activity in progress. If the activity was started by use of the P-ACTIVITY-START service, the Activity identifier parameter value of the request and indication service primitives; if the activity was resumed by use of the P-ACTIVITY-RESUME service the Old activity identifier parameter value of the request and indication service primitives.

original called number

Rec. Q.762

Information sent in the forward direction when a call is redirected and identifies the original called party.

original-EITs

Rec. X.413

An attribute identifying the original encoded-information-types of the message content.

original redirection reason

Rec. Q.762

Information sent in either direction indicating the reason why the call was originally redirected.

originating connection

Rec. Q.9

An exchange connection for a call originating on a subscriber line or access channel outgoing to an interexchange circuit.

originating node

Rec. Q.716

origin of a UDT message or of a signalling connection.

originating PDN

Rec. X.110

A set of equipment and/or circuits which enable connection of a calling DTE to the originating IDSE.

originating point (signalling-)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The signalling point in which a message is generated.

originating point code (OPC)

Glos. (VI.7, VI.8, VI.9)

A part of the label in a signalling message which uniquely identifies, in a signalling network, the (signalling) originating point of the message.

originating SFU

Rec. U.82

The telex SFU forwarding the telex message.

originating TA

Rec. V.110

The terminal adaptor which is responsible for initiating the next exchange of parameter information. Initially, the calling TA takes on the role of the originating TA.

originating traffic

Rec. E.600

Traffic generated within the network considered, whatever its destination.

originator

Recs. F.400, X.400, X.402

In the context of message handling, the user (but not distribution list) that is the ultimate source of a message or probe.

originator-specified alternate recipient

Rec. X.402

The user or DL (if any) to which the originator requests that a message or probe be conveyed if it cannot be conveyed to a particular intended recipient.

orphan

Rec. T.411

One or more lines of text that is associated with subsequent text but isolated from it by a page or column boundary.

orphan size

Rec. T.416

This attribute only applies when the content layout process would result in the basic logical object being laid out in two or more basic layout objects; for example, at a page or frame boundary.

orthotelephonic acoustic reference gain

Rec. P.10

Ratio of the pressure at the ear reference point of the listener to the pressure at the mouth reference point of the talker under othotelephonic reference conditions.

orthotelephonic reference condition

Rec. P.10

Acoustic path between a talker and a listener, facing each other at a distance of 1 meter in the free field.

orthotelephonically referred gain

See:

insertion gain; orthotelephonically referred gain.

OSI resources

Rec. X.200

Data processing and data communication resources which are of concern to OSI.

other information

Rec. Z.341

General information which may accompany the *function models* and the lists of *MML functions* in the documents B and C.

out-band parameter exchange

Rec. I.515

Information exchanged via signalling channels which are not within the channel used for user information transfer.

out-band signalling

Rec. Q.9

A signalling method in which signals are sent over the same transmission channel or circuit as the user's communication but in a different frequency band from that provided for the users.

out connector

Rec. Z.100

An *out-connector* is a connector.

out-of-band signalling

Rec. V.7

The exchange of control signals between interconnected data circuit terminating equipment (DCEs) using signals other than those for the transmission of data in the forward channel. The transmission of DTE data is not disrupted.

out-of-frame alignment time

Recs. G.701, Q.9

The time during which frame alignment is effectively lost.

Note – That time includes the time to detect loss of frame alignment and the frame alignment recovery time.

out of sequence probability

Rec. Q.716

This parameter gives the probability that UDT messages are delivered out of sequence to the user by the NSP.

Note – This parameter is relevant only for class 1

out of sequence probability for DT messages

Rec. Q.716

This parameter gives the probability that DT messages are delivered out of sequence to the user by the NSP.

out-slot signalling

Recs. I.112, Q.9

Signalling associated with a channel and transmitted in one or more separate digit time-slots not within the channel time-slot.

outage

See:
disabled state; outage.

outcome

Rec. X.290

A sequence of test events together with the associated input/output, either identified by an abstract test case specifier, or observed during test execution.

outgoing only terminal

Suppl. No. 2 (II.4)

A *terminal* that can make outgoing calls to the network but which is prevented from receiving incoming calls.

outgoing preparation operating

See:
preparation operating.

outgoing traffic

Rec. E.600

Traffic leaving the network considered, destined for sinks located outside it, whatever its origin.

outlet

Rec. Q.9

Point through which the outgoing traffic flow leaves a switching stage, or device.

outlet

Rec. Z.100

An *outlet* represents a line, such as a *channel* or *flow line*, existing a *macro diagram*.

OUTPUT

Rec. Z.333

Transfer specified data from the system to the user terminal (e.g. VDT, printer).

output

Rec. Z.341

i) Information that is transferred from the *system* to the *user*, e.g., *help output*, etc.

ii) An *action* to transfer specified data from the *system* to a *man-machine terminal*.

output

Rec. Z.100

An *output* is an *action* within a *transition* which generates a *signal instance*.

output (in MML)

Rec. Q.9

The process that consists of the delivery of data from a data processing system or from any part of it.

output (in SDL)

Rec. Q.9

An output is an *action* within a *transition* which generates a *signal* which in turn acts as an *input* elsewhere. (See Recommendation Z.100, § 2.7.4.)

output

See:
input/output.

output and input window area

Rec. Z.341

These two *window areas* should support scrolling and should be user controllable in size. The input *window area* should be used for *direct information* entry. Response to the *direct information entry* as well as *output outside dialogue* should appear in the output *window area.* Input acknowledgements may also appear directly following the command in the input *window area.* The *scrolling* should occur in *two window areas* separately, or both *window areas* may be combined into one *window area.*

output area

Rec. Z.100

The *output area* in a *control flow diagram* represents the *SDL/GR* concept of an *output.*

output connection

Recs. Q.9, Q.551

A unidirectional path from an exchange test point to an interface of a digital exchange.

output field

See:
inaccessible field.

output outside dialogue

Rec. Z.341

A spontaneous *output* indicating a certain event, e.g., an alarm situation, or an output in response to a *command* previously entered in an *interactive operating sequence,* e.g., a traffic measurement result.

output parameters

Recs. Z.336, Z.341

Data determining output routing and scheduling.

overall objective loudness rating (OOLR)

Suppl. No. 19

$$OOLR = -20 \log_{10} \frac{S_E}{S_M} \qquad (1\text{-}1)$$

where

S_M is the sound pressure at the mouth reference point (in pascals)

S_E is the pressure at the ear reference point (in pascals).

overall transit time of DT messages

Rec. Q.716

This parameter is the elapsed time between a N-DATA request and the corresponding N-DATA indication.

This parameter is composed of several internal parameters:

- sending time of a DT message by the SCCP,
- MTP overall transfer time,
- transit time of a DT message for the relay function at a relay point with coupling, – receiving time of a DT message by the SCCP.

Depending of the configuration of the signalling connection, the second parameter could appear one or several times and the third parameter could appear zero, one or several times (see Figure 1/Q.716).

A probabilistic approach has to be taken to give values to this parameter, considering the various possible SCCP routes and the existence of queues at several points.

overcharging probability

Rec. E.800

The *probability* that an effective *call* will be overcharged for any reason.

overflow (in telegraphy)

U.140

Redirection by the network of calls or messages to a designated position, when a connection to the called position cannot be established, with a view to a later retransmission.

overflow position (in a private network)

U.140

A nominated terminal of a private network to which an incoming call is redirected if the terminal identification has been omitted or if connection to the selected terminal is not possible.

overflow traffic

Rec. E.600

The part of the traffic offered to a pool of resources which is not carried by that pool of resources.

overhang

Rec. T.411

The result of a layout or imaging process that positions the sequence of character images for a line to begin at a distance from the line home position in the direction opposite to the character path.

overlap address signalling

Rec. Q.9

A signalling method in which the onward transmission of address signals from a switching centre may commence before the reception of all the address signals over the preceding link has been completed.

overlap line signalling

Rec. Q.9

A signalling method in which the onward transmission of a line signal from a switching centre may commence before the recognition time of the line signal being received expires.

overline service

U.140

Several subscriber line circuits grouped under the same address in such a way that a call to that address may reach any of the free lines of the group.

overload

Recs. Q.9, Q.543

That part of the total load offered to an exchange, in excess of the engineered traffic processing capacity of the exchange. Overload is usually expressed as a percentage of engineered capacity.

overload channels

Rec. G.763

The additional bearer channel capacity which is generated using variable bit rate (VBR) encoding to minimize or eliminate DSI competitive clipping

overload message (OLM)

Rec. Q.762

A message sent in the backward direction, on non-priority calls in response to an IAM, to invoke temporary trunk blocking of the circuit concerned when the exchange generating the message is subject to load control.

overload point

Recs. G.223, J.31

First definition – The overload point or overload level of an amplifier is at that value of absolute power level at the output, at which the absolute power level of the third harmonic increases by 20 dB when the input signal to the amplifier is increased by 1 dB.

This first definition does not apply when the test frequency is so high that the third harmonic frequency falls outside the useful bandwidth of the amplifier. The following definition may then be used:

Second definition – The overload point or overload level of an amplifier is 6 dB higher than the absolute power level in dBm, at the output of the amplifier, of each of two sinusoidal signals of equal amplitude and of frequencies A and B respectively, when these absolute power levels are so adjusted that an increase of 1 dB in both of their separate levels at the input to the amplifier causes an increase, at the output of the amplifier, of 20 dB in the intermodulation product of frequency 2A-B.

overload point (deprecated)

See:

load capacity.

override

Rec. X.413

A component of the selector parameter indicating that the previously registered-restrictions for this abstract-operation should not apply for this instance of this abstract-operation.

owner

Rec. F.500

In the context of a directory, that attribute type specifying the name of some object which has some responsibility for the associated object.

owner (of a network connection)

Rec. X.224

The transport entity that issued the N-CONNECT request leading to the creation of that network connection.

owner (of a token)

Rec. X.225

The SPM to whom a token is assigned.

P

p-fractile ...

Suppl. No. 6 (II.3)

The value obtained as the *p-fractile* of the distribution of a *random variable.*

p-fractile access delay

Rec. E.800

The *p-fractile* value of the *duration* between the *first call attempt* made by a *user* of a telecommunication network to reach another *user* or a *service* and the *instant of time* the *user* reaches the wanted other *user* or *service,* within specified tolerances and under given operational conditions.

p-fractile active repair time

Suppl. No. 6 (II.3)

The *p-fractile* value of the *active repair time.*

p-fractile administrative delay

Suppl. No. 6 (II.3)

The *p-fractile* value of the *administrative delay.*

p-fractile logistic delay

Suppl. No. 6 (II.3)

The *p-fractile* value of the *logistic delay.*

p-fractile; p-quantile (of a probability distribution)

Suppl. No. 6 (II.3)

If p is a number between 0 and 1, the *p-fractile* is the value of the *random variable* for which the *distribution function* equals p or "jumps" from a value less than or equal to p to a value greater than p.

Note – It is possible that the *distribution function* equals p throughout the interval between consecutive possible values of the variate. In this case, any value in this interval may be considered as the *p-fractile.*

p-fractile repair time

Suppl. No. 6 (II.3)

The *p-fractile* value of the *repair time.*

p-quantile (of a probability distribution)

See:

p-fractile; p-quantile (of a probability distribution).

PABX internal dial tone

Rec. E.182

A tone advising that the PABX is ready to receive call information and inviting the user to start sending call information.

pack

See:

to pack.

packet

Rec. I.113

An information block identified by a label at layer 3 of the OSI reference model.

packet assembly/disassembly (PAD)

*Series X**

A function which permits nonpacket mode terminals to exchange data in the packet mode.

packet entry event

Rec. X.134

A packet layer reference event that corresponds to a packet entering a network section (from a circuit section) or a packet entering a DTE (from an access circuit section).

packet exit event

Rec. X.134

A packet layer reference event that corresponds to a packet exiting a network section (to a circuit section) or a packet exiting a DTE (to an access circuit section).

packet handling

Rec. Q.9

The function of receiving and transmitting user packets between a user and a packet switching function.

packet layer reference event

Rec. X.134

A packet layer reference event occurs when a packet crossing a section boundary changes the state of the packet layer interface.

Note – The relevant state transitions are those defined explicitly or implicitly in Recommendations X.25 and X.75.

packet mode operation

Rec. Q.9

The transmission of data by means of addressed packets whereby a transmission channel is occupied for the duration of the transmission of the packet only. The channel is then available for use by packets being transferred between different data terminal equipments.

packet mode operation (in switching applications)

Rec. Q.9

The function of handling user packets is an exchange.

packet switched data transmission service

*Rec. Q.9, Series X**

A service involving the transmission and, if necessary, the assembly and disassembly of data in the form of packets.

packet switching

Rec. Q.9

The function of handling, routing, supervising and controlling user packet data, as required, by an exchange.

packet transfer mode

Rec. I.113

A transfer mode in which the transmission and switching functions are achieved by packet oriented techniques, so as to dynamically share network transmission and switching resources between a multiplicity of connections.

page

Rec. T.60

A page is the basic element of office correspondence in the Teletex service. This term defines the information that can be presented on one sheet of paper. This information may be stored, displayed or printed.

Note – Relevant paper sizes are indicated in Recommendation T.60.

page

Recs. T.62, T.62 bis

The basic element of office correspondence in the Telematic services. One A4 (or A4L, North American Standard or North American Legal) page or the information that may be presented on it.

page

Rec. T.411

A layout component that corresponds to a rectangular area used for presenting the content of the document.

page

Rec. Z.100

A *page* is one of the components of a physical partitioning of a *diagram.*

page coordinate system

Rec. T.411

An orthogonal co-ordinate system whose origin is the top left corner of the page; its horizontal axis and its vertical axis coincide with the top edge and the left edge of the page, respectively.

page position

Rec. T.412

This attribute specifies the position of the layout object page within a nominal page (see Rec. T.412, § 7.3).

page set

Rec. T.411

A composite layout component that represents a collection of pages or further page sets.

page teleprinter

Rec. S.140

A teleprinter which prints characters in page formation.

page wait

*Series X**

A function provided by the PAD which allows for the suspension of transmission of additional characters to the start-stop mode DTE, after a specified number of linefeed (LF) characters (determined by a PAD parameter) have been transmitted by the PAD.

paired-disparity code

Rec. G.701

A code in which some or all of the digits in the original signal are represented by two assemblies of digits, of opposite disparity, which are used in a sequence to minimize the digital sum of a longer sequence of digits.

Note – An alternate mark inversion signal is an example of a paired-disparity code.

pairwise kerning

Rec. T.411

The distance between two adjacent character images depending on the combination of the two characters together rather than separately.

pairwise kerning

Rec. T.416

This attribute specifies whether pairwise kerning should be performed on the content during the formatting process (see Rec. T.416, § 5.2.7).

parallel annotation

Rec. T.411

Two sequential character strings that are presented in parallel, wherein the second string is used to indicate the pronunciation or interpretation of the first string.

parallel automatic calling

Recs. V.7, V.25, V.25 bis

A procedure by which a data terminal equipment (DTE), by use of the 200 series interchange circuits, may instruct a data circuit terminating equipment (DCE) to perform the call establishment function. The transmission, from DTE to DCE, of each digit to be dialled is achieved in parallel form on interchange circuits 206 to 209.

parallel connection

Rec. I.140

Two or more connection elements in parallel form a connection.

parallel to serial converter

Rec. G.701

A device that converts a group of signal elements, all of which are presented simultaneously, into a corresponding sequence of consecutive signal elements.

parallel to serial converter; serializer

Rec. Q.9

A device that converts a group of digits, all of which are presented simultaneously, into a corresponding sequence of signal elements.

parallel transmission

Rec. R.140

The simultaneous transmission of the signal elements of a telegraph character signal on separate channels.

parameter

Rec. Q.9

A variable that is given a constant value for a specified application and that may denote the application.

parameter

Rec. V.25 bis

A variable which may accompany *commands* or *indications.*

parameter

Rec. Z.341

Data which identifies and contains pieces of information necessary to execute a *command.*

parameter (in MML)

Rec. Q.9

A parameter identifies and contains a piece of necessary information to execute a *command.*

parameter argument

Rec. Z.341

The smallest portion of a *parameter value* which specifies an appropriate object or value. It can be a *simple* or a *compound* structure and may be used singularly or as part of a group.

parameter block

Rec. V.110

The complete set of parameter information structured into message groups, which are transferred by each terminal adaptor towards the other during each parameter exchange.

parameter block

See:

block of parameters.

parameter block entry sequence

Rec. Z.341

A procedure used to input a *block of parameters.*

parameter block request indication

Rec. Z.341

An indication from the *system* to the *user* to proceed with *input* of *parameters.*

parameter field

Rec. X.225

A group of one or more octets used to represent a particular set of information.

parameter group identifier (PGI)

Rec. T.62

A special case of a parameter identifier, which indicates that the associated field consists entirely of a group of parameters, each identified by a parameter identifier.

parameter group identifier (PGI)

Rec. X.225

An identifier, defined in Recommendation X.225, that indicates the type of information contained in its associated parameter field. The associated parameter field may consist of a set of PI units.

parameter identifier (PI)

Rec. T.62

Indicates the type of information contained in an associated field or group of fields.

parameter identifier (PI)

Rec. X.225

An identifier, defined in Recommendation X.225, that indicates the type of information contained in its associated parameter field.

parameter identity

Rec. Z.341

The *parameter label* and optional *parameter position* identifying a *parameter* in a form.

parameter information

Rec. V.110

Terminal adaptation protocol information, terminal adaptor parameters, and (optionally) maintenance information.

parameter label

Rec. Z.341

A *text string* used in *forms* to identify a *parameter.*

parameter name

Rec. Z.341

An *identifier* which indicates unambiguously the meaning and structure of the subsequent *parameter value.*

parameter position

Rec. Z.341

The sequence number of a *parameter* in a *block of parameters* or in a *form.*

parameter value

Rec. Z.341

The part of a *parameter* that contains the information required to specify any appropriate object(s) or value(s). It consists of one or a group of *parameter arguments.*

parameter value (PV)

Recs. T.62, X.225

The information that represents the value of the parameter identified by either a PI or PGI.

parameter value input field

Rec. Z.341

An *accessible field* that is normally empty or filled in by the *system* and should be filled in or overwritten by the *user.*

parameterized abstract test case

Rec. X.290

An abstract test case in which all appropriate parameters have been supplied with values in accordance with a specific PICS and PIXIT.

parameterized abstract test suite

Rec. X.290

A selected abstract test suite in which all test cases have been made parameterized abstract test cases for the appropriate PICS and PIXIT.

parameterized executable test case

Rec. X.290

An executable test case in which all appropriate parameters have been supplied with values in accordance with a specific PICS and PIXIT.

parameterized executable test suite

Rec. X.290

A selected executable test suite in which all test cases have been made parameterized executable test cases for the appropriate PICS and PIXIT, and corresponding to a parameterized abstract test suite.

PARENT

Rec. Z.100

PARENT is a *PId expression.* When a *process* evaluates this *expression,* the result is the *PId-value* of the parent *process.* If the *process* was created at *system* initialization time, the result is *Null.*

parent-entry

Rec. X.413

A parent-entry has one or more child-entries, which were created as a result of the same abstract-operation. If a parent-entry is not a child-entry of another parent-entry, it is a main-entry.

parent-operation

Rec. X.219

An operation during the execution of which the performer may invoke linked child-operations to be performed by the invoker of the parent-operation.

parent-sequence-number

Rec. X.413

A sequence-number in a child-entry poiting to its parent-entry. There can only be one parent-sequence-number in a child-entry.

parent type (of a subtype)

Rec. X.208

Type used to define a subtype.

Note – The parent type may itself be a subtype of some other type.

parity function

*Series X**

A function provided by a PAD which allows the start-stop mode DTE and the packet mode DTE to select which of a range (as yet undefined) of operations should be undertaken by the PAD in relation to the parity bit of characters transmitted by the PAD and received by the PAD.

partial-attribute-request

Rec. X.413

A component of the entry-information-selection which enables the return of only selected values of a multi-valued attribute.

partial break-in

Rec. G.164

A temporary condition of break-in which exists at the onset of break-in. This state is characterized by a short break-in hangover time. The receive loss may be inserted during partial break-in provided it also has the short break-in hangover time.

partial break-in echo suppressor

Rec. G.164

An echo suppressor which includes partial and full break-in functions.

partial break-in operate time

Rec. G.164

The time interval between the instant when defined test signals, applied to the send- and/or receive-in ports, are altered in a defined manner such as to remove suppression and the instant when suppression is removed. Insertion of loss in the receive path may occur at the same time or slightly after removal of suppression.

partial fault

Suppl. No. 6 (II.3)

A *fault* of an *item* other than a *complete fault.*

partial generator set

Rec. T.411

A collection consisting of hierarchically related object class descriptions which are used to guide the creation of hierarchically related corresponding object descriptions but does not fully specify all specific structures that may be created.

partial loopback

Recs. G.960, I.430, M.60, M.125

A physical layer 1 mechanism which operates on one or more specified channels multiplexed within the full bit stream. At the loopback point, the received bit stream associated with the specified channel(s) shall be transmitted back towards the transmitting station without modification.

partial refund

Rec. D.000

Reimbursement to the customer of only part of the total charges paid to the Administration for the service/facility in question.

partial type definition

Rec. Z.100

The *partial type definition* for a *sort* defines some of the properties related to the *sort.* A *partial type definition* is part of a *data type* definition.

partially closed user group

Suppl. No. 2 (II.4)

A user group where certain terminals may make calls to or receive calls from any other terminals normally accessible in the public switched network, the other terminals having the facility to communicate only with the user of the group.

Note – In some cases the external access for nominated terminals is limited to outgoing calls.

partitioning

Rec. Z.100

Partitioning is the subdivision of a unit into smaller components which when taken as a whole have the same *behaviour* as the original unit. *Partitioning* does not affect the static interface of a unit.

pass-along message (PAM)

Rec. Q.762

A message that may be sent in either direction to transfer information between two signalling points along the same signalling path as that used to establish a physical connection between those two points.

pass along method

Rec. Q.9

A method for transporting signalling messages, whereby the signalling information is sent along the signalling path of a previously established physical connection.

"pass" verdict

Rec. X.290

A verdict given when the observed outcome satisfies the test purpose and is valid with respect to the relevant Recommendation(s)* and with respect to the PICS.

passive testing

Rec. X.290

The observation of PDU activity on a link, and checking whether or not the observed behaviour is allowed by the relevant Recommendation(s)*.

password

Rec. Z.341

A character string used for identification and authorization of a *user.*

patch

See:
to patch.

path

U.140

In a telegraph network, a route between any two exchanges.

path; digital path

Rec. M.60

The whole of the means of transmitting and receiving a digital signal of specified rate between those two digital distribution frames (or equivalent) at which terminal equipments or switches will be connected. Terminal equipments are those at which signals at the specified bit rate originate or terminate.

Note 1 – A digital path comprises one or more sections.

Note 2 – Where appropriate, the bit rate should qualify the title.

Note 3 – Digital paths interconnected by digital switches form a digital connection.

path; telecommunication path

Recs. M.60, Q.9

The continuous course taken by a transmission signal beween two points.

Note 1 – This may be a physical transmission medium, a frequency band in a frequency multiplex, a time slot in a time division multiplex, etc.

Note 2 – The path includes the transmission media and the means used for connecting them together.

pay tone

Rec. E.182

A tone advising users of a payphone that a payment is required.

payload module

Rec. I.113

That portion of the information payload within which one or more channels entirely exist.

payphone recognition tone

Rec. E.182

A tone advising a public exchange operator that the termination to or from which connection is sought is identified as a payphone.

payphone service

Suppl. No. 1 (II.2)

A service offered by means of a special equipment permitting outgoing telephone calls after insertion of adequate coins, tokens or coded cards and, without payment, incoming calls. Outgoing calls to certain services (e.g. emergency service) may be admitted without payment.

PBX line hunting services

Suppl. No. 1 (II.2)

The automatic selection of a free line from a group of lines serving a subscriber, on receipt of a call to that subscriber's general directory number.

PCM binary code

Rec. G.701

A pulse code in which all the quantized values are identified by binary numbers taken in order.

Note – This term should not be used for line transmission.

PCM digital reference sequence (DRS)

Recs. G.101, Q. 43

A PCM digital reference sequence is one of the set of possible PCM code sequences that, when decoded by an ideal decoder, produces an analogue sinusoidal signal at the agreed test reference frequency (i.e. a nominal 800 or 1000 Hz signal suitably offset) at a level of 0 dBm0.

Conversely an analogue sinusoidal signal at 0 dBm0 at the test reference frequency applied to the input of an ideal coder will generate a PCM digital reference sequence.

Some particular PCM digital reference sequences are defined in Recommendation G.711 in respect to A-law and μ-law codecs.

PCM multiplex equipment

Rec. G.701

Equipment that derives a single digital signal at a defined digit rate from several voice frequency channels by a combination of pulse code modulation and time division multiplexing, and that also carries out the complementary functions in the opposite direction of transmission.

PCM multiplex equipment

Rec. M.300

Equipment for deriving a single digital signal at a defined digit rate from two or more analogue channels by a combination of pulse code modulation and time division multiplexing (multiplexer) and also for carrying out the inverse function (demultiplexer).

The term should be preceded by the relevant equivalent binary digit rate, e.g., 2048-kbit/s PCM multiplex equipment.

PCM word

See:

code word; PCM word.

peak amplitude of an elementary echo

Rec. G.601

Maximum value of *echo* amplitude reached in the duration of an *elementary echo.*

peak limiting; peak limiting in quantizing

Rec. G.701

The effect whereby any value to be quantized lying outside the working range is replaced by the nearest quantized value. (See Figure 2/G.701.)

peak limiting in quantizing

See:

peak limiting; peak limiting in quantizing.

peaked traffic

Rec. E.600

Traffic that has a peakedness factor greater than 1.

peakedness factor

Rec. E.600

The ratio of variance to mean of a traffic.

peer control

Rec. Q.9

A formal language used by peer entities to exchange information.

peer entities

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Entities in the same layer but in different systems (nodes) which must exchange information to achieve a common objective.

peer-entities

Rec. X.200

Entities within the same layer.

peer protocol

Glos. (VI.7, VI.8, VI.9)

A formal language used by peer entities to exchange information.

pel

Rec. T.0

A contraction of "picture element".

pel array

Rec. T.411

A two-dimensional array of pels used to represent a pictorial image.

pel path

Rec. T.411

The direction of progression of successive pels along a line within a basic layout object.

pel path

Rec. T.417

This attribute specifies the direction of the progression of successive pels along a line, relative to the horizontal axis of the basic layout object.

pel spacing

Rec. T.411

The distance between any two successive pels along a line within a basic layout object.

pel spacing

Rec. T.417

This attribute specifies the method for determining the distance between successive pels along a line. The attribute consists of either 'null', or the two parameters "length" (with integer value m) and "pel spaces" (with integer value n).

pel transmission density

Rec. T.417

This attribute specifies a single value for both the pel spacing and line spacing.

per word tariff system

Rec. D.000

In the per word tariff system, rates are established per word purely and simply, the word-counting provisions of the relevant CCITT Recommendations being applied. A minimum rate per telegram corresponding to the rate for a certain number of words is applied.

In the per word tariff system, the accounting rate is the rate per word purely and simply of an ordinary private telegram without any special system.

percentage overflow (% OFL)

Rec. E.411

% OFL indicates the relationship between the total bids offered to a circuit group or destination, in a specified period of time, and the quantity of bids not finding a free circuit. It will, therefore, give an indication of the overflow from one circuit group to another, or the bids which fail because all circuit groups to a destination are busy.

$$\% \text{ OFL} = \frac{\text{Overflows bids (to another circuit group or to circuit busy signal)}}{\text{Total bids for the circuit group (or all circuit groups to a destination)}} \times 100$$

perfect signal

Rec. R.140

A telegraph signal such that all the significant intervals are associated with correct significant conditions and conform accurately to their theoretical durations.

perforated-tape retransmitter

Rec. S.140

An automatic retransmitter comprising a reperforator feeding a tape directly into an automatic transmitter.

perforator

See:
(tape) perforator.

performance monitoring (PM)

Rec. M.30

The monitoring of various parameters of an NE on an in-service basis to measure the quality of performance.

performance monitoring attributes

Rec. M.30

Characteristics of PM parameters including thresholds and pattern recognition criteria.

performance objective

Recs. G.100, G.102

The performance objective for a measurable transmission impairment for networks, entire connections, national systems forming part of international connections, international chains of circuits, individual circuits etc. often describes in statistical terms (mean value, standard deviation, or probability of exceeding stated value, etc.) the value to be aimed at in transmission network and systems planning. It describes the performance which, based

for example on subjective or other performance assessment tests, it is desirable to aim at in order to offer the user a satisfactory service.

The items (circuits, systems, equipments) making up the network are normally assumed to have a performance related to that recommended by the performance objectives.

performer

See:

performing-application-entity; performer.

performing-application-entity ; performer

Rec. X.219

The application-entity that performs a remote operation invoked by the other application-entity.

periodic frame

Rec. I.113

A transmission segment which is repeated at intervals of equal duration (e.g. 125 μsec), and may be delineated by incorporating fixed periodic patterns into the bit stream.

periodicity pattern

Recs. Z.336, Z.341

A pattern which indicates which days are recording (or results output) days and which are not. The start day positions this time span. Once activated, the execution of the measurements (or of the results output) is performed according to this pattern, until disabled by a deactivation command.

permanent (communication)

Rec. I.140

The communication can be started after the connection is set up at time instant t_1 in response to a subscription request for the service at time instant t_0. the duration may be unspecified. The communication and connection is released at time instant t_3 corresponding to the end of the subscription.

permanent (connection)

Rec. I.140

Permanent connections/connection elements are described by the following characteristics:

Permanent connections/connection elements are available to the connected subscriber at any time during the period of subscription between fixed network destination points requested by the subscribers.

permanent activation

Recs. G.960, I.430

Activation of a system, or part of a system, that will not be deactivated even when it is not required to be fully operating.

permanent circuit service ; permanent circuit telecommunication service

Rec. I.112

A type of telecommunication service in which the communication path is established in response to a customer request effected by means of an operational or administrative message.

Note – Release of the communication path is effected in a similar way to its establishment.

permanent fault

See:

persistent fault; permanent fault; solid fault.

permanent telecommunication service

See:

permanent circuit service; permanent circuit telecommunication service.

permanent virtual circuit

Rec. Q.9

A capability in the network between two users that is continuously available to them for exchanging packets of data.

permanent virtual circuit

*Series X**

One service of the packet switched data transmission services in which a permanent association exists between two DTEs which is identical to the data transfer phase of a virtual call. No call set-up or clearing procedure is possible or necessary.

permissions

Rec. Z.331

The rights granted to the user.

permitted categories

Rec. T.412

This attribute specifies the layout categories permitted for logical objects the content of which is to be laid out within the frame.

permitted maximum signal (PMS)

Rec. N.13

Sine-wave signal at 1020 Hz, 9 dB above the alignment signal level, equivalent to the permitted maximum programme-signal level.

persistent fault; permanent fault; solid fault

Suppl. No. 6 (II.3)

A *fault* of an *item* that persists until an action of *corrective maintenance* is performed.

person-to-person call (prefix 34)

Recs. E.216, F.126

Prefix 34 should be used when the call is for a specific person at the called number. An operator will intervene in the call, and should be provided with the details of the person to be called. The prefix may be followed by the number of the called party.

personal name

Recs. F.400, X.400

In the context of message handling, a standard attribute of an O/R address form that identifies a person relative to the entity denoted by another attribute (e.g., an organization name).

Note – Components are for example:

- surname,
- given name,
- initials,
- generation qualifier.

PGI unit

Rec. X.225

An element of an SPDU that contains a PGI field together with its associated LI field and parameter field.

phantom circuit

Rec. R.140

An additional circuit derived from the conductors of two metallic circuits, with the two conductors of each metallic circuit effectively being used in parallel.

Example: A telegraph circuit superposed on two telephone circuits.

phase

Rec. Z.341

One of five steps of the general working produce that forms the *methodology* for the specification of a *man-machine interface.*

phase shift keying (PSK); phase shift modulation

Rec. R.140

Telegraph transmission by phase modulation in which each change from one significant condition to another is characterized in steady-state by specified changes of phase of the oscillatory source or of the sinusoidal wave.

phase shift modulation

See:
phase shift keying (PSK); phase shift modulation.

phasing

Rec. T.0

At the receiver, ensuring the exact coincidence of the midpoint of the scanning field, with the corresponding point at the transmitter so as to ensure the correct positioning of the picture on the recording medium.

phasing signal

Rec. T.0

A signal sent by the transmitter for phasing purposes.

Note – Phasing is known as "phase white (black)" if the phasing signal is a black (white) signal of which a short interruption corresponding to the white (black) is sent during the lost time.

phototelegraphy

Rec. T.0

Method of reception of facsimile telegraphy which is chiefly intended for the reproduction of graded tonal densities and in which a photographic process is used at the receiver.

physical configuration attributes

Rec. G.771

Physical configuration attributes are those characteristics related to the physical configuration of the LCN and the DCN.

physical delivery (PD)

Recs. F.400, X.400

The delivery of a message in physical form, such as a letter, through a physical delivery system.

physical delivery access unit (PDAU)

Recs. F.400, X.400

An access unit that subjects messages (but neither probes nor reports) to physical rendition.

physical delivery address components

Recs. F.400, X.400

In a postal address they contain the information necessary for the local physical delivery within the physical delivery area of the physical delivery office, i.e., a street address, a P.O. Box address, a poste restante address or a unique name alternatively.

Note – The information is generally restricted to one line with up to 30 printable graphic characters. Additional information may be supplied by using the attribute type "extension of physical delivery address components".

physical delivery country name

Recs. F.400, X.400

In the context of physical delivery, a unique description of the country of the final destination.

physical delivery domain

Recs. F.400, X.400

The domain of responsibility of an organization providing a physical delivery system and optionally an MTA/PDAU.

physical delivery office address components

Recs. F.400, X.400

In a postal address they contain the information to specify the office which is responsible for the local physical delivery.

Note – The information is generally restricted to one line with up to 30 printable graphic characters. In some countries the postal code will follow the physical delivery office address components in a separate line (possibly together with the country name).

physical delivery office name

Recs. F.400, X.400

Standard attribute of a postal O/R address, in the context of physical delivery, specifying the name of the city, village etc., where the physical delivery office is situated, or where the physical delivery is effected.

physical delivery office name

Rec. F.500

An attribute type which specifies the name of the city, village, etc. where a physical delivery office is situated.

physical delivery office number

Recs. F.400, X.400

Standard attribute and in a postal O/R address a means to distinguish between more than one physical delivery office within a city etc.

physical delivery organization name

Recs. F.400, X.400

A free form name of the addressed entity in the postal address, taking into account the specified limitations in length.

physical delivery personal name

Recs. F.400, X.400

In a postal address a free form name of the addressed individual containing the family name and optionally the given name(s), the initial(s), title(s) and generation qualifier, taking into account the specified limitations in length.

physical delivery service

Recs. F.400, X.400

Service provided by a physical delivery system.

physical delivery service name

Recs. F.400, X.400

Standard attribute of a postal O/R address in the form of the name of the service in the country electronically receiving the message on behalf of the physical delivery service.

physical delivery system (PDS)

Recs. F.400, X.400

A system that performs physical delivery. One important kind of physical delivery system is the postal system.

physical frame

Rec. I.113

A segment of a serial logical bit stream at an interface, partitioned into successive segments.

physical interface

Recs. I.112, Q.9

The interface between two equipments.

physical interface (deprecated)
See:
physical interface specification.

physical interface
See:
interface; physical interface;
physical interface specification; physical interface.

physical interface specification

Recs. I.112, Q.9

A formal statement of the mechanical, electrical, electromagnetic and optical characteristics of the interconnections and interactions between two associated equipments, at their interface.

physical message

Recs. F.400, X.400

A physical object comprising a relaying envelope and its content, e.g., a letter.

physical rendition

Recs. F.400, X.400

The transformation of an MHS message to a physical message, e.g., by printing the message on paper and enclosing it in a paper envelope.

physical signalling channel

Rec. I.113

A dedicated physical channel (e.g. D-channel) used for signalling information. It may be used to carry other information.

PI unit

Rec. X.225

An element of an SPDU that contains a PI field together with its associated LI field and parameter field.

pick-up facility service

Suppl. No. 1 (II.2)

A subscriber being away from his telephone can pick up a call on his line by dialling his own number and/or possibly a special code from any other telephone, after having been informed by means of a paging system that there is such a call.

PICS proforma

Rec. X.290

A document, in the form of a questionnaire, designed by the protocol specifier or conformance test suite specifier, which when completed for an OSI* implementation or system becomes the PICS.

pictograms

Rec. E.121

A pictogram is a simplified pictorial representation. It is commonly used to guide people and tell the person *how* to achieve a certain goal. It consists of more or less realistic elements. Pictograms should be self-explanatory.

pictorial element (PE)

Rec. Q.9

One of a number of standardized graphical entities used within *state pictures* to represent switching system concepts. (See Annex E to Recommendation Z.100.)

picture element

Rec. T.0

a) at transmission:

The part of the area of the original document which coincides with the scanning spot at a given instant and which is of one intensity only, with no distinction of the details that may be included.

b) at reception:

The area of the finest detail that can be effectively reproduced on the recording medium.

picture element (pel)

Rec. T.411

The smallest graphic element that can be independently addressed within a picture; (an alternative term for raster graphics element).

PId

Rec. Z.100

PId is a *sort* defined in a predefined *partial type definition* for which there is one *literal, null. PId* is an abbreviation for process instance identifier, and the *values* of the *sorts* are used to identify *process instances.*

pilot

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Sinusoidal signal transmitted over analogue FDM links for regulation and supervision purposes.

PIXIT proforma

Rec. X.290

A document, in the form of a questionnaire, provided by the test laboratory, which when completed during the preparation for testing becomes a PIXIT.

plain language

Rec. F.4

Consists of words that present an intelligible meaning in one or more of the languages admitted for international telegrams, which include at least French, English and Spanish in every relation. Each word and each expression has a meaning normally assigned to it in the language to which it belongs. A text in plain language may contain:

a) numbers written in letters or figures;

b) proper names or abbreviated addresses;

c) groups comprising letters, figures, signs or any combination of them providing that they have no secret meaning.

planning equivalent

Rec. P.10

Result of a measurement with an objective meter which may be considered equal to an *R25 equivalent* or to a *corrected reference equivalent* with an accuracy which is sufficient for planning purposes.

plesiochronous

Recs. G.701, Q.9

The essential characteristic of time-scales or signals such that their corresponding significant instants occur at nominally the same rate, any variation in rate being constrained within specified limits.

Note 1 – Two signals having the same nominal digit rate, but not stemming from the same clock or homochronous clocks, are usually plesiochronous.

Note 2 – There is no limit to the time relationship between corresponding significant instants.

point

Rec. M.60

a) to identify an element within a maintenance organization where specified functions are carried out. Examples of its use in this context are: fault report point-circuit, restoration control point, testing point-transmission;

b) to identify an electrical location in a circuit, group, digital path, etc., where access is required for testing purposes. Examples of its use in this context are: circuit access point, analogue link access point, digital path access point.

point code

Rec. Q.762

Information sent in the call reference parameter indicating the code of the signalling point in which the call identity allocated to the call reference is relevant.

point of control and observation (PCO)

Rec. X.290

A point at which control and observation is specified in a test case.

point-to-multipoint ISDN connection

Rec. I.112

An ISDN connection that is established between a single specified ISDN interface, and more than one other specified ISDN interface.

point-to-point communication

Rec. I.140

This value applies when there are only two access points.

point-to-point connection

Rec. I.140

This value applies when only two end points are provided by the connection.

point-to-point connection

U.140

A connection established between only two stations.

point-to-point ISDN connection

Rec. I.112

An ISDN connection that is established between two specified ISDN interfaces.

pointer

Glos. (VI.7, VI.8, VI.9)

A single octet indicating the beginning of each mandatory variable parameter and optional part.

points of international connection at baseband frequencies of a radio-relay system

Rec. G.213

The points of international interconnection at baseband frequencies, called *R'* and *R*, form the input and output of a radio-relay system, conforming to CCITT Recommendation G.423 and CCIR Recommendation 380.

At the output of the radio-relay system (point *R*), the conditions given in Recommendation G.213, § 2 are found in the baseband.

pointwise availability

See:
instantaneous availability.

pointwise unavailability

See:
instantaneous unavailability.

poisson traffic; pure chance traffic

Rec. E.600

Traffic that has a Poisson distribution of arrivals. *Note* – Poisson traffic has a peakedness factor equal to 1.

(terminal) port

U.140

A functional unit of an exchange through which signals can enter or leave a network.

port

See:
abstract port; port.

portion boundary

Rec. X.134

A section boundary delimiting a national or international portion.

Figure 2/X.134 illustrates the definitions and delimitation of the virtual connection sections and portions. A typical international virtual connection is shown including the two access circuit sections and the two DTEs.

position

Recs. T.50, T.51

That part of a code table identified by its column and row co-ordinates.

position

Rec. T.61

An item in a code table identified by its column and row coordinates.

position

Rec. T.412

This attribute specifies the position of the object relative to the object at the next higher level in the hierarchical structure (i.e. either the immediately superior page or frame).

position

Rec. X.413

Positions are parameters used to specify a bound of a range.

position A; position Z

Rec. R.140

Representation of the positions occupied by the moving parts (for example, relay armatures) in a circuit diagram.

1 In a diagram representing a complete telegraph connection, operated by binary modulation, the positions that all the moving parts in the connection should simultaneously occupy, so that the electro-magnet of the receiver shall be in a given position (A or Z), should be designated in the same way as this position.

2 Position A is that which corresponds to the start signal of a standardized start-stop apparatus: position Z is that which then corresponds to the stop signal.

3 In the case of a point-to-point start-stop circuit, the moving parts should all be shown in position Z.

4 In the case of a diagram of a switched connection, the moving parts should all be shown in the position corresponding to the free condition of the circuits. Thus, for example, in the standardized international telex system, the position in question is A.

position-defined parameter

Rec. Z.341

A *parameter* whose nature is identified by its position in the *parameter block* of a *command.*

position point

Rec. T.411

The point relative to which the character image is placed i.e. the character is imaged with the position point at the active position.

position Z

See:

position A; position Z.

positioned channel

Rec. I.113

A channel that occupies bit positions which form a fixed periodic pattern (e.g. B, H and D-channels in ISDN user interfaces).

positioned interface structure

Rec. I.113

A structure in which all services and signalling are provided by positioned channels. Such a structure can exist only within a framed interface.

positioning area

Rec. T.411

The rectangular area within a basic layout object within which the position points and the escapement points of all character images are located.

positive acknowledgement

Glos. (VI.7, VI.8, VI.9)

A way to indicate correct transfer of message signal units.

positive delivery notification (PDN)

See:

non-delivery notification (NDN)/positive delivery notification.

positive indication tone

Rec. E.182

A tone telling a subscriber controlling a supplementary service that the control procedure has been successfully completed and accepted.

positive justification

Rec. G.701

A method of justification in which the digit time-slots used to convey a digital signal have a digit rate that is always higher than the digit rate of that original signal.

Note 1 – Positive justification is usually achieved by the provision of a fixed number of digit time-slots (justifiable digit time-slots) per frame in the resultant signal which may be used to transmit either information from the original signal, or no information, according to the relative digit rates of the resultant signal and the original signal.

Note 2 – Information which indicates whether the justifiable digit time-slots contain information digits or justifying digits is conveyed by means of the justification service digits.

positive pulse stuffing (deprecated)

See:

positive justification.

positive stuffing (deprecated)

See:

positive justification.

positive/zero/negative justification

Rec. G.701

A method of justification in which the digit time-slots used to convey a digital signal have a digit rate that may be higher than, the same as, or lower than the digit rate of the original signal.

Note 1 – Justifiable digit time-slots are provided in accordance with Note 1 of the definition of *positive justification.*

Note 2 – Separate means of transmitting deleted digits are provided in accordance with Note 2 of the definition of *negative justification.*

Note 3 – Information which facilitates the recovery of the original digits, which are conveyed by means of the justification service digits.

Note 4 – Usually the digit time-slots used to convey a digital signal have the same nominal digit rate as the original signal.

positive/zero/negative pulse stuffing (deprecated)

See:

positive/zero/negative justification.

positive/zero/negative stuffing (deprecated)

See:

positive/zero/negative justification.

possible crosstalk components

Rec. G.242

Transferred speech currents which, at the point considered, do not intrude into the channels of other systems but which may do so elsewhere.

post-dialling delay

Rec. E.600

Time interval between the end of dialling by the user and the reception by him of the appropriate tone or recorded announcement, or the abandon of the call without tone.

post-dialling delay

Rec. Q.9

Time interval between the end of dialling by the subscriber and the reception by him of the appropriate tone or recorded announcement, or the abandon of the call without tone.

post office box

Rec. F.500

An attribute type which specifies the post office box by which the object will receive physical delivery. If present, the attribute value is part of the object's postal address.

post office box address (P.O. box address)

Recs. F.400, X.400

An access unit that subjects messages (but neither probes nor reports) to physical rendition.

post-production processing

Rec. I.113

Further processing of contributed audio and video information, to change the form or presentation of the information prior to its final utilization.

post restante address

Recs. F.400, X.400

A standard attribute in a postal address indicating that physical delivery at the counter is requested. It may also carry a code.

post-selection delay

Rec. E.721

The time interval from the instant the INFO message containing the last selection digit (in the case of overlap sending or the SETUP message in the case of en-bloc sending) is passed by the calling terminal to the access signalling system until the first message indicating call disposition is received by the calling terminal.

Note – In the ISDN the called user can choose to delay the sending of the ALERTING signal to the calling user. This definition does not include such user-induced delays.

post-selection time

U.140

The interval of time between the end of the sending of the selection sequence by the calling party and the reception of the call-connect signal.

post-signal

U.140

A class of service signal transmitted after the sequence of digits characterizing the called terminal.

postal address

Rec. F.500

An attribute type which specifies the address information required for the physical delivery of postal messages by the postal authority to the named object. Formatted and unformatted postal addresses exist.

Note – See also Recommendations F.401 and X.520.

postal Administration

Recs. D.70, D.71

An Administration, or part of a combined postal and telecommunications Administration, concerned with the provision of postal services.

postal code

Recs. F.400, X.400

Standard attribute of a postal O/R address to specify the geographical area, and in the context of MHS, used for routing of messages.

postal code

Rec. F.500

An attribute type which specifies the postal code of the named object. If this attribute value is present it will be part of the object's postal address.

postal O/R address

Recs. F.400, X.400

In the context of message handling, an O/R address that identifies a user by means of its postal address. It identifies the physical delivery system through which the user is to access and gives the user's postal address.

postal O/R address components

Recs. F.400, X.400

They contain in a postal address information to decribe the sender or addressee by means of his name (physical delivery personal name, physical delivery organization name).

Note – In a postal address the information is generally restricted to one line of 30 printable characters. Additional information may be supplied by using the attribute type "extension of postal O/R address components".

postamble

Rec. X.290

The test steps needed to define the paths from the end of the test body up to the finishing stable state for the test case.

potential recipient

Recs. F.400, X.400

In the context of message handling, any user or distribution list to which a message or probe is conveyed during the course of transmittal. Equivalently, a preferred member, alternate member, or substitute recipient.

potential recipient

Rec. X.402

Any user or DL to (i.e., toward) which a message or probe is conveyed at any point during the course of transmittal. Necessarily an intended, originator-specified alternate, member, or recipient-assigned alternate recipient.

power feeding (repeater) station

Rec. G.601

A *directly powered repeater station* which supplies electric power to other *repeater stations.*

power of the test

Suppl. No. 6 (II.3)

The *probability* of not committing the *error of the second kind,* equal to $1 - \alpha$, and thus the *probability* of rejecting the *null hypothesis* when this hypothesis is false.

powerset

Rec. Z.100

Powerset is the *predefined generator* used to introduce mathematical sets. The *operators* for *powerset* are IN, Incl, Del, union, insersection and the *ordering operators.*

PQ_{DCN}

Rec. M.30

A family of protocol suites for use with the DCN applied to the Q_3 interface.

PQ_{LCN}

Rec. M.30

A family of protocol suites for use with the LCN, applied to the Q_1 and Q_2 interfaces.

preamble

Rec. X.290

The test steps needed to define the path from the starting stable state of the test case up to the initial state from which the test body will start.

precorrection

Rec. R.140

Application of an artificial telegraph distortion to signals at the sending end of a channel, in order to completely or partly compensate for the effect of the characteristic distortion of this channel.

predefined data

Rec. Z.100

For simplicity of description the term *predefined data* is applied to both predefined *names* for *sorts* introduced by *partial type definitions* and predefined *names* for *data type generators*. *Boolean, character, chartstring, duration, integer, natural PId, real* and *time* are *sort names* which are predefined. *Array, powerset,* and *string* are *data type generator names*which are predefined. *Predefined data* are defined implicitly at *system level* in all *SDL systems.*

predicted ...

Suppl. No. 6 (II.3)

The numerical value assigned to a quantity, before the quantity is actually observable, computed on the basis of earlier observed or estimated values of the same quantity or of other quantities using a mathematical model.

prediction

Suppl. No. 6

1) The process of computation used to obtain (a) *predicted* value(s) of a quantity.

2) The *predicted* value(s) of a quantity.

predictor

Rec. G.701

A device that provides an estimated value of a sampled signal derived from previous samples of the same signal or from a quantized version of those samples.

preference

Rec. Q.1003

Indicates whether or not an MS is given preference access to the PLMN under certain circumstances. This point is for further study.

Preference is permanent subscriber data.

preferred class

Rec. X.224

The protocol class that the initiator indicates in a CR TPDU as its first choice for use over the transport connection.

preferred delivery method

Rec. F.500

An attribute type which specifies the object's priority regarding the method to be used for communicating with it.

preferred recipient

Recs. F.400, X.400

In the context of message handling, one of the users and distribution lists that the originator selects as a message's or probe's preferred destination.

prefix

Recs. E.160, Q.10

A prefix is an indicator consisting of one or more digits, that allows the selection of different types of number formats (e.g., local, national or international), transit networks and/or the service.

Prefixes are not part of the number and are not signalled over internetwork or international boundaries.

Note – When prefixes are used, they are always entered by the user or automatic calling equipment.

prefix

Suppl. No. 2 (II.4)

An indicator, consisting of one or more digits, that allows the selection of different types of address formats (e.g. local, national or international address formats), transit network and/or service selection. Prefixes are not part of the national subscriber number and are not signalled over inter-network or international boundaries.

prefix

Rec. X.121

In the context of the international numbering plan for public data networks, an indicator consisting of one or more digits, allowing the selection of different numbering formats. Prefixes are not part of the international X.121 format.

Note – Prefixes are a national matter.

prefix giving access to the intercontinental automatic transit telex network

Rec. F.68

This expression is taken to mean the digit or digits that a subscriber must select (if necessary after the prefix giving access to the international telex network) to obtain access to automatic telegraph switching equipment for intercontinental transit telex traffic.

prefix giving access to the intercontinental telex network

U.140

A digit or a sequence of digits that must be selected by a subscriber, possibly after the prefix giving access to the long distance telex network, to connect with the intercontinental network.

prefix giving access to the international automatic telex network

Rec. F.68

This expression is taken to mean the digit or digits that a subscriber must select (if necessary after the prefix giving access to the automatic long-distance telex network) to obtain access to the automatic telegraph switching equipment for international telex traffic.

prefix giving access to the international telex network

U.140

A digit or a sequence of digits that must be selected by a subscriber, possibly after the prefix giving access to the long distance telex network, to connect with the international network.

prefix giving access to the long-distance automatic telex network

Rec. F.68

In national telex networks, when abridged call numbers are used for local or short-distance traffic, an access prefix should be selected to give access to the higher level network (long-distance level).

prefix giving access to the long distance telex network

U.140

A digit or sequence of digits giving access to the remainder of the national telex network from an area inside which local telex numbers are used.

premature disconnect probability

Rec. X.136

A premature disconnect event is defined to have been generated within a section when, in the absence of an external premature disconnect stimulus, two packet exit the section – one at each boundary – creating any one of the pairs of packet layer reference events listed in Table 8/X.136. A premature disconnect event applies only to virtual call services.

The premature disconnect probability for a virtual connection section is the probability, in any given second, that a virtual call experiences a premature disconnect event generated within that section.

premature disconnect stimulus probability

Rec. X.136

A premature disconnect stimulus is observed at a single section boundary. It is any event or combination of events that according to the protocol should result in a clear or restart being generated by the recipient. An example of a premature disconnect stimulus is the transmission of an incorrect packet type into a virtual connection section. A premature disconnect stimulus applies only to virtual call services.

Note – For the purpose of performance parameter definition, it is assumed that the premature disconnect stimuli for an X.25 DTE are equivalent to the premature disconnect stimuli for an X.25 DCE. incorrect packet type into a virtual connection section. A premature disconnect stimulus applies only to virtual call services.

premature disconnect stimulus probability of a section at a boundary

Rec. X.136

The probability of a premature disconnect stimulus generated within that section and transferred across the boundary per virtual connection second.

premature release probability; cut-off call probability

Rec. E.800

The *probability* that an established *connection* will be released for a reason other than intentionally by any of the parties involved in the call.

prematurely released telephone connection

Rec. E.850

Known as a cutoff call when the connection is completely broken, or

1) when a single interruption occurs lasting for longer than ten seconds which causes the transmission quality of the connection to be unsuitable for voice communications;
2) when a succession of interruptions occur lasting less than ten seconds where the product of the average duration of each interruption and the frequency of occurrence (i.e., average number of interruptions/seconds) exceeds 0.005.

prepaid card

Rec. E.133

A card carrying a set amount of unit or monetary value that can be used for telephone purposes. The card is decremented based on use and can be either thrown away or re-valued, depending on the technological attributes of the card.

preparation of plans and data management

Rec. L.11

The capture, updating, processing and representation of all data relating 24 to underground ducts is understood. Any information system for underground ducts can thus be run either manually or by computer.

preparation operating

Rec. E.100

In preparation operating, after the request is recorded by an operator in the outgoing international exchange another operator in the exchange sets up the call. After the requests have been put in order at the exchange, the controlling operator sees to it that the calling station is connected on the international circuit without loss of time.

A distinction is made between:

1) advance preparation operating
   Advance preparation operating requires preparation at both the outgoing and incoming international exchanges.
2) outgoing preparation operating
   Outgoing preparation operating requires preparation at the outgoing international exchange only.

preparatory period

Rec. N.4

The period during which broadcasting organizations do their own adjustments, tests and other work before the sound-programme transmission itself commences.

preparatory period

Rec. N.54

The period during which the broadcasting organizations carry out their own adjustments, tests, etc., before the television transmission itself commences.

See Figure 1/N.54.

pre-selection delay

U.140

The interval of time between the sending of the calling signal by the calling party and the reception of the proceed-to-select signal.

pre-selection delay (overlap sending)

Rec. E.721

The time interval from the instant the SABME message is passed by the calling terminal to the access signalling system until the SETUP ACK message is received by the calling terminal.

presentation

Rec. T.61

The printing or display of a stored character or characters to allow for human comprehension of the stored information.

presentation

Rec. T.411

The operation of rendering a document in a form perceptible to a human being.

presentation address

Rec. F.500

An attribute type which specifies a presentation address associated with an object representing an DSI application entry.

presentation attributes

Rec. T.412

A number of sets of presentation attributes may be specified. Which set applies to a given basic component depends on the content architecture class of the content associated with the component.

presentation context

Rec. X.216

An association of an abstract syntax with a transfer syntax.

Note 1 – From the viewpoint of the presentation-service-user, a presentation context represents an environment in which the presentation data values of the abstract syntax can be transferred (as a bitstring) without ambiguity.

Note 2 – Where the abstract syntax permits it, a presentation data value may contain embedded fields, each of which carries a presentation data value from a (possibly different) abstract syntax.

Note 3 – From the viewpoint of the presentation-service-user, a presentation context represents a specific use of an abstract syntax. Multiple presentation contexts may be defined for the same abstract syntax (with the same or different transfer syntaxes); presentation data values transmitted in these separate presentation contexts are also delivered in these separate presentation contexts.

presentation context identification

Rec. X.216

The identification of a specific presentation context at the conceptual service boundary.

presentation context identifier

Rec. X.226

An identifier for a specific presentation context. The identifier is unique within a presentation-connection and known to both presentation protocol machines. The default context does not have a presentation context identifier associated with it.

presentation control functions

Rec. T.61

Control functions that influence in a uniform way the presentation attributes of the text (e.g. line spacing or page format) on a presentation device.

presentation data value

Rec. X.216

The unit of information specified in an abstract syntax, which is transferred by the presentation-service.

presentation element

Rec. T.150

Basic graphic element used to construct an image.

Examples of telewriting presentation elements are: trace, closed area, background.

presentation medium

Rec. T.411

The carrier of information in a form perceptible to a human being.

presentation style

Rec. T.411

A constituent of the document, referred to from a basic logical or layout component, which guides the format and appearance of the document content.

presentation style

Rec. T.412

This attribute is used to establish a relationship between a basic component description and a presentation style.

presentation style identifier

Rec. T.412

This attribute identifies a presentation style uniquely within the context of the document.

presentation surface

Rec. T.411

A two-dimensional presentation medium (such as paper, film, video display screen) on which the formatted form of a document may be displayed for human viewing.

pre-signal

U.140

A class of service signal transmitted at the beginning of the selection signals.

preventive cyclic retransmission (error control) method

Glos. (VI.7, VI.8, VI.9)

A noncompelled, positive acknowledgement, cyclic retransmission forward error correction system.

preventive maintenance

Rec. M.60, Suppl. No. 6 (II.3)

The maintenance carried out at predetermined intervals or according to prescribed criteria and intended to reduce the probability of failure or the degradation of the functioning of an item.

preventive maintenance time

Suppl. No. 6 (II.3)

That part of the *maintenance time* during which *preventive maintenance* is performed on an *item*, including *technical delays* and *logistic delays* inherent in *preventive maintenance*. See Figure 3, Suppl. No. 6 (II.3)

primary block (deprecated)

See:

primary PCM group.

primary block; digroup

Recs. M.300, Q.9

A basic group of PCM channels assembled by time division multiplexing.

See Figure 5/M.300.

Note – The following conventions could be useful:

Primary block μ – a basic group of PCM channels derived from 1544 kbit/s PCM multiplex equipment.

Primary block A – a basic group of PCM channels derived from 2048 kbit/s PCM multiplex equipment.

primary digital group

Rec. G.701

An assembly, by digital multiplexing, of digital signals occupying a specified number of channel time-slots to form a composite signal having a digit rate of 2048 kbit/s or 1544 kbit/s.

Note – Normally each channel time-slot has eight digit time-slots and an effective digit rate of 64 kbit/s.

primary failure

Suppl. No. 6 (II.3)

A *failure* of an *item*, not caused either directly or indirectly by the *failure* or the *fault* of another *item*.

primary muldex

Rec. Q.9

A digital multiplexer-demultiplexer that converts signals between 64 kbit/s and 1544 or 2048 kbit/s bit streams. See Figure 2/Q.9.

primary PCM group

Rec. G.701

An assembly, by digital multiplexing, of PCM signals occupying a specified number of channel time-slots to form a composite signal having a digit rate of 1544 kbit/s or 2048 kbit/s, in both directions of transmission.

Note – The following conventions could be useful:

Primary group μ – a basic group of PCM signals derived from 1544-kbit/s PCM multiplex equipment.

Primary group A – a basic group of PCM signals derived from 2048-kbit/s PCM multiplex equipment.

primary performance parameter

Rec. I.350

A parameter or a measure of a parameter determined on the basis of direct observations of events at services access points or connection element boundaries.

primary rate access

Recs. G.960, I.430

A user-network access arrangement that corresponds to the primary rates of 1544 kbit/s and 2048 kbit/s. The bit rate of the D-channel for this type of access is 64 kbit/s. The typical primary rate interface structures are as given in Recommendations I.412 and I.431.

primary rate access

Rec. Q.9

A user-network access arrangement that corresponds to the primary rates of 1544 kbit/s and 2048 kbit/s. The bit rate of the D-channel for this type of access is 64 kbit/s.

primary reference clock

Rec. G.810

A reference clock that provides a timing signal with long term frequency departure maintained at $1 \cdot 10^{-11}$ or better with verification to Universal Time Coordinated (UTC). Requirements for primary reference clocks are given in Recommendation G.811.

Note 1 – The primary reference clock may generate a timing signal completely autonomous of other references or alternatively, the primary reference clock may not have a completely autonomous implementation, in which case it may employ direct control from standard UTC-derived frequency and time sources.

Note 2 – This clock is sometimes referred to as a Stratum 1 clock (i.e. the highest quality clock in the network).

primary route

Rec. F.600

The route normally used in a given relation.

primary routes

Recs. F.60, F.68

The circuits normally used in a given relation.

primary routes
See:
routes.

primitive
See:
service-primitive; primitive.

primitive encoding

Rec. X.209

A data value encoding in which the contents octets directly represent the value.

printable area

Rec. T.60

A printable area is defined to be the paper area available to the printing mechanism onto which graphic information can be technically impressed.

printed record of duration and charge of calls service

Suppl. No. 1 (II.2)

The possibility for a subscriber to get a specific printed record of called number, duration and charge of calls.

printing perforator

Rec. S.140

A tape perforator which, when perforating, also prints on the tape the corresponding character or the symbol representing the function control.

printing reperforator

Rec. S.140

A reperforator which, when perforating, also prints on the tape the corresponding character or the symbol representing the function control.

printing station

Rec. F.50

Equipment used to print messages in the national telemessages distribution office. The printing station shall be capable of accepting a minimum of 69 printing characters (including spaces) per line.

priority

Suppl. No. 2 (II.4)

The possibility of setting up a call from a nominated *terminal* on a *private network* or *closed user group*, by assigning to it, at each stage of selection, priority over all other calls of lower priority that are in the process of being established. The possibility may apply either to every call or only to nominated calls from such a privileged terminal.

priority

Rec. F.500

A service control which specifies the priority of a request (low, medium, high) for the service. This is not a guaranteed service in that the directory as a whole does not implement queuing. There is no relationship implied with the use of priorities in underlying layers.

priority for called subscriber

Suppl. No. 2 (II.4)

A subscriber who has the facility of *priority* or *absolute priority* for all calls or for certain calls only to his *terminal*. This facility is activated by the sending of an appropriate signal by the calling terminal.

Note – There may be several priority levels, each confering relative or absolute priority with respect to lower levels.

priority service

Suppl. No. 1 (II.2)

In telephone exchanges provision is made to give preferential treatment concerning the order of path or circuit selection to certain calls.

private data network

*Series X**

A network established and operated by a private organization for the purpose of data communication applications.

Note – A private network may be connected to one or more public data networks, depending on national regulations.

private directory management domain (PRDMD)

Recs. X.500, X.501

A directory management domain which is managed by an organization other than an Administration.

private domain name

Recs. F.400, X.400

In the context of message handling, a standard attribute of an O/R address form that identifies a PRMD relative to the ADMD denoted by an administration domain name.

Note – They are administered by the ADMD the PRMD is associated with.

private key

Rec. X.509

(In a public key cryptosystem) that key of a user's key pair which is known only by that user.

private management domain (PRMD)

Recs. F.400, X.400, X.402

In the context of message handling, a management domain that comprises messaging system(s) managed by an organization other than an Administration.

private network (in telegraphy)

U.140

A group of terminals that can establish calls between one another without passing through the switching equipment of the public network.

private number ringing signal

Suppl. No. 1 (II.2)

Each member of a family is given different identification (ID). If the calling party wants a particular member he dials the ID code related to that member. The called member can know he is wanted by a particular kind of ringing signal.

private (telephone) installation

Rec. P.10

A *telephone network* installed on the premises of a single individual or organization.

Note – By convention, private telephone installations include sets of *telephone stations* which are connected to one *subscriber's line*

private use option

Rec. F.710

A service feature not defined by CCITT as an addition to the basic requirements, that may optionally be used by subscribers in the international TCS, but requiring always a previous agreement between subscribers.

probability

Suppl. No. 6 (II.3)

For practical reasons, it may be considered that, whenever the conditions of a *test* can be reproduced, the *probability Pr(E)* of an event E occurring is the value around which the occurrence frequency of the latter oscillates and towards which it tends when the number of tests are indefinitely increased.

Note – The concept of *probability* may be introduced in either of two forms, depending on whether it is intended to designate a degree of belief or whether it is considered as the limit value of a frequency. In both cases, its introduction requires that some precautions be taken which cannot be developed within the context of an International Standard and for which users should refer to specialized literature.

probability density function

Suppl. No. 6 (II.3)

The derivative, if this exists, of the *distribution function*:

$$f(x) = \frac{\mathrm{d}F(x)}{\mathrm{d}X}$$

probability of acceptance

Suppl. No. 6 (II.3)

The *probability* that an *item* will be accepted by a given *statistical test* plan.

probability of end-to-end blocking

Rec. E.721

The probability that a call attempt will be unsuccessful due to a lack of network resources.

Note – Resources in the access network are not part of this definition.

probability of rejection

Suppl. No. 6 (II.3)

The *probability* that an *item* will not be accepted by a given *statistical test* plan.

probability of successful service completion

Rec. E.800

The *probability* that a *connection* can be established, under satisfactory operating conditions, and retained for a given *time interval.*

probe

Recs. F.400, X.400

In the context of message handling, an instance of a secondary class of information objects conveyed by means of message transfer that describes a class of message and that is used to determine the deliverability of such messages.

procedure

Rec. Z.100

A *procedure* is an encapsulation of the *behaviour* of a *process.* A *procedure* is defined in one place but may be referred to several times within the same *process.* See the definitions of the terms *formal parameter* and *actual parameter.*

procedure
See:
abstract procedure; procedure.

procedure body

Rec. Z.341

That part of a *dialogue procedure* where *commands* can be entered and new physical areas can be addressed, dependent on the authority of the *user.*

procedure call

Rec. Z.100

A *procedure call* is the invocation of a named *procedure* for interpretation of the *procedure* and passing *actual parameters* to the *procedure.*

procedure call
See:
call in software; procedure call.

procedure call area

Rec. Z.100

The *procedure call area* is the *SDL/GR* representation of a *procedure call.*

procedure definition

Rec. Z.100

A *procedure definition* is the *SDL/PR* definition of a *procedure.*

procedure description

Rec. Z.341

A method of representing an *operational procedure.*

procedure diagram

Rec. Z.100

A *procedure diagram* is the *SDL/GR* representation of a *procedure.*

procedure epilogue

Rec. Z.317

The procedure epilogue is used to terminate the dialogue procedure. The composition of the procedure epilogue is highly dependent on the type of terminal and implementation. The procedure epilogue can consist of actuating a control switch, power off, etc. and/or keying a sequence of characters on the keyboard and/or the output of end of dialogue from the system.

procedure epilogue

Rec. Z.341

The procedure used to terminate the *dialogue procedure.* It consists of an *action* by the *user* to deactivate the *dialogue* and/or an *output* from the *system* to indicate the *end of dialogue.*

procedure graph

Rec. Z.100

A *procedure graph* is a nonterminal in the *abstract syntax* representing a *procedure.*

procedure prologue

Rec. Z.317

The procedure prologue may consist of three parts given in the following order:

- the request, which is an action to activate the man-machine terminal and the system;
- the identification of the user. The identification of the user is optional. Identification may be bypassed under special conditions, for example system initialization. In situations where no identification procedure is used, then it must be possible to allow access only for certain periods per day, e.g., office hours;
- a header, which is given from the system and contains the exchange identification, information relating to date and time, etc. Headers can be optional for a system or within a system for certain terminals.

The procedure prologue is intended to be executed only once at the beginning of a dialogue. The procedure prologue is followed by a ready indication inviting a destination prologue or an interactive operating sequence.

procedure prologue

Rec. Z.341

A set of *actions* to activate the *man-machine terminal*, to call the *system* and to identify the *user*.

procedure return

See:

return; procedure return.

proceed-to-select signal

U.140

A return switching signal transmitted by an exchange in response to a calling signal or after a call-confirmation signal to indicate that the exchange is ready to receive the selection signals.

proceed-to-send signal

See:

start-dialling signal; proceed-to-send signal (sent in the backward direction.

proceed-to-send signal (sent in the backward direction)

Rec. Q.120

This signal is sent from the incoming end of an international circuit, following the receipt of a seizing signal, to indicate that the equipment is ready to receive the numerical signals.

In System No. 4 two different proceed-to-send signals are provided:

a) the *terminal* proceed-to-send signal, used to invite the sending of the language digit (or the discriminating digit) plus the national (significant) number;

b) the *transit* proceed-to-send signal, used to invite the sending of only those numerical signals (beginning with the first digit of the country code) necessary for routing the call through the international transit exchange towards the incoming international exchange or to another international transit exchange.

proceed-to-send signal (sent in the backward direction)

Rec. Q.140

This signal is sent from the incoming end of an international circuit, following the receipt of a seizing signal, to indicate that the equipment is ready to receive the numerical signals.

process

Rec. Z.100

A *process* is a communicating extended finite state machine. Communication can take place via *signals* or shared *variables*. The *behaviour* of a *process* depends on the order of arrival of *signals* in its *input port*.

process (in a data processing system)

Rec. Q.9

A course of events occurring according to an intended purpose or effect.

process (in SDL)

Rec. Q.9

A process performs a logic function that requires a series of information items to proceed, where these items become available at different points in time. In the context of SDL, a process is an object that either is in a *state* awaiting an *input* or in a *transition*.

process area

Rec. Z.100

A *process area* in *SDL/GR* is the representation of a *process* or a reference to a *process* in an *interaction diagram.*

process definition

Rec. Z.100

A *process definition* is the *SDL/PR* representation of a *process.*

process diagram

Rec. Z.100

A *process diagram* is the *SDL/GR* representation of the definition of a *process.*

process graph

Rec. Z.100

A *process graph* is nonterminal in the *abstract syntax* representing a *process.*

process instance

Rec. Z.100

A *process instance* is a dynamically created *instance* ofa *process.* See *SELF, SENDER, PARENT,* and *OFFSPRING*

processable form

Rec. T.411

A form of representation of a document that allows editing and formatting.

processable mode number one (PM1)

Rec. F.220

A processable mode designed to take into account a common set of functions commonly available to wordprocessing softwares.

Its main characteristics are that it allows to reprocess transmitted documents with only a single-column layout and containing only character encoded text. Additional characteristics may be found in Recommendation F.220 § 2.

The complete definition of this mode includes:

- the definition of the document features which can be interchanged between equipments supporting PM1. These features are functionally as well as technically defined in Recommendation T.502;
- the definition of the protocol elements to be used for the transfer of documents and for the negotiation of optional features between equipments supporting PM1. This definition is technically specified in Recommendation T.522;
- the specification of the equipment characteristics to be supported for PM1. These characteristics are defined in Recommendation T.562.

processed

Rec. X.413

An entry-status value.

processing

Rec. T.411

The carrying out of operations on a document, including editing, reformatting, presentation, filing and retrieval.

processing capacity

Rec. Q.9

The total capacity of a unit available for performing processing functions.

processing time

See:

switching delay; processing time; handling time.

processor

Rec. Q.9

A device capable of performing systematic execution of operations upon data. In telecommunication applications, the operations include control of the resources required to provide services.

processor outage

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A situation in which a signalling link becomes unavailable, due to factors at a functional level higher than level 2. This may be because of, for example, a central processor failure.

producer's risk (point)

Suppl. No. 6 (II.3)

A point on the *operating characteristic curve* corresponding to some predetermined and usually low *probability of rejection.*

production

Rec. X.208

A part of the formal notation used to specify ASN.1, in which allowed sequences of items are associated with a name which can be used to reference those sequences in the definition of new sets of allowed sequences.

programme booking centre (PBC)

Rec. D.180

The office of an Administration (or broadcasting organization where circuits are provided for international service by such an organization) which receives orders for international sound and/or television circuits from broadcasting organizations in its own country or from a broadcasting organization in another country or from the PBC of another Administration and is charged with the task of making appropriate arrangements for providing the ordered circuits.

programme originator

Rec. N.51

A customer at a transmitting country needing up-linking of a transmission to television receive-only stations (TVROs) not related to an ITC (see Figure 6/N.51).

programme-sensitive fault

Suppl. No. 6 (II.3)

A *fault* that is revealed as a result of the execution of some particular sequence of instructions.

programming system

Rec. Q.9

One or more programming languages and the necessary software for using these languages with particular automatic data processing equipment.

progress indicator

Rec. I.515

Information supplied to indicate to the ISDN terminal that interworking has occurred.

prompt maintenance alarm (PMA)

Rec. M.60

A prompt maintenance alarm is generated in order to initiate maintenance activities (normally immediately) by maintenance personnel to remove from service a defective equipment for the purpose of restoring good service and effecting repair of the failed equipment.

prompting

Rec. Z.341

A method used by the *system* to request *input* from the *user* in a *dialogue procedure.*

promption output

Rec. Z.341

An *output* from the *system* providing guidance on the next *input* requirement.

propagated error

Suppl. No. 6 (II.3)

An *error* in the response to erroneous data input to a non-faulty *item.*

propagation performance

Recs. E.800, M.60

The ability of a propagation medium, in which a wave propagates without artificial guide, to transmit a signal within the given tolerances.

Note – The given tolerances may apply to variations in signal level, noise, interference levels, etc.

proportional line spacing

Rec. T.416

This attribute specifies how the content layout process is to determine the distance between the reference lines of two successive line boxes.

proposed class

Rec. X.224

A preferred class or an alternative class.

proposed parameter

Rec. X.215

The value for a parameter proposed by an SS-user in an S-CONNECT request or an S-CONNECT response that it wishes to use on the session connection.

proposed parameter

Rec. X.224

The value for a parameter that the initiator indicates in a CR TPDU that it wishes to use over the transport connection.

proposed parameter

Rec. X.225

The value for a parameter proposed by an SPM in a CONNECT SPDU or an ACCEPT SPDU that it wishes to use on the session connection.

protected monitoring point

Rec. M.60

A protected monitoring point provides a digital interface at which it is possible to monitor the transmitted signal and to make measurements with suitable test equipments (described in Fascicle IV.4, *Red Book*).

The degree of protection is considered to be sufficient when a variation of the pulse mask as given in Recommendation G.703 is less than $x\%$ with a short circuit at the protected monitoring point. (The value of x is for further study in connection with the electrical characteristics.)

Note – The above definition is a working definition and is under study in Study Groups IV and XV.

protected monitoring point (PMP)

Rec. G.772

Provides a digital interface at which it is possible to monitor the transmitted signal and to make measurements with suitable test equipments (see Rec. M.60).

protection

Rec. T.412

This attribute specifies whether or not the logical object, and any associated content portions, are intended to be protected from having any attributes modified by the recipient.

protection switching

Rec. M.60

Note – This term was used in the CCITT *Red Book* and has been deleted in the *Blue Book*. For more information, see the definitions for terms relating to direct transmission restoration (protection link switching) and automatic and semi-automatic transmission restoration (protection network switching) in Recommendation M.495.

protocol

Recs. I.112, Q.9

A formal statement of the procedures that are adopted to ensure communication between two or more functions within the same layer of a hierarchy of functions.

protocol

Rec. Q.9

A set of rules and formats which govern the exchange of information between two peer entities, for purposes of information (signalling or data) transfer.

protocol

See:

(signalling) protocol.

protocol class

Rec. Q.712

For connection-oriented protocol classes, the "protocol class" parameter field is used during the connection establishment phase; it is negotiated between the two end SCCP. It is also used during data transfer phase to audit the consistency of this connection data at both ends of a connection section.

For connectionless protocol classes the "protocol class" parameter field is used to indicate whether or not a message should be returned on error occurence.

protocol class

Rec. Q.762

Information sent in the connection request parameter indicating the protocol class requested by the signalling connection control part for the end-to-end connection.

protocol conformance test report (PCTR)

Rec. X.290

A document written at the end of the conformance assessment process, giving the details of the testing carried out for a particular protocol, including the identification of the abstract test cases for which corresponding executable test cases were run and for each test case the test purpose and verdict.

protocol control indicator

Rec. Q.762

Information consisting of the end-to-end method indicator, the interworking indicator, the end-to-end information indicator, the SCCP method indicator and the ISDN user part indicator. The protocol control indicator is contained in both the forward and backward call indicators parameter field and describes the signalling capabilities within the network connection.

protocol data unit error (ERR)

Rec. Q.712

A *protocol data unit error* message is sent on detection of any protocol errors.

It is used during the data transfer phase in protocol classes 2 and 3.

protocol error

Rec. X.224

A TPDU whose use does not comply with the procedures for the class.

protocol error

Rec. X.225

Use of an SPDU that does not comply with the procedures agreed for the session connection.

protocol error

Rec. X.226

A situation occuring when a presentation-protocol-data-unit is used in a way which does not comply with the procedures defined in Recommendation X.226.

protocol identifier

Rec. I.515

Information defining the specific protocols used by a terminal to support data transfer.

protocol implementation conformance statement (PICS)

Rec. X.290

A statement made by the supplier of an OSI* implementation or system, stating the capabilities and options which have been implemented, and any features which have been omitted.

protocol implementation extra information for testing (PIXIT)

Rec. X.290

A statement made by a supplier or implementor of an IUT which contains or references all of the information (in addition to that given in the PICS) related to the IUT and its testing environment, which will enable the test laboratory to run the appropriate test suite against the IUT.

protocol selection attributes

Rec. G.771

Protocol selection attributes are those characteristics of protocol suites related to their ability to meet the communication needs of application messages in the LCN and the DCN.

provider-intitiated-service

Rec. X.210

A service which is generated by the service-provider.

pseudo n-ary signal

Rec. G.701

A redundant *n*-ary digital signal that is derived from a *m*-ary digital signal without change of the line digit rate.

Note – An alternate mark inversion signal is an example of a pseudo-ternary signal, i.e. $n = 3$, $m = 2$.

psophometric power

Rec. G.212

Where square law addition (power addition) of noise can be assumed, it has been found convenient for calculations and design of international circuits to use the idea of psophometric power as defined below:

$$\text{psophometric power} = \frac{(\text{psophometric voltage})^2}{600}$$

or

$$\text{psophometric power} = \frac{(\text{psophometric e.m.f.})^2}{4 \times 600}$$

A convenient unit is the micro-microwatt or picowart (pW), and this equation can then be given as follows:

$$\text{psophometric power} = \frac{(\text{psophometric e.m.f. in mV})^2}{0.0024} \text{ (pW).}$$

PTLXAU answerback

Rec. U.204

In the case of two-stage selection, the answerback of the destination PTLXAU and which is always returned by the PTLXAU in response to a received WRU signal.

PTLXAU identification

Rec. U.204

When delivering an IP message to a telex subscriber, the sequence transmitted by the PTLXAU which indicates the country of origin of the PTLXAU and IPM service.

public data network

*Series X**

A network established and operated by an Administration for the specific purpose of providing data transmission services to the public. Circuit switched, packet switched and leased circuit data transmission services are feasible, depending on national regulations. The public data network may carry traffic of other services.

public data transmission service

*Suppl. No. 1 (II.4), Series X**

A data transmission service established and operated by Administrations and provided by means of a public network. Circuit switched, packet switched and leased circuit data transmission services are specified.

Note 1 – A public data transmission service may be subdivided into derived services.

Note 2 – A public data transmission service or a derived service consists of service elements forming a basic service and of other service elements which are called optional user facilities.

Note 3 – There is an implicit definition of data transmission services in Recommendations X.1 and X.2.

public directory service

Rec. F.500

A service provided by Administrations to subscribers and users for the purpose of obtaining information on addresses for telecommunication services and other related information from an electronic directory.

public facsimile bureau

Rec. F.160

An Administration's public bureau responsible for accepting, transmitting, receiving and delivering facsimile documents.

public facsimile service

Suppl. No. 1 (II.4)

An international telematic service offered by Administrations for the purpose of transmitting documents between facsimile terminals via telecommunication networks.

Note – The subdivision of this service is described in Recommendation F.160.

public facsimile station

Rec. F.160

Equipment operated by an Administration in a facsimile bureau open to the public, including a facsimile terminal, access to the telecommunication networks (with possible use of dedicated circuits) as well as connecting and possible additional equipment.

public key

Rec. X.509

(In a public key cryptosystem) that key of a user's key pair which is publicly known.

public land mobile network

Rec. Q.1001

A public land mobile network (PLMN) is established and operated by an administration or RPOA for the specific purpose of providing land mobile telecommunication services to the public. A PLMN may be regarded as an extension of a fixed network (e.g. PSTN) or as an integral part of the PSTN. In the first case, it can be considered as a collection of mobile services switching centre (MSC) areas within a common numbering plan (e.g. service access codes) and a common routing plan (e.g. definition of crossover point); in this case the MSCs are the functional interfaces between the fixed network and a PLMN for call set-up. In the second case, it can be considered as an assemblage of special logic in existing or future PSTN/ISDN stored program controlled digital local exchanges, conceptually integrated within a common numbering and routing plan.

public land mobile network (PLMN)

Glos. (VI.7, VI.8, VI.9)

A public network dedicated to the operation of mobile radio communications.

public land mobile network (PLMN)

Rec. Q.9

A collection of *mobile service switching centre* areas within a common numbering plan and a common routing plan operated by an administration of a RPOA in order to provide public land mobile services to its subscribers.

public land mobile services

Recs. Q.9, Q.1001

Telecommunication services provided to moving subscribers (terrestrial applications).

public message handling service

Recs. F.400, X.400

Message handling service offered by an Administration.

public recorded information service

Suppl. No. 1 (II.2)

Recorded information of public interest provided by the telecommunications Administrations, possibly in cooperation with appropriate public or private institutions, is given to subscribers calling the respective service numbers.

public services

Recs. F.400, X.400

In the context of telecommunication, the services offered by Administrations.

public telefax station

Suppl. No. 1 (II.4)

Equipment made available to the public by an Administration for the operation of the Telefax service, comprising a facsimile terminal and access to the appropriate networks. These facsimile terminals may be used exclusively for transmission or reception, or for both transmission and reception (see Recommendation F.180, § 5).

public telegram service

Suppl. No. 1 (II.4)

The *telegraph service* offered by Administrations to the public for the transmission of *telegrams* and their delivery to the addressee.

Note – The service provides for the exchange of various classes of telegrams.

public telegraph network

U.140

A telecommunication network set up to perform a telegraph service for the public.

Note – A public telegraph network is supplied, operated and controlled by an Administration or recognized private operating agency.

public telex access unit (PTLXAU)

Rec. U.204

A functional unit which implements the requirements to allow the delivery of messages from telex subscribers to users of the interpersonal messaging service (and vice versa) as specified in the relevant U-series and X-series of Recommendations. The method of implementation of these functions in any physical unit is a national matter.

public telex booth

Suppl. No. 2 (II.4)

Telex *terminal* available to the public (i.e. non-subscribers).

pulse code

Rec. G.701

A set of rules giving the equivalence between each quantized value and its corresponding code word.

pulse code modulation (PCM)

Rec. G.701

A process in which a signal is sampled, and each sample is quantized independently of other samples and converted by encoding to a digital signal.

pulse density requirement (PDR) at 1544 kbit/s

Rec. G.802

The minimum requirement for an entire 1544 kbit/s digital signal is that there should be no more than 15 binary "0"s between successive binary "1"s and that there should be an average binary "1"s density of at least one in every eight bits. This requirement is due to the design of a number of existing systems (see Recommendation G.703.)

Moreover, the requirement for an octet-structured source in a 1544 kbit/s digital link is that at least one binary "1" should be contained in any octet.

pulse duration

Rec. G.601

The interval of time between the first and last instant at which the instantaneous value of a pulse (or of its envelope if a carrier frequency pulse is concerned) reaches a specified fraction of the peak amplitude.

pulse echo attenuation

See:

pulse echo return loss; pulse echo attenuation.

pulse echo meter

Rec. G.601

Apparatus designed to take *echometric measurements* by means of pulses.

pulse echo return loss; pulse echo attenuation

Rec. G.601

Relative amplitude of an elementary echo expressed in transmission units.

pulse stuffing (deprecated)
See:
justification.

pure chance traffic
See:
poisson traffic; pure chance traffic.

purported name

Rec. X.501

A construct which is syntactically a name but which has not (yet) been shown to be a valid name.

Q

Q interface

Rec. M.30

The Q interface is applied at q reference points. To provide flexibility of implementation, the class of Q interfaces is made up of the following three subclasses:

- interface Q_1, intended to connect NEs containing no MF to MDs or to NEs containing MF via an LCN
- interface Q_2, intended to connect MDs to MDs, NEs containing MF to MDs or to other NEs containing MF via an LCN
- interface Q_3, intended to connect MDs, NEs containing MF and OSs to OSs via a DCN.

Note 1 – Applications different from primary applications are not excluded when different functions are combined for implementation.

Note 2 – A higher numbered interface will generally use a more sophisticated protocol than a lower numbered interface.

q reference points

Rec. M.30

The q reference points connect the function blocks NEF to MF, MF to MF, MF to OSF and OSF to OSF either directly or via the DCF. Within the class of q reference points the following distinctions are made:

q_1: the q_1 reference points connect NEF to MF either directly or via the DCF;

q_2: the q_2 reference points connect MF to MF either directly or via the DCF;

q_3: the q_3 reference points connect MF to OSF and OSF to OSF either directly or via the DCF.

qualifier

Rec. Z.100

The *qualifier* is part of an *identifier* which is the extra information to the *name* part of the *identifier* to ensure uniqueness. *Qualifiers* are always present in the *abstract syntax*, but only have to be used as far as needed for uniqueness in the *concrete syntax* when the *qualifier* of an *identifier* cannot be derived from the context of the use of the *name* part.

quality of service

Rec. E.800

The collective effect of service performances which determine the degree of satisfaction of a *user* of the *service.*

Note 1 – The *quality of service* is characterized by the combined aspects of *service support performance, service operability performance, serveability performance, service integrity* and other factors specific to each *service.*

Note 2 – The term "quality of service" is not used to express a degree of excellence in a comparative sense nor is it used in a quantitative sense for technical evaluations. In these cases a qualifying adjective (modifier) shall be used.

quality of service

Rec. I.140

This attribute is described by a group of specific sub-attributes, for example: service reliability, service availability.

quality of service (QOS)

Rec. M.60

The collective effect of service performances which determine the degree of satisfaction of a user of the service.

Note – The quality of service is characterized by the combined aspects of service support performance, service operability performance, service integrity and other factors specific to each service.

See Figure 1/E.800.

quality of service (QOS)-parameter set

Rec. I.122

For each QOS-parameter, a set of "subparameters" is defined from among the following possibilities:

a) a *target* value which is the QOS value desired by the calling user;

b) the *lower quality acceptable* value which is the lowest QOS value agreeable to the calling user. (When the lowest quality acceptable refers to throughput, the term "minimum" may be used, while when it refers to transit delay, the term "maximum" may be used.);

c) an *available* value which is the QOS that the network is willing to provide;

d) a *selected* value which is the QOS value to which the called user agrees.

quality of service variable

Rec. E.600

Any performance variable (such as congestion, delay, etc.) which is perceivable by a user.

Note – For a description of the relations of quality of service factors see Recommendation E.800.

quantized value

Rec. G.701

The single discrete value used to represent any value in a particular quantizing interval. (See Figure 2/G.701.)

quantizing

Rec. G.701

A process in which a continuous range of values is divided into a number of adjacent intervals, and any value within a given interval is represented by a single predetermined value within the interval. (See Figure 2/G.701.)

quantizing distortion

Rec. G.701

The distortion resulting from the process of quantizing samples within the working range.

quantizing distortion power

Rec. G.701

The power of the distortion component of the output signal resulting from the process of quantizing.

quantizing interval

Rec. G.701

One of the intervals used in quantizing. (See Figure 2/G.701.)

quarantine service

Rec. X.200

A facility of the session-service by which an integral number of session-service-data-units sent on a session-connection are not made available to the receiving presentation-entity until explicitly released by the sending presentation-entity.

quarter character rate

See:

half character rate; quarter character rate.

quasi-associated mode (of signalling)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A nonassociated mode (of signalling) in which the (signalling) message route is determined basically, for each signalling message, by information contained in this message (namely in its routing label) and is fixed in normal operation.

quasi-associated mode of operation

Rec. Q.253

The quasi-associated mode of operation is the limited form of the non-associated mode. The common signalling links to be used are generally each operating in the associated mode with a group of circuits.

In the quasi-associated mode of operation the signals are transferred between the two exchanges over two or more common signalling links in tandem, but only over certain predetermined paths and through predetermined signal transfer points.

See Figure 4/Q.253.

quasi-associated signalling

Gloss. (VI.3)

A form of non-associated signalling in which the route the signals may take through the network is prescribed.

queueing delay

Gloss. (VI.3)

The delay incurred by a signal message as a result of the sequential transmission of signal units on the signalling channel.

queuing

Rec. P.84

An overload control strategy employing buffer memory in the DCME transmitter to store speech samples while waiting for a bearer channel to become available.

queuing time

See:
waiting time; queuing time.

quiet code

Rec. Q.9

A digital signal used for transmission test purposes.

R

R25 equivalent

Rec. P.10

Loudness loss determined as a *reference equivalent* in accordance with Recommendation P.72 *(Red Book)*, except that the listening level is constant, corresponding to 25 dB in NOSFER.

R or T pads (in telephone extension)

Rec. G.100

The R or T pad represents the transmission loss between the 0 dBr points at the digital/analogue codec and the 2-wire side of the 2-wire/4-wire terminating unit or the same in the reversed direction, respectively.

Note – The transmission loss introduced by the combination of the R and T pads in the subject of CCITT Recommendations.

radio control path

Rec. Q.1001

The radio communication facility between a mobile station and a base station intended to carry all the information transfer between the mobile station and the MSC, in which area the mobile station currently is located, during the time that no radio traffic path between that base station and that mobile station is assigned.

radio paging service

Suppl. No. 1 (II.2)

The service provides the subscriber with the facility, by means of portable equipment used in a given area, to receive an alert by radio initiated by any telephone in a public network.

The alert can be accompanied by a spoken message or visual coded display either entered by the caller or generated within the network.

radio traffic path

Rec. Q.1001

The radio communication facility between a mobile station and a base station intended to carry a call and uniquely assigned to the mobile station during that call.

radiomaritime telex letter

Recs. E.200, F.110

A message sent by telex direct from a mobile station to a selected land station or to a selected public telegraph office for delivery by mail or any other appropriate means.

radiotelegram service (prefix 15)

Recs. E.216, F.126

Prefix 15 will connect the caller to the radio telegram service position. The transmission of radio telegram should normally be made by radio telex only. The radio telegram service in this case should be arranged in such a way that automatic retransmission is possible.

radiotelexogram

Recs. E.200, F.110

Message sent by telex direct from a subscriber to a foreign land station for transmission to a mobile station or a message sent from a mobile station to a land station for transmission by telex direct to a foreign subscriber.

random access (deprecated)

See:
direct access.

random errors

Recs. M.60, Q.9

Errors distributed over the digital signal so that they can be considered statistically independent from each other.

random process

Suppl. No. 6 (II.3)

A collection of time-dependent *random variables* where the values are governed by a given set of multivariate distributions for all combinations of the *random variables.*

random variable; variate

Suppl. No. 6 (II.3)

A variable which may take any of the values of a specified set of values and with which is associated a probability distribution.

Note – A *random variable* which may take only isolated values is said to be "discrete". A *random variable* which may take all the values of a finite or infinite interval is said to be "continuous".

range

Rec. Q.762

Information sent in a circuit group supervision message (e.g. circuit group blocking) to indicate the range of circuits affected by the action in the message.

range

Rec. X.413

A parameter, used in abstract-operations, to select a contiguous sequence of entries from an information-base.

raster graphics element

Rec. T.411

An alternative term for a picture element (pel).

ratio of compression

Rec. G.162

The ratio compression of a compressor is defined by the formula:

$$\alpha = \frac{n_e - n_{e0}}{n_s - n_{s0}}$$

where:

n_e is the input level;

n_{e0} is the input level corresponding to 0 dBm0;

n_s is the output level;

n_{s0} is the output level corresponding to an input level of n_{e0}.

ratio of compression

Rec. G.166

The ratio of compression of a compressor is defined by the formula:

$$\alpha = \frac{L_{1\,CIN} - L_{2\,CIN}}{L_{1\,COUT} - L_{2\,COUT}}$$

where

$L_{1\,CIN}$ and $L_{2\,CIN}$ are any two different compressor input levels within the compressor operating range.

$L_{1\,COUT}$ and $L_{2\,COUT}$ are the compressor output levels corresponding to input levels $L_{1\,CIN}$ and $L_{2\,CIN}$ respectively.

ratio of expansion

Rec. G.162

The ratio of expansion of an expander is defined by the formula:

$$\beta = \frac{n'_s - n'_{s0}}{n'_e - n'_{e0}}$$

where:

n'_e is the input level;

n'_{e0} is the input level corresponding to 0 dBm0;

n'_s is the output level;

n'_{s0} is the output level corresponding to an input level of n'_{e0}.

ratio of expansion

Rec. G.166

The ratio of expansion of an expander is defined by the formula:

$$\beta = \frac{L_{1\,EOUT} - L_{2\,EOUT}}{L_{1\,EIN} - L_{2\,EIN}}$$

where

$L_{1\,EIN}$ and $L_{2\,EIN}$ are any two different expander input levels within the expander operating range.

$L_{1\,EOUT}$ and $L_{2\,EOUT}$ are the expander output levels corresponding to input levels $L_{1\,EIN}$ and $L_{2\,EIN}$ respectively.

read operation

Rec. F.500

An operation of the directory system to extract an explicitly identified entry. It may also be used to verify a distinguished name.

Note – This directory system operation is considered to be a basic service feature in the service context.

ready indication

Rec. Z.317

The ready indication indicates that the direction of the dialogue has changed and that the system is waiting for information to be given at the terminal. The ready indication is defined as the character < (less than sign) optionally preceded by the appropriate format effectors. The < (less than sign) character is not necessarily required in extended MML (see Recommendations Z.321 to Z.323), as the information that the terminal is ready for input can be given by cursor position, or additional information contained somewhere in the menu or form.

ready indication

Rec. Z.341

An *output* element used in a *dialogue procedure* to indicate that the direction of the dialogue has changed and that the *system* is ready to receive a *command* or a *destination identifier.* It is also used as the *identification invitation.*

ready indicator

Rec. Z.341

An *indicator* used in the *ready indication* to indicate that the *system* is ready to receive information.

real

Rec. Z.100

Real is a *sort* defined in a predefined *partial type definition* for which the *values* are the numbers which can be presented by one *Integer* divided by another. The predefined *operators* for the *sort real* have the same *names* as the *operators* of *sort Integer.*

real application relay system

Rec. X.300

Any combination of networks*, networks, and application IWFs where at least one network and/or application IWF also acts upon the information related to that application.

real end system

Rec. X.300

A DTE or TE having the capability to communicate, and serving as origination or destination of an instance of communication related to its application(s), and which is not an intermediate system or subnetwork.

real open system

Rec. X.200

A real system which complies with the requirements of OSI Recommendations in its communication with other real systems.

real system

Recs. M.36, X.200

A set of one or more computers, the associated software, peripherals, terminals, human operators, physical processes, information transfer means, etc., that forms an autonomous whole capable of performing information processing and/or information transfer.

real tester

Rec. X.290

The realization of the lower tester, plus either the definition or the realization of the upper tester, plus the definition of the test coordination procedures, as appropriate to a particular test method.

real-time

Rec. Q.9

Pertaining to the processing of data by a computer in connection with another process outside the computer according to time requirements imposed by the outside process.

real time call establishment

Rec. I.122

The term real time call establishment refers to a set of procedures based on which the communication can be started in a relatively short time (i.e. in the order of a few seconds) after the request is made.

real-time conferencing

Rec. F.710

The concept of real-time conferencing implies:

1) The time required for the transmission of the various signals between the connected terminals is short in comparison to the human reaction times in conference situations.
2) The conferees participate simultaneously to the conference.

real-time conversion facility (real-time interworking)

Suppl. No. 1 (II.4)

Such a CF shall transfer a message, in a unique communication, from a telex terminal to a teletex terminal, and from a teletex terminal to a telex terminal, without storage of the message.

real type

Rec. X.208

A simple type whose distinguished values (specified in Recommedation X.208, § 16.2) are members of the set of real numbers.

reanswer signals

Rec. Q.254

Signals in the backward direction indicating that the called party, after having cleared, again lifts his receiver or in some other way reproduces the answer condition, e.g. switch-hook flashing.

reasonableness check

Rec. Q.9

A procedure for verfifying whether the signalling information of a received signal message is reasonable in relation to the sequence of previously received signal messages for that circuit.

reasonableness check tables

Gloss. (VI.3)

Tables which define procedures used to avoid or resolve ambiguous call situations.

reassembling

Rec. X.200

A function performed by an (N)-entity to map multiple (N)-protocol-data-units into one (N)-service-data-unit. It is the reverse function of segmenting.

reassembling
See:
segmenting/reassembling.

reattempt
See:
repeated call attempt; reattempt.

receipt

Recs. F.400, X.400

In the context of message handling, a transmittal step in which either a UA conveys a message or report to its direct user, or the communication system that serves an indirect user conveys such an information object to that user.

receive channel

Rec. R.140

The designation at a terminal or other equipment, of a channel used for receiving.

receive echo loss
See:
listener echo loss; receive echo loss .

receive end echo
See:
listener echo; receive end echo.

receive loss

Rec. G.164

The specified loss which an echo suppressor introduces into the receive path (of the echo suppressor) to reduce the effect of echo currents during break-in.

See Figure 5/G.164.

receive sequence number

Rec. Q.712

The "receive sequence number" parameter field P(R) is used in the data acknowledgement message to indicate the lower edge of the receiving window.

It also indicates that at least all messages numbered up to and including P(R) – 1 are accepted.

receiver

Rec. X.209

An implementation decoding the octets produced by a sender, in order to identify the datavalue which was encoded.

receiver
See:
receiving-application-entity; receiver.

receiving a TS-user

Rec. X.214

A Transport service user that acts as a sink of data during the data transfer phase of a transport-connection.

Note – A Transport service user can be both a sending and a receiving TS user simultaneously.

receiving-application-entity; receiver

Rec. X.218

The application-entity that receives, or may receive (i.e., does not possess the Turn) the APDU from the sending application-entity.

receiving objective loudness rating (ROLR)

Suppl. No. 19 (V)

$$\text{ROLR} = -20 \log_{10} \frac{S_E}{\frac{1}{2} V_W} \tag{1-3}$$

where

V_W is the open-circuit voltage of the electric source (in millivolts)

S_E is the sound pressure at the ear reference point (in pasclas).

receiving perforator

See:

reperforator; receiving perforator.

receiving-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the receiver.

receiving SPM

Rec. X.225

An SPM that receives a given SPDU.

receiving SS-user

Rec. X.215

An SS-user that acts as a sink of data during the data phase of a session connection.

Note – A SS-user can be both a sending and a receiving SS-user simultaneously.

receiving time of a CC message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive (for an incoming CC message), and the corresponding N-CONNECT confirmation primitive.

receiving time of a CR message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive (for an incoming CR message), and the corresponding N-CONNECT indication primitive.

receiving time of a DT message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive (for an incoming DT message), and the corresponding N-DATA indication primitive.

receiving time of a UDT message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication and the corresponding N-UNIDATA indication at the destination node.

receiving transport entity

Rec. X.224

A transport entity that receives a given TPDU.

recipient

See:
actual recipient;
actual recipient; recipient.

recipient-assigned alternate recipient

Rec. X.402

The user or DL (if any) to which an intended, originator-specified alternate, or member recipient may have elected to redirect messages.

recombining

Rec. X.200

The function performed by an (N)-entity which identifies (N)-protocol-data-units for a single (N)-connection in (N − 1)-service-data-units received on more than one (N − 1)-connection. It is the reverse function of the splitting function performed by the (N)-entity sending the (N − 1)-service-data-units.

Recommendation indicator

Rec. Q.762

Information sent in association with a cause value identifying the Recommendation to which the cause value applies.

reconstructed sample

Rec. G.701

The signal generated at the output of a decoder when a specified digital signal representing a quantized value is applied to its input.

record

Rec. Q.9

A set of related data or words treated as a unit.

record tone

Rec. E.182

A tone generated by automatic answering equipment to inform the calling subscriber when to begin a message which will be recorded.

recorded announcement

Rec. E.182

An audible indication in the form of speech.

recorded message

Suppl. No. 2 (II.4)

A facility provided by the called subscriber or terminating network, whereby incoming calls to that subscriber may be connected to a transmitter for recorded *messages.*

recording

Recs. Z.336, Z.341

Performance of the operations implied by the measurement entities in order to collect the required data.

recording day

Recs. Z.336, Z.341

Day when a recording is performed. Several recording periods are allowed within a recording day. No overlap of recording periods is allowed for the same measurement. Each recording period can have a different length.

recording period

Recs. Z.336, Z.341

A period of recording during a recording day.

recovery

See:
restoration; recovery.

recovery time, T_5

Rec. M.495

Time interval between the completion of transmission restoration operations and the full restoration of failed transmission.

Note – This may include the verification of switching operations, re-synchronization of digital transmission, etc.

recursion

Recs. F.400, X.400

In the context of message handling, the situation that a message gets back to the same distribution list of origin and potentially circulates infinitely.

recursive definitions

Rec. X.208

A set of ASN.1 definitions which cannot be reordered so that all types used in a construction are defined before the definition of the construction.

Note – Recursive definitions are allowed in ASN.1: the user of the notation has the responsibility of ensuring that those values (of the resulting types) which are used have a finite representation.

redirecting indicator

Rec. Q.762

Information sent in either direction indicating whether the call has been forwarded or rerouted and whether or not presentation of redirection information to the calling party is restricted.

redirecting number

Rec. Q.762

Information sent in the forward direction when a call is redirected more than once, indicating the number from which the call was last redirected.

redirecting reason

Rec. Q.762

Information sent in either direction indicating, in the case of calls undergoing multiple redirections, the reason why the call has been redirected.

redirection

Recs. F.400, X.400

In the context of message handling, a transmittal event in which an MTA replaces a user among a message's immediate recipients with a user preselected for that message.

redirection address

Suppl. No. 2 (II.4)

Information sent in the backward direction consisting of a number of *address* signals indicating the complete address to which the call is to be or has been redirected.

redirection counter

Rec. Q.762

Information sent in either direction indicating the number of redirections which have occurred on a call.

redirection number

Rec. Q.762

Information sent in the backward direction indicating the number towards which the call must be rerouted or has been forwarded.

redundancy

Suppl. No. 6 (II.3)

In an *item*, the existence of more than one means for performing a *required function.*

redundant code

Rec. R.140

A code using more signal elements than strictly necessary to represent the contents of the message.

For example:

1. A seven-unit code, such as International Telegraph Alphabet No. 3 which uses only character signals made of four unit elements of A condition and three unit elements of Z condition, is redundant.
2. A five-unit code, using all the characters of International Telegraph Alphabet No. 2, is not redundant.

redundant digital signal

Rec. G.701

The signal that is produced by encoding a given signal in accordance with a redundant line code.

redundant line code

Rec. G.701

A line code that uses more encoded signal elements than strictly necessary to represent groups of digits of the original signal.

redundant n-ary signal

Rec. G.701

A digital signal whose elements can assume n discrete states where the average equivalent binary content per signal element is less than $\log_2 n$.

Note – The relative redundancy R, of an n-ary digital signal, is given by:

$$R = 1 - \frac{r_e}{r_d \cdot \log_2 n} = \left[1 - \frac{r_e}{r_d \cdot \log_2 n}\right] \cdot 100\%$$

where r_d is the symbol rate of the n-ary signal and r_e is the equivalent bit rate.

This may also be expressed in terms of the number of binary digits which can be transmitted by an element of a particular line code. Examples are:

AMI (37% redundant), 1 binary digit per element;
4B3T (16% redundant), 1.33 binary digit per element.

reentrant program; reentrant routine; reentrant subroutine; reenterable routine; reenterable subroutine

Rec. Q.9

A program (A routine) (A subroutine) that may be entered repeatedly and may be entered before prior executions of the same program (routine) (subroutine) have been completed, subject to the requirement that neither its external program parameters nor any instructions are modified during its execution.

Note – A reentrant program, routine or subroutine may be used by more than one computer program simultaneously.

reentrant trunking

Rec. Q.9

The routing of a circuit from outlet to inlet in a switching stage in order to access equipment associated with special services such as operators, auxiliary equipment, etc.

Note – Not to be confused with the action of mutual help where the purpose of re-entering the call is to attempt to reduce the probability of switching congestion on a given call by allowing a new possibility of choice of path from the new inlet to a trunk in the desired route.

reference area

Rec. T.411

A rectangular area within a basic layout object, with its side equal to the pel spacing and the line spacing, within which the main part of a pel is imaged.

reference axis

Rec. P.51

The line perpendicular to the lip plane containing the center of the lip ring.

reference clock

Rec. G.701

A clock of very high stability and accuracy that may be completely autonomous and whose frequency serves as a basis of comparison for the frequency of other clocks.

reference configuration

Rec. I.112

A combination of functional groups and reference points that shows possible network arrangements.

reference configuration

Rec. I.325

A conceptual configuration based on association rules of functional groupings and reference points.

reference configurations

Rec. I.324

Conceptual configurations which are useful in identifying various possible arrangements in an ISDN. The reference configurations are based on association rules of functional groupings and reference points.

reference configurations

Rec. I.411

Conceptual configurations useful in identifying various possible physical user access arrangements to an ISDN. Two concepts are used in defining reference configurations: reference points and functional groupings.

reference configurations

Rec Q.1062

Conceptual configurations useful in identifying various possible physical access arrangements to the PLMN. Two concepts are useful in defining reference configurations: reference points and functional groups.

reference data

Suppl. No. 6 (II.3)

Data, which by general agreement may be used for *prediction* and/or comparison with *observed data.*

reference equivalent

Rec. P.10

The loss, expressed in decibels, constant at all frequencies transmitted, which has to be introduced into the new *fundamental system for the determination of reference equivalents* or NOSFER in order to obtain in a given direction the same *loudness* as the *complete telephone connection* being considered, the *acoustical speech power* emitted by the talker being the same in both cases.

Note 1 – The reference equivalent is positive or negative according to whether it has been necessary for a loss to be added or removed from the NOSFER.

Note 2 – The reference equivalent is strictly defined by the measuring method described in Recommendation P.72 *(Red Book).*

reference frequency

Rec. Q.45 bis

The nominal reference frequency, on which relative levels, transmission loss, loss-frequency distortion etc. are based, is 800 Hz or 1000 Hz alternatively.

Note – Since 1020 Hz is the recommended nominal frequency for techniques using digital processes this frequency should be preferred to harmonize into the evolving digital network.

reference line

Rec. T.411

A line through the line home position and parallel to the character path.

reference obstacle

Rec. P.51

Disc constructed of hard, stable and on-megnetic material, such as brass, having a diameter of 63 mm and 5 mm thick. In order to measure the normalized obstacle diffraction, it shall be fitted with a ¼″ pressure microphone, mounted at the centre with the diaphragm flush on the disc surface.

reference path

Rec. X.518

A continuous sequence of knowledge references.

reference point

Recs. G.960, I.112, I.430, Q.9

A conceptual point at the conjunction of two non-overlapping functional groups.

Note – Each reference point is assigned a prefix letter, for example: T reference point.

reference point

Rec. T.411

The point at the corner of the reference area situated in the opposite direction of both pel path and line progression and which is used for positioning a pel.

reference points

Rec. I.324

The conceptual points at the conjunction of two functional groupings. In a particular example, a reference point may correspond to a physical interface between pieces of equipment, or in other examples there may not be any physical interface corresponding to the reference point.

reference points

Rec. I.411

The conceptual points dividing functional groups. In a specific access arrangement, a reference point may correspond to a physical interface between pieces of equipment, or there may not be any physical interface corresponding to the reference point. Physical interfaces that do not correspond to a reference point (e.g. transmission line interfaces) will not be the subject of ISDN user-network interface Recommendations.

reference points

Rec Q.1062

Reference points are the conceptual points dividing functional groups. In a specific access arrangement a reference point may correspond to a physical interface (e.g., Um) between pieces of equipment or there may not be any physical interface corresponding to the reference point.

reference surface

Rec. G.651

The cylindrical surface of an optical fibre to which reference is made for jointing purposes.

Note – The reference surface is typically the cladding or primary coating surface. In rare circumstances it could be the core surface.

reference system

Suppl. No. 19 (V)

A system that provides 0 dB acoustic gain between a mouth reference point at 25 mm in front of a talker's lips and an ear reference point at the entrance to the ear canal of a listener, when the listener is using an

earphone. This system is assigned a loudness rating of 0 dB. The frequency characteristic of the system must be flat over the range 300-33000 Hz and show infinite attenuation outside of this range.

reference test method (RTM)

Rec. G.651

A test method in which a given characteristic of a specified class of optical fibres or optical fibre cables is measured stricly according to the definition of this characteristic and which gives results which are accurate, reproducible and relatable to practical use.

referral

Rec. F.500

Request handling by the DSA in the case of failing to find the requested information in the first DSA. In this case the directory may return a referral, which suggests an alternative access point at which the DUA can make its request.

Note 1 – This is an alternative method to chaining or multicasting. The implementation is a local matter.

Note 2 – A set of agreements is requuired between the domains (DSAs) wanting to interact on the basis of this method. Whether referrals are presented to the user or not is a local matter. It has to take into account whether the domain (DSA) being referred to will accept requests from these users.

Note 3 – Referrals to domains (DSAs) without prior agreement (including accounting procedures) with them are undesired.

referral

Rec. X.518

An outcome which can be returned by a DSA which cannot perform an operation itself, and which identifies one or more other DSAs more able to perform the operation.

refinement

Rec. Z.100

Refinement is the addition of new details to the funtionality at a certain *level of abstraction.* The *refinement* of a *system* causes an enrichment in its *behaviour* or its capabilities to handle more types of *signals* and information, including those *signals* to and from the *environment.* Compare with the term *partitioning.*

reformatting

Rec. T.411

The carrying out of operations to determine the new layout of a previously formatted document.

(refractive) index profile

Rec. G.651

The distribution of the refractive index along a diameter of an optical fibre. See Figure A-1/G.651.

refusal cause

Rec. Q.712

The "refusal cause" parameter field is used in a *Connection Refused* message to indicate the reason why the connection setup request was refused.

regeneration

Rec. G.701

The process of receiving and reconstructing a digital signal so that the amplitudes, waveforms and timing of its signal elements are constrained within specified limits.

regeneration

Rec. R.140

Elimination of telegraph distortion.

regenerative repeater

Rec. G.601

A *repeater* ensuring *regeneration* of *digital signals*, and capable of other functions.

Note – This definition is different from that given in Recommendation G.701. At the time when Recommendation G.701 was drafted, a suitable CCITT definition of *repeater* was not available. The ensemble of definitions given in Recommendation G.601 makes it desirable to incorporate the *regenerative repeater* in the family of transmission systems, instead of defining it only as a device, as is the case in Recommendation G.701.

regenerative repeater

Rec. G.701

A repeater that regenerates digital signals.

Note – A regenerative repeater may operate in one or both directions of transmission, and the term may be qualified by "unidirectional" or "bidirectional" as appropriate.

regenerator

Rec. G.701

A device that performs *regeneration.*

regenerator section (deprecated)

See:

elementary regenerator section.

region of interest

Rec. T.411

A rectangular area within a virtual device coordinate space, with sides which are parallel to the axes of its coordinate system, surrounding those (parts of) geometric graphics elements that are intended to be imaged.

register

Rec. Q.9

The apparatus, in an automatic system, which receives the dialled impulses and controls the subsequent switching operations.

register function

Rec. Q.9

The functions of receiving, storing, analyzing and possibly translating and transmitting address and other information for the purpose of controlling the setting up of a call.

register-MS abstract-operation

Rec. X.413

An abstract-operation which allows the UA to register certain information, relevant to the UA-MS interworking, in the MS.

register signalling (Signalling System R1)

Rec. Q.9

Link-by-link multifrequency (MF) in-band pulse signalling is used for the transmission of address

information. The signalling frequencies are 700 Hz to 1700 Hz, in 200 Hz steps, and combinations of two, and two only, determine the signal. The address information is preceded by a KP signal (start-of-pulsing) and terminated by an ST signal (end-of-pulsing). Either en bloc, or en bloc overlap, or overlap sending may apply. This register signalling arrangement is used extensively with other in-band and out-band line signalling systems.

registered access

Recs. F.400, X.400

In the context of message handling services, access to the service performed by subscribers who have been registered by the service provider to use the service, and been allocated an O/R address.

registered address

Rec. F.500

An attribute type which specifies a mnemonic for an address associated with an object at a particular city location. The mnemonic is registered in the country in which the city is located and is used in the provision of the public telegram service.

registered IPMS user

Rec. U.204

A user of the interpersonal messaging service who has registered with the PTLXAU for the receipt of telex messages and who is assigned a telex number that is part of the telex national numbering plan for this purpose.

registration

Rec. X.413

Information which is registered in the MS and stored (until changed by the Register-MS abstract-operation) between abstract-associations. (See the definition of Register-MS).

registration-identifier

Rec. X.413

An identifier for one particular set of registration-parameters for an auto-action-type.

registration of incoming calls service

Suppl. No. 1 (II.2)

The registration of details of all incoming calls to a particular telephone line (e.g. caller's number, time ringing commences, time of answer or time of abandonment, time of release, but excluding the recording of speech).

regular signalling link

Rec. Q.9

The signalling link which normally carries some particular parcel of signalling traffic.

regular transmissions

Rec. D.180

Those which take place at regular intervals, at fixed times between the same points. Some regular transmissions may be subject to special contractual arrangements.

regularity loss

Rec. G.601

The expression in transmission units of the modulus of *irregularity reflection coefficient* P_i. Its value in decibels is equal to:

$$A_i = -20 \log_{10} |P_i|.$$

regulated line section (symmetric pairs, coaxial pairs or radio-relay links, etc.)

Rec. G.211

In a carrier transmission system, a line section on which the line-regulating pilot or pilots are transmitted from end to end without passing through an amplitude-changing device peculiar to the pilot or pilots.

regulated line section (symmetric pairs, coaxial pairs or radio relay links)

Rec. M.300

In a carrier transmission system, a line section on which the line-regulating pilot or pilots are transmitted from end to end without being subjected to any intermediate amplitude regulation associated with the pilot or pilots.

regulated line section coaxial pairs

See:

regulated line section (symmetric pairs, coaxial pairs or radio relay links).

regulated line section radio relay links

See:

regulated line section (symmetric pairs, coaxial pairs or radio relay links).

rejection output

Rec. Z.341

An *output* message indicating that an *input* to the *system* is valid and will not be acted upon, and corrections cannot be applied.

relation

Rec. D.000

Exchange of traffic between two terminal countries, always referring to a specific service if there is between their Administrations:

a) a means for the exchange of traffic in that specific service either over direct circuits (direct relation), or via a point of transit in a third country (indirect relation),and

b) normally, the settlement of accounts.

(telex) relation

Rec. F.60

A (telex) relation between two terminal countries exists when there is between them an exchange of telex traffic (and, normally, a settlement of accounts).

relational operator

Rec. Z.341

An operator (see Table 2/Z.314) in a *selection argument.* Used in data base queries.

relative amplitude of an elementary echo

Rec. G.601

Ratio between the *peak amplitude of an elementary echo* and the maximum amplitude of the measuring signal, evaluated at the emission point.

relative distinguished name (RDN)

Rec. F.500

The unique name of an entry. It consists of a particular sequence of attribute value assertions, each of which is true, concerning the distinguished values of an entry.

relative distinguished name (RDN)

Rec. X.501

A set of attribute value assertions, each of which is true, concerning the distinguished values of a particular entry.

relative frequency

Suppl. No. 6 (II.3)

The ratio of the number of times a particular value, or a value falling within a given class, is observed to the total number of observations.

relative (power) level

Recs. G.101, Q.43

The relative level at a point on a circuit gven by the expression 10 $\log_{10}$ (P/P_0) dBr, where P represents the power of a sinusoidal test signal at the point concerned and P_0 the power of that signal at the transmission reference point. This is numericcally equal to the *composite gain* (see its definition) between the transmission reference point and the point concerned, for a nominal frequency of 1000 Hz.

relative level (at a point on a circuit)

Rec. G.100

The expression 10 $\log_{10}$ (P/P_0) dBr where P represents the power of a test signal of 1000 Hz at the point concerned and P_0 the power of that signal at the *transmission reference point.*

Note – This quantity is independent of P_0, it is a composite gain (level difference). For further details, the definition of *relative (power) level.*

relative level (dBr)

Rec. N.1

The relative power level of a point in a transmission system is the nominal power gain at the reference frequency from a reference point to the point considered. The same consideration is used for the relative voltage level in a transmission system based on voltage levels.

Relative levels can be used to compare two or more points of a network with respect to power (or voltage). One point of a network is usually defined as the reference point at 0 dBr, from which other measurement points are derived.

For sound-programme circuits, the zero relative level is located at the injection point, i.e. usually at the transmission point of a sound-programme circuit.

relative power level

See:
relative (power level.

relative time interval error

Rec. G.701

The total difference over a specified interval of time in the corresponding significant instants of two digital signals.

relay point

Rec. Q.716

Signalling point where the translation functions of the SCCP for connectionless classes are implemented.

relay point with coupling

Rec. Q.716

Signalling point where the relay functions of the SCCP connection oriented classes, including the coupling of signalling connection sections function, are implemented.

relay point without coupling

Rec. Q.716

Signalling point where the relay functions of the SCCP connection oriented classes, but without the coupling of signalling connection sections function, are implemented.

release

Rec. E.600

The event which changes the condition of a resource from busy to idle.

release

Rec. Q.9

The sequence of events which brings about the end of a busy state.

release cause

Rec. Q.712

The "release cause" parameter field is used in a *Released* message to indicate the reason of the release.

release complete (RLC)

Rec. Q.712

A *release complete* message is sent in response to the *released* message indicating that the *released* message has been received, and the appropriate procedures has been completed.

It is used during connection release phase in protocol classes 2 and 3.

release complete message (RLC)

Rec. Q.762

A message sent in either direction in response to the receipt of a released message, or if appropriate to a reset circuit message, when the circuit concerned has been brought into the idle condition.

release delay

Rec. I.352

The length of time that starts when a DISConnect message from the clearing party creates a message transfer event at the clearing party S/T interface and ends when the RELease message creates a message transfer event at the same interface.

Release delay at the clearing part S/T interface = $(t_2 - t_1)$

where

t_1 is the time of occurrence for the starting message transfer event,

t_2 is the time of occurrence for the ending message transfer event.

release failure probability

Rec. E.800

The *probability* that the required *release* of a *connection* will not take place.

release-guard signal

Rec. Q.254

A signal sent in the backward direction in response to a clear-forward signal, or if appropriate to the reset-circuit signal, when the circuit concerned has been brought into the idle condition.

release-guard signal

Rec. Q.9

A signal sent in the backward direction in response to the clear-forward signal when the circuit concerned is brought into the idle condition.

release-guard signal (sent in the backward direction)

Rec. Q.120

This signal is sent in the backward direction in response to the clear-forward signal, to indicate that the latter has been fully effective in bringing about the release of the switching equipment at the incoming end of an international circuit. It serves to protect an international circuit against subsequent seizure as long as the disconnection operations controlled by reception of the clear-forward signal have not been completed at its incoming end.

release-guard signal (sent in the backward direction)

Rec. Q.140

This signal is sent in the backward direction in response to the clear-forward signal. It serves to protect an international circuit against subsequent seizure as long as the disconnection operations controlled by reception of the clear-forward signal have not been completed at its incoming end.

release-guard signal (sent in the backward direction)

Rec. Q.400

A signal sent to the outgoing exchange in response to a clear-forward signal to indicate that the latter has been fully effective in returning the switching units at the incoming end of the circuit to idle condition. An international circuit is protected against subsequent seizure as long as the release operations initiated by the clear-forward signal have not been completed at the incoming end.

release message (REL)

Rec. Q.762

A message sent in either direction to indicate that the circuit is being released due to the reason (cause) supplied and is ready to be put into the idle state on receipt of the release complete message. In case the call was forwarded or is to be rerouted, the appropriate indicator is carried in the message together with the redirection address and the redirecting address.

released (RLSD)

Rec. Q.712

A *released* message is sent, in the forward or backward direction, to indicate that the sending SCCP wants to release a signalling connection and the associated resources at the sending SCCP have been brought into the disconnect pending condition. It also indicates that the receiving node should release the connection and any other associated resources as well.

It is used during connection release phase in protocol classes 2 and 3.

relevant failure

Suppl. No. 6 (II.3)

A *failure* to be included in interpreting test or operational results or in calculating the value of a *reliability performance measure.*

Note – The criteria for the inclusion should be stated.

reliability R

Suppl. No. 6 (II.3)

The *probability* that an *item* can perform a *required function* under stated conditions for a given *time interval.*

Note 1 – It is generally assumed that the *item* is in a state to perform this *required function* at the beginning of the *time interval.*

Note 2 – In French, the term *fiabilité* is also used to denote the performance quantified by this *probability.*

reliability block diagram

Suppl. No. 6 (II.3)

Block diagram showing, for one or more *functional modes* of a complex *item*, how *faults* of the sub-items represented by the blocks, or combinations thereof, result in a *fault* of the *item.*

reliability growth

Suppl. No. 6 (II.3)

A condition characterized by a progressive improvement of a *reliability performance measure* of an *item*, or population of similar *items*, with time.

Note – A growth can result either from active improvement or from *burn-in.*

reliability improvement

Suppl. No. 6 (II.3)

A process undertaken with the deliberate intention of promoting *reliability growth* by the elimination of *systematic faults.*

reliability in analogue cable transmission systems

Rec. G.602

The reliability of a single unit of an analogue transmission equipment or of a complete transmission system is defined as the probability that this item can perform its required function for a given time interval. One parameter to quantify this reliability is the mean time between failures (MTBF). A failure of the system is considered to occur when there is:

1) complete loss of signal;
2) one in which the pilot level drops by 10 dB below nominal value;
3) when the total unweighted noise power, measured or calculated with an integrating time of 5 ms exceeds 1 million pW (10^6 pW) on the 2500 km hypothetical reference circuit (see Recommendation G.222).

In all instances, this condition must last at least 10 seconds (this value should be considered as provisional).

reliability model

Suppl. No. 6 (II.3)

A mathematical model used for *prediction* or *estimation* of *reliability measures* of an *item* or for similar purposes.

reliability performance

Rec. M.60, Suppl. No. 6 (II.3)

The ability of an item to perform a required function under given conditions for a given time interval.

Note 1 – It is generally assumed that the item is in a state to perform this required function at the beginning of the time interval.

Note 2 – The term reliability is used as a measure of reliability performance. See Figure 1, Suppl. No. 6 (II.3)

reliable transfer

Rec. X.218

An application-independent mechanism to provide for the transfer of application-protocol-data-units between open systems, and to recover from communication and end-system failure minimizing the amount of retransmission.

reliable-transfer-protocol-machine

Rec. X.228

The protocol machine for the reliable transfer service element specified in Recommendation X.228.

reliable transfer service element

Rec. X.218

The application-service-element defined in Recommendation X.218.

relocatable address

Rec. Q.9

An address that is adjusted when the computer program containing it is relocated.

relocate

See:

to relocate.

remote access; remote access connection element

Recs. G.960, I.430

A specific access connection element in which the digital section is not directly connected to the exchange termination but is connected through a multiplexer or concentrator.

remote access connection element

See:

remote access; remote access connection element.

remote call forwarding service

Suppl. No. 1 (II.2)

The possibility for a subscriber to obtain a telephone number in another area and have all calls to that number automatically forwarded at his cost to a telephone number in his premises.

remote definition

Rec. Z.100

A *remote definition* is a syntactic means of distributing a *system definition* into several parts and relating the parts to each other.

remote document access

Rec. T.431

Document selection and access rights via communication.

remote document management

Rec. T.431

Document creation or deletion via communication.

remote exchange concentrator

Rec. Q.9

A concentrator located remotely from the exchange that controls it and to which its higher traffic volume circuits are connected. The switching stages comprised normally have no capability to directly interconnect subscriber lines terminating in that concentrator. (See Figure 1/Q.9.)

remote maintenance

Suppl. No. 6 (II.3)

Maintenance of an *item* performed without physical access of the personnel to the *item.*

remote-operation-protocol-machine

Rec. X.229

The protocol machine for the remote operation service element specified in Recommendation X.229.

remote operation service element

Rec. X.219

The application-service-element defined in Recommendation X.219.

remote operations

Rec. X.219

1) A concept and notation supporting the specification of interactive communication between application-entities. This includes the remote operation service element and the mapping of the notation onto the service primitives of used application-service-elements.

2) The set of bind-operations, unbind-operations and operations.

remote switching stage

Rec. Q.9

A switching stage associated with and controlled by an exchange in a different location. (See Figure 1/Q.9.)

remote test method

Rec. X.290

An external method in which there is neither a PCO above the IUT nor a standardized test management protocol; some requirements for test coordination procedures may be implied or informally expressed in the abstract test suite but no assumption is made regarding their feasibility or realization.

remotely controlled exchange

Rec. Q.9

An exchange whose switching functions are wholly or partially controlled by a control unit or a processor in another location. (See Figure 1/Q.9.)

REMOVE

Rec. Z.333

Take specified equipment units out of service. The system still retains knowledge of the units so that they may be returned to service by the RESTORE action defined below, automatic recovery, or manual override.

remove

Rec. Z.341

An *action* to request the *system* to take specified equipment units out of service; the system still retains knowledge of the units so that they may be returned to service by the *restore* action.

remuneration for exclusive use of circuits

Rec. D.000

The *remuneration for exclusive use* is the remuneration paid to the Administration of a country which makes its circuits available for direct transit, each circuit being assigned on an exclusive basis. The volume of traffic, its origin and its fluctuations in time are not the concern of the owner Administration and have no effect on the amount of the remuneration, which is paid circuit by circuit. The owner does not control the traffic routed over the circuit. This is the conventional lease arrangement between Administrations.

For further clarification, it should be mentioned that:

a) the general term "*lease*" (in French: *location*) used until now applies only to the case cited in the paragraph above where exclusive use is granted;

b) the term "*owner*" in these definitions refers to an Administration which receives the remuneration and which grants the rights to another Administration. The owner may have real ownership or the indefeasible right of use of the facilities.

remuneration for shared use of circuits and equipment

Rec. D.000

The expression "remuneration for shared use" refers to the remuneration paid to the Administration of a country **P** which makes its facilities available to a number of Administrations of other countries L_1, L_2, . . ., L_n for the routing of different international traffic streams. It may apply either to circuits or to switching equipment. Under the control of the owner Administration, the use of such facilities may be shared in any appropriate manner with other Administrations (including the Administration which owns them). The latter sets the price for the shared use of its facilities:

a) either according to the number of traffic units,

b) or by a fixed amount covering a certain period of time and based on the estimated volume of traffic and its time characteristics.

rental

Rec. D.000

Payment(s) due to Administrations for the provision of certain facilities or access to certain facilities/services for designated periods.

repair

See:

corrective maintenance; repair.

repair coverage

Suppl. No. 6 (II.3)

The proportion of *faults* of an *item* that can be successfully removed.

repair rate

See:

(instantaneous) repair rate $\mu(t)$.

repair time; corrective maintenance time

Suppl. No. 6 (II.3)

That part of the *maintenance time* during which *corrective maintenance* is performed on an *item*, including *technical delays* and *logistic delays* inherent in *corrective maintenance*. See Figure 3, Suppl. No. 6 (II.3)

repaired item

Suppl. No. 6 (II.3)

A repairable *item* which is in fact repaired after a *failure.*

repeat (RPT)

Rec. T.100

This code indicates that the preceding graphics character is to be repeated. The number of repetitions is indicated in binary form by the six least significant bits of the subsequent character chosen from columns 4 to 7. The character itself is not included in the count. This function does not apply to control characters.

repeatability (of results)

Rec. X.290

Characteristic of a test case, such that repeated executions on the same IUT lead to the same verdict, and by extension a characteristic of a test suite.

repeated call attempt; reattempt

Rec. E.600

Any of the call attempts subsequent to a first call attempt related to a given call demand.

Note – Repeated call attempts may be manual, i.e. generated by humans, or automatic, i.e. generated by machines.

repeater

Rec. G.601

An equipment essentially including one or several amplifiers and/or *regenerators*, and associated devices, inserted at a point in a transmission medium (see Figures 1/G.601 and 2/G.601).

Note – A repeater may operate in one or both directions of transmission.

repeater section (deprecated)

See:
elementary cable section.

reperforator; receiving perforator

Rec. S.140

A receiver comprising essentially a tape perforator controlled by the received telegraph signals or data signals.

reperforator switching

U.140

A tape relay system in which the tape from a reperforator feeds directly into a permanently associated automatic transmitter which can be switched to an outgoing channel.

Note – This switching may be manual, automatic or semi-automatic.

repetition cycle

Rec. R.140

A sequence of characters, the minimum number of which is determined by the loop time-delay of an error detecting and feed-back system. This delay is necessary to provide automatic repetition of information.

reply

Glos. (VI.7, VI.8, VI.9)

Any component sent back as the consequence of an operation invocation.

report

Recs. F.400, X.400

In the context of message handling, an instance of a secondary class of information object conveyed by means of message transfer. It is generated by the MTS, it reports the outcome or progress of a message's or probe's transmittal to one or more potential recipients.

represent

See:

to represent.

reproducible failure

See:

systematic failure; reproducible failure; deterministic failure.

reproduction ratio

Rec. T.0

The ratio of the linear dimensions of the reproduced document to the corresponding dimensions of the original document.

request

Rec. Z.317

The request is a manual action to activate the terminal and the system or to cause an interrupt. The composition of the request is highly dependent on the type of terminal and implementation.

The request can consist of keying the break key or actuating a control switch, power on, etc. and/or keying a sequence of characters on the keyboard.

request

Rec. Z.341

A manual *action* used to activate a *man-machine terminal* and the *system.*

request (primitive)

Rec. X.210

A primitive issued by a service-user to invoke some procedure.

request cycle

See:

RQ cycle; request cycle.

request decomposition

Rec. X.518

Decomposition of a request into subrequests each accomplishing a part of the distributed operation.

request output

Rec. Z.341

A type of *response output* requesting further *input action* from the *user*, e.g., correction of an erroneous *parameter*, or supplying further information.

request transmission time

See:

answering time of operators; request transmission time; delay time; setting-up times of an international call.

requesting association control protocol machine

Rec. X.227

The association control protocol machine whose service-user is the requestor of a particular association control service element service.

requesting-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the requestor of a particular Reliable Transfer Service Element service.

requesting-remote-operation-protocol-machine

Rec. X.229

The remote-operation-protocol-machine whose service-user is the requestor of a particular remote operation service element service.

requesting SS-user

See:

requestor; requesting SS-user.

requestor

Rec. F.500

The subscriber, user or system entity making a particular request to the directory.

requestor

Rec. X.216

The presentation-entity or presentation-service-user that initiates a particular action.

requestor

Rec. X.217

The ACSE service-user which issues the request primitive for a particular ACSE service. For a confirmed service, it also receives the confirm primitive.

requestor

Rec. X.218

The part of an application-entity that issues a request primitive, or receives a confirm primitive for a particular RTSE service.

requestor

Rec. X.219

The part of an application-entity that issues a request primitive for a particular ROSE service.

requestor

Rec. X.226

The presentation protocol machine that initiates a particular action.

requestor; requesting SS-user

Rec. X.215

An SS-user that initiates a particular action.

required function

Suppl. No. 6 (II.3)

A function or a combination of functions of an *item* which is considered necessary for the provisioning of a given *service.*

required time

Suppl. No. 6 (II.3)

The *time interval* during which the user requires the *item* to be in a condition to perform a *required function.* See Figure 3, Suppl. No. 6 (II.3)

rerouting

Rec. F.68

When congestion occurs at an intermediate transit exchange, rerouting permits a call to be remade via a secondary route from the outgoing international exchange.

re-routing

U.140

In case of congestion in a transit exchange, the re-direction of the call backwards to a preceding exchange in the already partly established connection with a view to finding an alternative traffic routing from that exchange.

reselection

*Series X**

Process by which a DTE, referred here to as DTE A, can request the PAD to clear the current virtual call established between DTE A and a start-stop mode DTE and then to establish a new virtual call between the start-stop mode DTE and another DTE, DTE B, selected and indicated to the PAD by DTE A.

reservation office

Rec. F.710

A national administrative centre where reservations for connections and if applicable MCU(s) and other equipment are made.

reserve signalling link

Rec. Q.9

The signalling link which can be used to carry all, or part of, the signalling traffic of a regular signalling link when the latter has failed or has been withdrawn from service.

reserved (communication)

Rec. I.140

The communication can be started at time instant t_1 explicitly specified at the time instant of communication and connection request, t_0. Communication and connection release occurs at time instant t_3 explicitly specified also at t_0. Communication and connection duration is predetermined: the communication and connection is set up for a specified period of time. As an option, connection release occurs at time instant t_3 following a release request made at time instant t_2 during the communication and *a priori* undetermined ($t_3 - t_2$ is as short as possible). This option corresponds to an unspecified duration of the communication and connection, or to a possibility of unanticipated release (see Figure A.1/I.140).

reserved circuit service; reserved circuit telecommunication service

Rec. I.112

A type of telecommunication service in which the communication path is established at a time specified in advance by the user, in response to a user request effected by means of user-network signalling.

Note – The duration of the communication, or the time of release of the communication path, may also be specified in advance by the user.

reserved circuit telecommunication service

See:

reserved circuit service; reserved circuit telecommunication service.

reset

Rec. X.200

A function which sets the correspondent (N)-entities to a predefined state with a possible loss or duplication of data.

Note – Blocking and concatenation, though close to each other (they both permit grouping of data-units) are different (see definitions *blocking* and *concatenation*). These two functions may serve different purposes. For instance, concatenation permits the (N)-layer to group one or several acknowledgement (N)-PDUs with one (or several) (N)-PDUs containing user data, and this would not be possible with the blocking function only. Note also that the two functions may be combined so that the (N)-layer performs blocking and concatenation.

reset

Rec. Z.100

Reset is an operation defined for *timers* which allows *timers* to be made inactive. See the definition of the term *active timer.*

reset (SCCP)

Glos. (VI.7, VI.8, VI.9)

A service of the SCCP to return a connection to a predefined state, or to recover from loss of synchronization between two SCCP users.

reset-band-acknowledgement signal

Rec. Q.256

A signal sent in response to the reset-band signal to indicate whether a circuit is available for use or should be blocked in the failed exchange.

reset-band-acknowledgement signal, all circuits idle

Rec. Q.256

A signal sent in response to the reset-band signal to indicate that all circuits in the band are available for use.

reset-band signal

Rec. Q.256

A signal sent by a failed exchange during recovery to request that all circuits in the band be put in the idle state except those circuits at the receiving end that have imposed a blocked condition on the sending end. If at the receiving end the circuit is blocked, the reset-band signal should remove that condition.

reset cause

Rec. Q.712

The "reset cause" parameter field is used in a *Reset Request* message to indicate the reason why a reset procedure is invoked.

reset circuit message (RSC)

Rec. Q.762

A message sent to release a circuit when, due to memory mutilation or other causes, it is unknown whether for example, a release or a release complete message is appropriate. If, at the receiving end, the circuit is remotely blocked, reception of this message should cause that condition to be removed.

reset-circuit signal

Rec. Q.254

A signal that is sent to release a circuit when, due to memory multilation or other causes, it is unknown whether, for example, a clear-forward or clear-back signal is appropriate. If at the receiving end the circuit is blocked, this signal should remove that condition.

reset confirm (RSC)

Rec. Q.712

A *reset confirm* message is sent in response to a *reset request* message to indicate that *reset request* has been received and the appropriate procedure has been completed.

It is used during the data transfer phase in protocol class 3.

reset probability

Rec. X.136

A reset event is defined to have been generated within a section when, in the absence of an external reset stimulus, two packets exit the section – one at each boundary – creating any one of the pairs of Recommendation X.134 packet layer reference events listed in Table 6/X.136.

The reset The reset probability for a virtual connection section is the probability, in any given second, that a reset event is generated within that section.

reset request (RSR)

Rec. Q.712

A *reset request* message is sent to indicate that the sending SCCP wants to initiate a reset procedure (re-initialization of sequence numbers) with the receiving SCCP.

It is used during the data transfer phase in protocol class 3.

reset stimulus probability

Rec. X.136

A reset stimulus is observed at a single section boundary. It is any event or combination of events that according to the protocol should result in a reset (or, in the case of a PVC, a reset or restart) being generated by the recipient. An example of a reset stimulus is a DTE transmitting a reject packet when the packet retransmission facility has not been subscribed.

Note – For the purpose of performance parameter definition it is definition it is assumed that the reset stimuli for an X.25 DTE are equivalent to the reset stimuli for an X.25 DCE.

reset stimulus probability of a section at a boundary

Rec. X.136

The expected number of reset stimuli generated within that section and transferred across the boundary per virtual connection second.

residual echo level (L_{RES})

Rec. G.165

The level of the echo signal which remains at the send-out port of an operating echo canceller after imperfect cancellation of the circuit echo. It is related to the receive-in signal L_{Rin} by

$$L_{RES} = L_{Rin} - A_{ECHO} - A_{CANC}$$

where

L_{Rin} is the receive input signal level

A_{ECHO} is the echo loss

A_{CANC} is the cancellation.

See Figure 4/G.165.

Any nonlinear processing is not included.

residual error probability

Rec. Q.716

This parameter gives the probability that a UDT message is lost, duplicated or delivered incorrectly by the set constituted of SCCP and the MTP (called Network Service Part or NSP). An incorrectly delivered UDT is one in which the user data are delivered in a corrupted condition (see undetected errors above), or the user data are delivered to an incorrect NSAP.

For class 1 only, a UDT message is considered as incorrectly delivered if it is delivered out of sequence by the NSP.

residual error rate

Rec. I.122

Residual error rate is defined for both the additional packet-mode bearer services and the corresponding layer services.

The layer services corresponding to the additional packet-mode bearer services are characterized by the exchange of service data units (SDUs). For frame relaying 1, SDUs are exchanged at the functional boundary between the core functions of Recommendation I.441* and the end-to-end protocol implemented above them. For frame relaying 2 and frame switching, SDUs are exchanged at the functional boundary between the complete I.441* and the end-to-end functions implemented above I.441*. For the X.25-based additional packet mode service (APMS), SDUs are exchanged at the funcional boundary of X.25 PLP-DTP (packet layer protocol-data transfer part) and the end-to-end functions implemented above.

The network participates in this exchange by means of protocol data units (PDUs). In frame relaying 1 and 2, PDUs are frames as defined in the core functions of I.441*. In frame switching, PDUs are frames as defined in I.441*, while in X.25-based APMS, they are packets as defined in X.25 PLP.

Note – I.441* is I.441 with appropriate extensions. The use of the extensions maydepend on each bearer service and is for further study. The residual error rate for the corresponding layer service of APMS is defined as:

$$R = 1 - \frac{\text{Total correct SDUs delivered}}{\text{Total offered SDUs}}$$

The residual error rate for the APMS is defined as the ratio:

$$R = 1 - \frac{\text{Total correct PDUs delivered}}{\text{Total offered PDUs}}$$

residual error rate

Rec. X.136

Residual error rate is the ratio of total incorrect, lost, and extra (e.g. duplicate) user data bits to total user data bits transferred across either section boundary in a population of interest.

User data bits are the bits of the user data field in data packets of the X.25 or X.75 packet layer (protocols and data above the packet layer). Framing routing, bit stuffing, error control, and other protocol fields introduced by all protocols at or below the packet layer are excluded.

Relationships among the quantities identified above are defined in Figure 3/X.136. Incorrect user data bits are user data bits that are inverted in transfer between the section boundaries, i.e., bits whose binary value

observed at the section boundary on the destination side of a virtual connection portion is the opposite of that observed at the section boundary on the source side. Lost user data bits are user data bits that are transferred into a virtual connection portion at one section boundary, but are not transferred out of the virtual connection portion at the other within 200 seconds of non-flow-controlled transmission. Bits lost in association with a reset or premature disconnect are excluded in calculating residual error rate. Extra user data bits are user data bits that are transferred out of a virtual connection portion at one section boundary, but were not previously transferred into the virtual connection portion at the other. Extra user data bits include duplicated user data bits and misdelivered user data bits.

residual error rate for DT messages

Rec. Q.716

This parameter gives the probability that a DT message is lost, duplicated, missequenced or incorrectly delivered by the NSP.

A DT message is incorrectly delivered if user data is delivered in a corrupted condition (see the definition of *undetected errors*), or the user data are delivered to an incorrect NSAP.

residual voltage

See:
discharge voltage.

resolution

Rec. T.0

A measure of the capability for delineating picture detail. In Group 3 and Group 4 facsimile transmission resolution is expressed as picture elements or pels per mm (horizontal resolution) and lines per mm (vertical resolution).

resource

Rec. E.600

Any set of physically or conceptually identifiable entities within a telecommunications network, the use of which can be unambiguously determined.

resource

Rec. T.412

This attribute is used to establish a relationship between an object class description in the interchanged document and an object class description in the resource-document (see Rec. T.412, §§ 2.3.10 and 3.5.9).

(network) resource(s)

Rec. Q.9

Means of supplying a want or a stock that can be drawn on. In context with the telecommunication network, in particular switching devices, circuit groups, echo and loss control devices, devices for sending recorded announcements, traffic service positions, network integrated data banks, etc.

resource document

Rec. T.411

A generic-document containing one or more object class descriptions referred to by one or more object class descriptions of another document.

responder

Rec. X.216

The presentation-entity or presentation-service-user that responds to a presentation-connection establishment proposal.

responder

Rec. X.224

A transport entity with whom an initiator wishes to establish a transport connection.

Note – Initiator and responder are defined with respect to a single transport connection. A transport entity can be both an initiator and responder simultaneously.

responder

Rec. X.225

An SPM with whom an initiator wishes to establish a session connection.

Note – Initiator and responder are defined with respect to a single session connection.

responder

Rec. X.226

The presentation protocol machine that responds to a presentation-connection establishment proposal.

response

Rec. T.62

A response is control information sent by the recipient of the command to advise the sender of the command of the action taken. Exceptionally, the reaction to a response may be another response.

response (in a transaction)

Rec. Q.9

A signal or signals (possibly sent as a sequence of messages) containing information requested by an enquiry.

response (primitive)

Rec. X.210

A primitive issued by a service-user to complete, at a particular service-access-point, some procedure previously invoked by an indication at that service-access-point. *Note* – Responses can be positive or negative as appropriate to the circumstances.

response cycle
See:
BQ cycle; response cycle.

response identifier (RI)
See:
command identifier (CI); response identifier.

response output

Rec. Z.341

An *output* message in the *dialogue procedure* which gives information about the state of an *input.* The output can beany one of the following types: *acceptance output, rejection output* and *request output.*

restart (SCCP)

Glos. (VI.7, VI.8, VI.9)

A recovery mechanism for signalling connection sections in the event of a node failure.

restitution

Rec. R.140

The formation of a succession in time of signifcant conditions resulting from a received signal.

restitution delay

Rec. R.140

Transfer time of a significant instant between a transmitter and the corresponding receiver.

restoral rate (μ)

Rec. X.137

The average number of transitions from the unavailable state to the available state per unit unavailable time.

restoration; recovery

Rec. M.60, Suppl. No. 6 (II.3)

That event when the item regains the ability to perform a required function after a fault.

1 + 1 restoration

See:

transmission restoration function: 1 + 1 restoration.

restoration algorithm

Rec. M.495

Method for forming restoration links for faulty normal transmission links.

restoration control centre

Rec. M.495

A centre supervising all or part of normal and restoration transmission systems.

Note – A restoration control centre can be included within a control centre which is not dedicated to restoration.

restoration control point (RCP)

Recs. M.60, M.725

The restoration control point (RCP) is an element within the general maintenance organization for the international telecommunication services. It initiates and coordinates service restoration activities in case of failures or planned outages of transmission systems in accordance with plans and ad hoc arrangements agreed by the technical services of the Administration concerned.

restoration control program

Rec. M.495

A decision making program which controls restoration processes.

restoration equipment

See:

restoration link; restoration equipment.

restoration link; restoration equipment

Rec. M.495

A transmission link/equipment which is used for transmission when the normal link/equipment is not available.

Note 1 – A restoration link or equipment is generally idle under normal operating conditions, but might be used under these conditions by low-priority traffic for which a lower degree of service availability is accepted.

Note 2 – Note 1 may not apply to 1+1 type restoration system where both links are carrying the traffic.

restoration network

Rec. M.495

The network formed by all restoration links.

restoration procedure time, T_3

Rec. M.495

Time interval between the confirmation of a fault and completion of the processing and transmission of the control signals required to effect restoration.

restoration time, T_r

Rec. M.495

The time from the occurrence of the failure to the restoration of the faulty transmission: $T_r = T_1 + T_2 + T_3 + T_4 + T_5$ = confirmation time + transfer time + T_5.

Note – An apparent fault might be detected by an equipment and not confirmed after the confirmation operations. In this case, only times T_1 and T_2 are relevant.

restoration transfer time, T_4

Rec. M.495

Time interval between completion of the processing and transmission of the control signals required to effect restoration and the completion of transmission restoration operations.

restoration unit

Rec. M.495

All normal and restoration links and associated switching equipment capable of being controlled from a particular control centre.

Note – Some networks areas may be controlled from more than one control centre.

RESTORE

Rec. Z.333

Return specified units to service.

restore

Rec. Z.341

An *action* to return specified equipment units to service; opposite of *remove.*

restricted conference call

Suppl. No. 2 (II.4)

A *conference call* in which certain nominated *terminals* may only transmit to one, or some, of the terminals involved, or may not transmit at all.

restricted differential time delay (RDTD)

Rec. I.340

The term RDTD in the connection type context is defined as follows:

This value applies when:

i) at each point in a connection or connection element, the time slots are explicitly or implicitly demarcated for each information channel or an aggregate of information channels,ii)the information parts submitted to the time slots at the the transmitting end are delivered to the receiving end with a differential time delay or not more than 50 ms.

restricted service

Suppl. No. 2 (II.4)

A service whereby a subscriber may have *access barred* from his terminal installation to certain services, routes or *terminals* which would normally be accessible to all customers.

restriction in the outgoing direction service

Suppl. No. 1 (II.2)

The possibility for a subscriber to prevent all or certain outgoing calls and/or service control operations from his telephone line.

result

Glos. (VI.7, VI.8, VI.9)

The component indicating the outcome (success or failure) of an operation.

results accumulation period

Recs. Z.336, Z.341

Time interval within a recording period during which the required measurement entities are processed and at the end of which results are stored for immediate or later output.

results output routing

Recs. Z.336, Z.341

Data defining the media to which results output is to be directed.

results output schedule

Recs. Z.336, Z.341

Data specifying a set of days (or a periodicity pattern) and of times during these days when the output of the results is to be made.

RESUME

Rec. Z.333

Continue an activity previously suspended.

resume indicator

See:

suspend/resume indicator.

resume message (RES)

Rec. Q.762

A message sent in either direction indicating that the calling or called party, after having been suspended, is reconnected.

retainability of an established connection

Rec. E.800

The *probability* that a switched *connection*, once established, will operate within specified transmission tolerances without *interruption* for a given *time interval*.

retained signal

Rec. Z.100

A *retained signal* is a *signal* in the *input port* of a *process*, i.e., a *signal* which has been received but not consumed by the *process*.

retained TPDU

Rec. X.224

A TPDU which is subject to the retransmission procedure or retention until acknowledgment procedure and is available for possible retransmission.

retiming

Recs. G.701, Q.9

Adjustment of the intervals between the significant instants of a digital signal, by reference to a timing signal.

retransmission buffer (RTB)

Glos. (VI.7, VI.8, VI.9)

Storage in the signalling link control for signal units transmitted but not yet positively acknowledged.

retrieval

Recs. F.400, X.400

In the context of message handling, a transmittal step in which a user's message store conveys a message or report to the user's UA. The user is an actual recipient of the message or the originator of the subject message or probe.

retrieval

Glos. (VI.7, VI.8, VI.9)

The process of transferring all those messages in the retransmission buffer of a signalling link (A), which have not yet been positively acknowledged, to the transmission buffers of alternative signalling links.

retrieval

Rec. T.411

The recovery of previously filed information.

retrieval of stored call content

Suppl. No. 2 (II.4)

The transmission of the call contents to subscribers who had previously requested *storage of all content*

retrieval port

Rec. X.413

The port offering the retrieval set of abstract-services within the MS abstract-service.

retrieval service

Rec. I.113

An **interactive service** which provides the capability of accessing information stored in database centres. This information will be sent to the user on demand only. The information can be retrieved on an individual basis, i.e., the time at which an information sequence is to start is under the control of the user.

retrieval services

Rec. I.121

The user of retrieval services can retrieve information stored in information centres and in general provided for public use. This information will be sent to the user on his demand only. The information can be retrieved on an individual basis. Moreover, the time at which an information sequence is to start is under the control of the user.

Examples are broadband retrieval services for film, high resolution image, audio information, and archive information.

See Figure 1/I.121

return; procedure return

Rec. Z.100

The *return* of a *procedure* is the transfer of control to the calling *procedure* or *process.*

return cause

Rec. Q.712

For connectionless protocol classes, the "return cause" parameter field is used to indicate the reason why a message was returned.

return loss

Rec. G.100

Quantity characterizing the degree of match between two impedances, Z_1 and Z_2. It is given by the expression:

$$L_R = 20 \log_{10} \left| \frac{Z_1 + Z_2}{Z_1 - Z_2} \right| \quad \text{dB.}$$

return switching signal

U.140

A switching signal transmitted in the direction from the called party to the caller.

returned-content entry

Rec. X.413

An entry-type in the stored-messages information-base which contains the returned content from a previously submitted message.

returned echo level (L_{RET})

Rec. G.165

The level of the signal at the send-out port of an operating echo canceller which will be returned to the talker. The attenuation of a nonlinear processor is included, if one is normally present. L_{RET} is related to L_{Rin} by

$$L_{RET} = L_{Rin} - (A_{ECHO} + A_{CANC} + A_{NLP}).$$

where

L_{Rin} is the receive input signal

A_{ECHO} is the echo loss

A_{CANC} is the cancellation

A_{NLP} is the nonlinear processing loss.

See Figure 4/G.165.

If nonlinear processing is not present, note that $L_{RES} = L_{RET}$.

reusable program; routine

Rec. Q.9

A program (A routine) that may be loaded once and executed repeatedly subject to the requirements that any instructions that are modified during its execution are returned to their states and that its external program parameters are preserved unchanged.

reveal attribute

Rec. Z.100

A *variable* owned by a *process* may have a *reveal attribute*, in which case another *process* in the same *block* is permitted to view the *value* associated with the *variable*. See *view definition*.

reversals

Rec. R.140

Uninterrupted sequence of signal elements of a two condition signal with alternating significant conditions all of the same duration and equal to that of the unit interval.

right hand edge

Rec. T.411

The edge of a frame or block that is parallel to the direction of the layout path and that is met first, from the outside of the frame or the block, in the direction at an angle of 90° counterclockwise relative to the direction of the layout path.

ringback tone

See:

ringing tone; ringback tone.

ring-forward signal; forward-transfer signal (sent in the forward direction)

Rec. Q.310

This line signal is initiated by an operator to recall an operator at a point further ahead in the connection.

ringing tone

Rec. E.182

A tone advising the caller that a connection has been made and that a calling signal is being applied to a telephone number or service point.

ringing tone; ringback tone

Rec. Q.9

A tone which indicates that the ringing function is being applied at the called end.

ringing tripping delay (internal and terminating traffic connections)

Rec. Q.543

Ringing tripping delay is a characteristic that is applicable for calls terminating on ANALOGUE SUBSCRIBER LINES only. It is defined as the interval from the instant that the called subscriber off-hook condition is reconizable at the subscriber line interface until the ringing signal at the same interface is suppressed.

RO-notation

Rec. X.219

The notation used for the specification of Remote Operations, defined in Recommendation X.219.

role occupant

Rec. F.500

An attribute type which specifies the name of an object that fulfills an organizational role. An attribute value for role occupant is a distinguished name.

root context

Rec. X.518

The naming context for the vertex whose name comprises the empty sequence of RDNs.

ROSE-provider

Rec. X.219

The provider of the remote operations service element services.

ROSE-user

Rec. X.219

The application-specific function that performs the mapping of the operations and errors of the RO-notation onto ROSE.

route

Rec. E.600

One or more circuit groups providing a connection between switching centres.

route

Rec. Q.9

a) The means of transmission (paths, links via wire, cable, radio) used or to be used for the set-up of permanent or switched connections between two locations.

b) The way within a network followed or to be followed for the transmission of a message or the set-up of a call between two locations.

Note – Two or more routes may be used in tandem. The whole way between the end points then again is called route.

ROUTE

Rec. Z.333

Instruct the system that any subsequent messages, classes of data, or message types indicated should be output to specified media.

route

Rec. Z.341

An *action* to instruct the system that any subsequent *output* of a certain type should be routed to specified media.

route

Recs. Z.335, Z.341

Collection of circuit sub-groups between two exchanges that are equivalent for routing purposes. The term route in Recommendation Z.335 is equivalent to the concept of "circuit Group" as used in Recommendation Z.337 and in E-Series Recommendations.

route group

Recs. Z.335, Z.341

The set of all the possible routes on which a call may be forwarded to the appropriate destination.

route set congestion control

Glos. (VI.7, VI.8, VI.9)

A procedure included in the signalling route management which is used to update the congestion status of a signalling route in a given signalling point.

routes

Rec. E.100

The routes followed by international telephone traffic are designated by agreement between Administrations. A distinction is made between:

- primary routes,
- secondary routes,

primary routes: The circuits normally used in a given relation.

Secondary routes: The circuits to be used when the primary routes are congested, or when the transmission on the primary routes is not sufficiently good, or it is outside the normal hours of service on the primary routes.

The secondary route(s) may pass through the same countries as the primary routes or through different countries.

routine

Rec. Q.9

An ordered set of instructions that may have some general or frequent use.

routine

See:

reusable program; routine.

routine or periodic testing

Rec. M.60

Items are tested periodically, initiated either by the system or by the maintenance staff. The frequency of the test depends on the importance of the item, the failure rate and the number of items of that type present in the element.

routing

Rec. Q.9

a) The process of determining and using, in accordance with a set of rules, the route for the transmission of a message or the set-up of a call. The process ends when the message or the call has reached the destination location.

b) a qualification implying the above process, e.g.:
   - call routing;
   - message routing;
   - traffic routing.

routing

Rec. X.200

A function within a layer which translates the title of an entity or the service-access-point-address to which the entity is attached into a path by which the entity can be reached.

routing label

Rec. Q.762

Information provided to the message transfer part for the purpose of message routing (see Recommendation Q.704, § 2.2).

routing label

Glos. (VI.7, VI.8, VI.9)

The part of the message label that is used for message routing in the signalling network. It includes the destination point code, the originating point code and the signalling link selection field.

RQ cycle; request cycle

Rec. R.140

The repetition cycle requested in an error detecting and feedback system when a multilation is detected.

Note – See CCIR Recommendation 342-2.

RTSE-provider

Rec. X.218

The provider of the reliable transfer service element.

RTSE-user

Rec. X.218

The user of the reliable transfer service element. The user may be the user element, or another application service element, of the application entity.

RTSE-user

Rec. X.219

The application-specific function that performs the mapping of the bind-operation and unbind-operation of the RO-notation onto RTSE.

S

S + D equipment
See:
speech plus duplex equipment; S + D equipment.

S + S equipment
See:
speech plus simplex equipment; S + S equipment.

safety of life telex calls

Rec. F.60

Those telex calls requested in accordance with Article 25 of the *International Telecommunication Convention.*

same layout object

Rec. T.412

This attribute specifies that the start of the content associated with the logical object and the end of the content associated with another logical object, specified by the first parameter, shall be laid out, if possible, within a single layout object which is of a specified layout object class or layout category or object type, as specified by the second parameter.

sample

Rec. G.701

A representative value of a signal at a chosen instant, derived from a portion of that signal.

sampling

Rec. G.701

The process of taking samples of a signal, usually at equal time intervals.

sampling rate

Rec. G.701

The number of samples taken of a signal per unit time.

satellite exchange

Rec. Q.9

A local exchange on a low level of the network hierarchy which is associated to another exchange and with no route switching functions except those towards the associated higher level local exchange. A satellite exchange has normally the capability to connect locally subscribers' lines terminating in it. (See Figure 1/Q.9.)

satellite indicator

Rec. Q.762

Information sent in the forward direction indicating the number of satellite circuits in the connection.

save

Rec. Z.100

A *save* is the declaration of those *signals* that should not be consumed in a given *state.*

save (in SDL)

Rec. Q.9

A save is the postponement of *recognition of a signal* when a *process* is in a *state* in which *recognition of that signal* does not occur. (See Recommendation Z.100, § 2.6.5.)

save area

Rec. Z.100

The *save area* is the *SDL/GR* representation of a *save.*

save signal set

Rec. Z.100

The *save signal set* of a *state* is the set of saved *signals* for that *state.*

scaled measurement unit (SMU)

Rec. T.411

A unit of linear measurement used for positioning and dimensioning layout objects and content elements on a presentation surface, its value being equal to the basic measurement unit (BMU) times the unit scaling.

scanning density

Rec. T.0

Number of scanning pitches per unit length.

scanning line

Rec. T.0

The area explored by the scanning spot in one sweep from one side to the other of the scanning field.

scanning pitch

Rec. T.0

The distance between the corresponding edges of two consecutive scanning lines.

SCCP component of the signalling connection establishment time

Rec. Q.716

This parameter is composed of two times:

- the elapsed time between a N-CONNECT request primitive at the origin node and the corresponding N-CONNECT indication primitive at the destination node;
- the elapsed time between a N-CONNECT response primitive at the destination node and the corresponding N-CONNECT confirmation primitive at the origin node.

It is composed of several internal parameters:

- Sending time of a CR message by the SCCP;
- MTP overall transfer time;
- Transit time of a CR message for the relay function at a relay point without coupling;
- Transit time of a CR message for the relay function at a relay point with coupling;
- Receiving time of a CR message by the SCCP;
- Sending time of a CC message by the SCCP;
- Transit time of a CC message for the relay function at a relay point with coupling;
- Receiving time of a CC message by the SCCP.

Depending on the configuration these parameters can appear zero, one or several times.

A probabilistic approach has to be taken to give values to this parameter, considering the various possible configurations and the existence of queues at several points.

SCCP method indicator

Rec. Q.762

Information sent in either direction indicating the available SCCP methods, if any, for end-to-end transfer of information.

SCCP relation

Glos. (VI.7, VI.8, VI.9)

A relationship between two SCCP users which allows them to exchange data over it. An SCCP relation can consist of one or several routes.

SCCP relation

Rec. Q.716

A SCCP relation is a relation between two SCCP users which allows them to exchange data over it. A SCCP relation can consist of one or several SCCP routes.

SCCP relay function

Glos. (VI.7, VI.8, VI.9)

A function which provides an address translation to route an SCCP message to its destination, and may include coupling of connection sections for connection-oriented protocol classes.

SCCP route

Rec. Q.716, Glos. (VI.7, VI.8, VI.9)

A route composed of an ordered list of nodes where the SCCP is used (origin, relay(s), destination) for the transfer of SCCP messages from an originating SCCP user to the destination SCCP user.

SCCP routing

Glos. (VI.7, VI.8, VI.9)

A function based on the called party address information, which evaluates and translates the information, checks the addressee availability, and the need for coupling of connection sections.

SCCP routing verification test (SRVT)

Glos. (VI.7, VI.8, VI.9)

A procedure used to determine if the data of the SCCP routing tables in the signalling network are consistent.

SCCP user

Glos. (VI.7, VI.8, VI.9)

Functional entity which uses directly the services of the SCCP.

scheduled maintenance

Suppl. No. 6 (II.3)

The *preventive maintenance* carried out in accordance with an established time schedule.

scheduled service time for a virtual connection section

Rec. X.137

The time during which the network provider has agreed to make that section available for service. The normal objective would be 24 hours per day, 7 days per week. *Note* – Other scheduled service times may be specified in some networks.

scheduling

Rec. M.30

Can include the assignment of time intervals to the execution of one or more functions by the NE. It can also include inhibition or allowance of execution of the function without affecting prior scheduling.

scope unit

Rec. Z.100

A *scope unit* in the *concrete grammar* defines the range of *visibility* of *identifiers.* Examples of *scope units* include the *system, block, process, procedure, partial type definitions* and *service definitions.*

scrambler

Rec. G.701

A device that converts a digital signal into a pseudo-random digital signal having the same meaning and the same digit rate.

screening indicator

Rec. Q.762

Information sent in either direction to indicate whether the address was provided by the user or network.

screening test

Suppl. No. 6 (II.3)

A *test,* or combination of *tests,* intended to remove or detect unsatisfactory *items* or those likely to exhibit early *failures.*

scrolling

Rec. Z.341

The ability to display the part of the data not currently visible in the *window area.*

SDL/GR

Rec. Z.100

SDL/GR is the graphical representation in *SDL.* The *grammar* for *SDL/GR* is defined by the *concrete graphical grammar* and the *common textual grammar.*

SDL/PE

Rec. Z.100

SDL/PE is a set of icons which can be used in conjunction with the *state symbol* of *SDL/GR.*

SDL/PR

Rec. Z.100

SDL/PR is the textual phrase representation in *SDL.* The *grammar* for *SDL/PR* is defined by the *concrete textual grammar.*

search guide

Rec. F.500

An attribute type which specifies information of suggested search criteria which may be included in some entries expected to be a convenient base-object for the search operation, e.g. country or organization.

search operation

Rec. F.500

An operation in the directory system to search a portion of the DIT for entries of interest, and to return selected information from those entries.

Note – This directory system operation is considered to be a basic service feature in the service context.

second dial tone

Rec. E.182

A tone advising the caller that the network has accepted the call information already sent and asking the caller to provide more information.

second-order digital transmission hierarchy

Rec. Q.9

Digital signals multiplexed to the 6312 or 8448 kbit/s level for digital transmission.

second-order multiplexed signals

See:

second-order multiplexes signals; second-order multiplexed signals.

second-order multiplexes signals; second-order multiplexed signals

Rec. Q.9

Digital signals that have been multiplexed into 6312 or 8448 kbit/s bit streams.

secondary failure

Suppl. No. 6 (II.3)

A *failure* of an *item*, caused either directly or indirectly by the *failure* or the *fault* of another *item*.

secondary routes

Recs. F.60, F.68

The circuits to be used when the primary routes are congested. The secondary route(s) may pass through the same countries as the primary routes or through different countries. In manual and semi-automatic operation, secondary routes may also be used when the transmission on the primary route is not sufficiently good, or if traffic is to be handled outside the normal hours of service on the primary routes.

secondary routes

See:

routes.

secret key (deprecated)

See:

private key.

secret language

Rec. F.4

Comprises words in which one or more consist of:

a) groups of letters, figures, signs or any combination of them that have a secret meaning;

b) words in plain language that are not used with the meaning normally assigned to them;

c) any other words not fulfilling the conditions laid down for plain language.

section (deprecated)

See:

digital section.

section boundary; boundary

Rec. X.134

A section boundary (or boundary) separates a network section from the adjacent circuit section or it separates an access circuit section from the adjacent DTE.

section termination

Rec. G.601

A point selected conventionally to be the interface between the physical transmission medium and associated equipment such as *repeaters* (see Figures 1/G.601 and 2/G.601).

Note – The precise selection of the point to constitute the section termination should take into account associated accessories such as splices, connectors or flexible connecting cables in order to include them, as the case may be, on one side or on both sides of the termination.

section termination

Rec. G.701

A connectional interface selected to be the boundary between a physical transmission medium and its associated equipment.

Note – This point will usually be the connectors at the input and output of an equipment.

security arrangements

Gloss. (VI.3)

The measures provided to ensure continuity of service of the signalling system in the event of the failure of one or both of the data channels.

security capabilities

Recs. F.400, X.400

In the context of message handling, the mechanisms that protect against various security threats.

security capabilities

Rec. F.500

Capabilities of a directory system to provide protection against security threats.

Note 1 – These directory system capabilities are considered to be additional optional user facilities in the service context.

Note 2 – See Recommendation X.509 for explanation of security capabilities.

security policy

Rec. X.509

The set of rules laid down by the security authority governing the use and provision of security services and facilities.

see also

Rec. F.500

An attribute type which specifies names of other objects which may be other aspects (in some sense) of the same real-world object.

segment

Rec. D.12

The measurement unit used for charging for the volume of information transmitted in a packet-switched service is independent of the maximum packet length. It is called a segment and its length is 64 octets.

Note – This number is subject to further study.

segmented encoding law

Rec. G.701

An encoding law in which an approximation to a smooth law is obtained by a number of linear segments. (See Figure 3/G.701.)

segmenting

Rec. X.200

A function performed by an (N)-entity to map one (N)-service-data-unit into multiple (N)-protocol-data-units.

segmenting

See:

sequencing/segmenting.

segmenting/reassembling

Rec. Q.712

The "segmenting/reassembling" parameter field is used in the data message for the segmenting and reassembling function. It is the more data indicator (M-bit). This is used only in connection-oriented messages.

It is set to one in a data message to indicate that more data will follow in a subsequent message.

It is set to zero in a data message to indicate that the data in this message forms the end of a complete data sequence.

segmenting/reassembling

Glos. (VI.7, VI.8, VI.9)

If the size of the user data is too big to be transferred within one message, user data are segmented into a number of portions, and reassembled at the receiving end.

seizing-acknowledgement signal (sent in backward direction)

Rec. Q.400

A signal sent to the outgoing exchange to indicate the transition of the equipment at the incoming end from the idle state to seized state. Recognition of the seizing acknowledgement signal at the outgoing end causes the state of the circuit to change from seized to seizure acknowledged. *Note* – This signal is only used in the digital version of System R2 line signalling.

seizing signal

See:

connect seizing signal; (sent in the forward direction.

seizing signal (sent in the forward direction)

Rec. Q.120

This signal is transmitted at the beginning of a call to initiate circuit operation at the incoming end of an international circuit.

The seizing signal can also perform switching functions and two different types of seizing signal are provided for this purpose, viz:

a) the *terminal seizing* signal, which can be used at the incoming international exchange, to seize equipment used exclusively for switching the call to the national network of the incoming country;

b) the *transit seizing* signal, wich can be used in the exchange at the incoming end of the international circuit to seize equipment used exclusively for switching the call to another international exchange.

seizing signal (sent in the forward direction)

Rec. Q.140

This signal is transmitted at the beginning of a call to initiate circuit operation at the incoming end of an international circuit and to seize equipment for switching the call either to the national network of the incoming country or to another international exchange.

seizing signal (sent in the forward direction)

Rec. Q.400

A signal sent at the beginning of the call to initiate transition of the circuit at the incoming end from the idle state to seized state. At the incoming exchange it causes the association of equipment capable of receiving register signals.

seizure

Rec. E.411

A seizure is a bid for a circuit in a circuit group which succeeds in obtaining a circuit in that circuit group.

seizure

Rec. E.600

A bid that obtains the use of a resource of the type under consideration.

seizure

Rec. Q.9

A successful bid.

With "bid": a single attempt to obtain the service of a resource.

seizures per circuit per hour (SCH)

Rec. E.411

SCH is an indication of the average number of times, in a specified time interval, that each circuit group is seized. When related to the expected values of average call holding times and effective call/seizure rate for the circuit group, it will give an indication of the effectiveness of the service being offered.

$$\text{SCH} = \frac{\text{Seizures per hour}}{\text{Quantity of circuits available for service}}$$

It is not necessary to accumulate data for an hour to compute SCH. (See definition of *bits per circuit per hour – BCH*)

selected abstract test suite

Rec. X.290

The subset of an abstract test suite selected using a specific PICS.

selected class

Rec. X.224

The protocol class that the responder indicates in a CC TPDU that it has chosen for use over the transport connection.

selected executable test suite

Rec. X.290

The subset of an executable test suite selected using a specific PICS and corresponding to a selected abstract test suite.

selected parameter

Recs. X.215, X.225

The value for a parameter that has been chosen for use on the session connection.

selected parameter

Rec. X.224

The value for a parameter that the responder indicates in a CC TPDU that it has chosen for use over the transport connection.

selection

Rec. Z.341

A *symbol* of the *decomposition meta-language* which indicates that the choice among several *information entities* is possible.

selection

Rec. Z.100

Selection means providing those *external synonyms* needed to make a specific *system specification* from a generic *system specification.*

selection (in a telegraph receiver)

Rec. S.140

Primary operation of *translation,* by which the *control function* or the symbol to be printed or translated is chosen automatically or not, from the received signal.

selection argument

Rec. Z.341

An argument comprising one or more conditions. Used in data base queries.

selection identity

Rec. Z.341

An identity unique to a *menu item* so that it can be distinguished from other *menu items* within the same *menu.*

selection signals

U.140

A sequence of forward signals giving to an exchange information necessary to the setting up of a call.

selection stage

Rec. Q.9

An aggregate of switches enabling an inlet to access one of a plurality of outlets and designed to operate as a single unit from a traffic handling point of view.

selection time

U.140

The interval of time between the reception by the calling party of the proceed-to-select signal and the end of reception by the exchange of the selection sequence.

selection type

Rec. X.208

A structured type, defined by reference to a component type of a choice type.

selective accounting service

Suppl. No. 1 (II.2)

A number of separate telephone accounts are associated with an exchange termination and the account to which charges for a particular call are to be debited is identified when making the call.

selector

Rec. X.413

A parameter, used in abstract-operations, to select entries from an information-base.

SELF

Rec. Z.100

SELF is a *PId expression.* When a *process* evaluates this *expression,* the result is the *PId-value* of that *process. SELF* never results in the *value Null.* See the definitions of the terms *PARENT, OFFSPRING, PId.*

self-delimiting

Rec. X.226

An attribute of a transfer syntax which indicates that the end of each value in that syntax can be determined by means provided by the syntax.

self-delineating block

Rec. I.113

A block with the property that its endpoints can be identified by examining the block itself. A defined pattern or flag at the beginning of each block might serve to demarcate the block.

self-delineating labelled interface

Rec. I.113

An interface whose entire serial bit stream consists of a self-delineating labelled multiplexing.

semantics

Rec. Z.341

The rules and conventions governing the interpretation and assignment of meaning to constructions in a language.

semantics

Rec. Z.100

Semantics gives meaning to an entity: the properties it has, the way its *behaviour* is interpreted, and any dynamic conditions which must be fulfilled for the *behaviour* of the entity to meet *SDL* rules.

sematème (not used in English)

Rec. R.140

Contiguous succession in time of significant conditions.

semiautomatic demand operating

See:

demand operating.

semi-automatic observation

Rec. E.421

Monitoring of telephone calls using equipment which records some data automatically. For example, equipment in which information, such as exchange being observed, number dialled by the subscriber, metering pulses and time of call, is recorded automatically on some means suitable for data processing. The observer merely has to key in a code indicating the condition observed.

semi-automatic system

Rec. Q.9

A system in which the calling subscriber's order is given to an operator who completes the call through automatic switches.

semi-loop loss

See:

transmission loss of path a-t-b; semi-loop loss.

semi-permanent connection

Rec. Q.9

A connection established part-time and on a scheduled basis for the use of one user. At other times the connection may be released and available for use in handling traffic of the switched network.

semi-permanent (connection)

Rec. I.140

Semi-permanent connections/connection elements pass through a switching network.

Semi-permanent connections/connection elements between agreed points may be provided for an indefinite period of time after subscription, for a fixed period or for agreed periods during a day, week or other interval.

send reference station

Rec. N.1

The transmit sub-control station of an *international multiple destination sound-programme circuit section, international multiple destination sound-programme* circuit or *international multiple destination sound-programme* link. (See Figures 4/N.1 and 5/N.1.)

send reference station

Rec. N.51

The transmit sub-control station of an *international multiple destination television circuit section, international multiple destination television* circuit or *international multiple destination television* link. (See Figures 4/N.51 and 5/N.51.)

send-special-information tone signal

Recs. Q.254, Q.400

A signal sent in the backward direction indicating that the special information tone should be returned to the calling party. This tone indicates that the called number cannot be reached for reasons not covered by other specific signals and that the unavailability is of a long term nature. (See also Recommendation Q.35.)

sender

Rec. X.209

An implementation encoding encoding a data value for transfer.

SENDER

Rec. Z.100

SENDER is a *PId expression.* When evaluated *SENDER* yields the *PId value* of the sending *process* of the *signal* that activated the current *transition.*

sender

See:
sending-application-entity; sender.

sending-application-entity ; sender

Rec. X.218

The application-entity that sends, or may send (i.e., possesses the TURN) the APDU to the receiving application-entity.

sending-reliable-transfer-protocol-machine

Rec. X.228

The reliable-transfer-protocol-machine whose RTSE-user is the sender.

sending SPM

Rec. X.225

An SPM that sends a given SPDU.

sending SS-user

Rec. X.215

A SS-user that acts as a source of data during the data transfer phase of a session connection. *Note* – A SS-user can be both a sending and a receiving SS-user simultaneously.

sending time of a CC message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a N-CONNECT respose primitive and the corresponding MTP-TRANSFER request primitive (for the transfer of the CC message).

sending time of a CR message by the SCCP

Rec. Q.716

This parameter is the elapsed time between the N-CONNECT request primitive and the corresponding MTP-TRANSFER request primitive (for the transfer of the CR message).

Note – The value of this parameter may differ substantially depending wether or not a translation function is used in the SCCP.

sending time of a DT message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a N-DATA request primitive and the corresponding MTP-TRANSFER request primitive (for the transfer of a DT message).

sending time of a UDT message by the SCCP

Rec. Q.716

This parameter is the elapsed time between a N-UNIDATA request and the corresponding MTP-TRANSFER request at the originating node.

Note – The value of this parameter may differ substantially depending whether or not a translation function is used in the SCCP.

sending transport entity

Rec. X.224

A transport entity that sends a given TPDU.

sending TS-user

Rec. X.214

A Transport service user that acts as a source of data during the data transfer phase of a transport-connection.

Note – Transport service user can be both a sending and a receiving TS-user simultaneously.

separation

Rec. T.412

This attribute specifies minimum amounts of separative between the block(s) used to lay out the content associated with the basic logical object and the nearest adjacent block(s) immediately subordinate to the same immediate superior layout object.

separation

Rec. X.200

A function performed by an (N)-entity to identify multiple (N)-protocol-data-units which are contained in one (N – 1)-service-data-unit. It is the reverse function of concatenation.

separator (in MML)

Recs. Q.9, Z.341

A *character* used to delimit *syntax* elements.

sequence

Rec. Z.341

A *symbol* of the *decomposition meta-language* which indicates a left-to-right ordering of *information entities.*

sequence number

Rec. X.224

a) The number in the TPDU-NR field of a DT TPDU which indicates the order in which the DT TPDU was transmitted by a transport entity.

b) The number in the YR-TU-NR field of an AK or RJ TPDU which indicates the sequence number of the next DT TPDU expected to be received by a transport entity.

sequence-number

Rec. X.413

An attribute which uniquely identifies an entry. Sequence-numbers are allocated in ascending order.

sequence numbering

Glos. (VI.7, VI.8, VI.9)

Each signal unit carries two sequence numbers for error correcting purpose.

sequence of command octets

Rec. V.110

The repeated transmission of at least 32 command octets transmitted without interval for 64 kbit/s unrestricted and restricted channels. In the case of asynchronous in-band parameter exchange (IPE) the sequence may be interrupted, within the limits of the procedures.

sequence-of type

Rec. X.208

A structured type, defined by referencing a single existing type; each value in the new type is an ordered list of zero, one or more values of the existing type.

Note – Encoding rules do not limit the number of values in a sequence-of value.

sequence type

Rec. X.208

A structured type, defined by referencing a fixed, ordered, list of types (some of which may be declared to be optional); each value of the new type is an ordered list of values, one from each component type.

Note – Where a component type is declared to be optional, a value of the new type need not contain a value of that component type.

sequencing

Glos. (VI.7, VI.8, VI.9)

A service of the SCCP that preserves the sequence of Network Service Data Units.

sequencing

Rec. X.200

A function performed by the (N)-layer to preserve the order of (N)-service-data-units that were submitted to the (N)-layer.

sequencing/segmenting

Rec. Q.712

The "sequencing/segmenting" parameter field contains the information necessary for the following functions: sequence numbering, flow control, segmenting and reassembling.

sequential

Rec. I.140

A connection has a sequential configuration when its connection elements are established and released sequentially i.e. only one of several connection elements or chains of connection elements exists at any given time.

sequential layout order

Rec. T.411

The sequential order in which layout objects are to be imaged when an imaging order is not specified.

sequential logical order

Rec. T.411

The sequential order in which logical objects are to be processed by the layout process.

sequential order

Rec. T.411

A convention for ordering the objects in a structure such that each object is succeeded by all of its immediate subordinates, before any other object with the same immediate superior, i.e. in order tree traversal.

serial automatic calling

Recs. V.7, V.25, V.25 bis

A procedure by which a data terminal equipment (DTE), by use of the 100 series interchange circuits, may instruct a data circuit terminating equipment (DCE) to perform the call establishment function. The transmission from DTE to DCE, of each digit to be dialled, is achieved in serial form on interchange circuit 103.

serial number

Rec. F.500

An attribute type which specifies an identifier, the serial number of a device.

serial to parallel converter

Rec. G.701

A device that converts a sequence of consecutive signal elements into a corresponding group of signal elements all of which are presented simultaneously.

serial to parallel converter; deserializer

Rec. Q.9

A device which converts a sequence of signal elements into a corresponding group of digits, all of which are presented simultaneously.

serial transmission

Rec. R.140

Transmission of the signal elements of a telegraph signal at successive time intervals, either contiguous or not.

serializer

See:
parallel to serial converter;
parallel to serial converter; serializer.

series of LOW-HIGH data octet pairs

Rec. V.110

The transmission of six octets grouped into three pairs of LOW-HIGH data octets, the LOW data octet being transmitted in each pair before the HIGH data octet. The six octets are transmitted without interval for 64 kbit/s unrestricted and restricted channels. In the case of asynchronous IPE, the transmission of the six octets may be interrupted, within the limits of the procedures.

serveability performance

Recs. E.800, M.60

The ability of a service to be obtained, within specified tolerances and other given conditions, when requested by the user and continue to be provided for a requested duration.

Note – Serveability performance may be subdivided into the service accessibility performance and the service retainability performance.

service

Recs. E.800, M.60

A set of functions offered to a user by an organization.

service; bearer service

Rec. M.60

A type of telecommunication service that provides the capability for the transmission of signals between user-network interfaces.

service; telecommunication service

Recs. I.112, M.60, Q.9

That which is offered by an Administration to its customers in order to satisfy a specific telecommunication requirement.

Note – Bearer service and teleservice are types of telecommunication service. Other types of telecommunication service may be identified in the future.

service

Rec. Z.100

A *service* is an alternative way of specifying a *process*. Each *service* may define a partial *behaviour* of a *process*.

service (CCITT)

See:

CCITT service.

service access probability

See:

service accessibility; service access probability.

service accessibility performance

Recs. E.800, M.60

The ability of a service to be obtained, within specified tolerances and other given conditions, when requested by the user.

Note – This takes into account the transmission tolerance and the combined aspects of propagation performance, trafficability performance and availability performance of the related systems.

service accessibility; service access probability

Rec. E.800

The *probability* that a *service* can be obtained within specified tolerances and other given operating conditions when requested by the *user*.

service alarm (SA)

Rec. M.60

A service alarm is generated at maintenance entities at which the service originates and/or terminates to indicate that the particular service is no longer available (e.g., when a primary block is no longer available for setting up connections, the PCM muldex will extend a service alarm indication to the exchange equipment). The service alarm should be generated when performance falls below a level specified for a particular service. This level may coincide with that for initiating also a prompt maintenance alarm.

service area

Rec. Q.1001

The service area is defined as an area in which a mobile station is obtainable by another PLMN, PSTN or ISDN subscriber without the subscriber's knowledge of the actual location of the mobile station within the area. A service area may consist of several PLMNs. One service area may consist of one country, be a part of a country or comprise several countries. The location registration system associated with each service area must thus contain a list of all mobile stations located within that service area.

Figure 2/Q.1001 shows an example of the composition of a service area.

Note – This definition does not take into account any constraints on routing imposed by the international telephone network.

service area

Rec. Q.9

An area in which a mobile subscriber reachable by any other subscriber of a public network without the calling subscriber's knowledge of the actual location.

service area

Rec. Z.100

A *service area* is either a *service diagram* or a reference to a *service.*

service attribute; telecommunication service attribute

Rec. I.112

A specified characteristic of a telecommunication service.

Note – The value(s) assigned to one or more service attributes may be used to distinguish that telecommunication service from others.

service availability

Rec. X.137

Service availability applies to both virtual call and permanent virtual circuit services. The service availability for a virtual connection portion is the long-term percentage of scheduled service time in which that section is available.

service channel (deprecated)

See:
control channel; C-channel.

service code

Rec. E.131

A numerical code designating a supplementary service.

service code prefix

Rec. E.131

A non-numerical code preceding the service code and indicating the type or types of process to be applied to the service.

service control

Rec. F.500

A function of a directory system to control certain performance criteria. A service control parameter contains the controls, if any, that are to direct the provision of the service.

Note – One service control in the directory system (time limit) is an essential optional user facility. Other specific ones are additional optional user facilities in the service context, if the service provider offers them. See also § 4 of Recommendation F.500.

service control point

Rec. Q.9

A function or entity in the telecommunications network which has access to data and logic for controlling the processing of a call in order to provide a supplementary service.

service data unit integrity

Rec. I.140

This value applies when:

i) at each user-network interface, protocols provide a mechanism for identifying the boundaries of service data units (e.g. X.25 complete packet sequence), and

ii) all bits submitted within a single service data unit are delivered in a corresponding service data unit.

service definition

Rec. Z.100

A *service definition* is the *SDL/PR* definition of a *service.*

service diagram

Rec. Z.100

A *service diagram* is the *SDL/GR* definition of a *service.*

service digits

Rec. G.701

Digits that are added, to a digital signal at the sending end of a digital link, normally at regular intervals and removed at the receiving end of that link and used to provide ancillary facilities.

service element

Rec. T.431

A unit of standardization specifying a complete group of functions.

service identification

Rec. E.131

Information designating a supplementary service.

service indicator (SI)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Information within a signalling message identifying the user to which the message belongs.

service information (octet) (SIO)

Glos. (VI.7, VI.8, VI.9)

Eight bits, contained in a message signal unit, comprising the service indicator and the sub-service field.

service integrity

Recs. E.800, M.60

The degree to which a service is provided without excessive impairments, once obtained.

Note – This service is characterized by the transmission performance of the system.

service interworking

Recs. T.62, T.62 bis

The facility of sending and receiving information between a teletex terminal and a terminal of another service, e.g. telex.

service message transfer unit (SMXU)

Rec. U.82

Used to convey service information about messages.

service observation

Rec. E.421

Monitoring to obtain a complete or partial assessment of the quality of telephone calls, excluding test calls.

service operability performance

Recs. E.800, M.60

The ability of a service to be successfully and easily operated by a user.

service primitive

Rec. T.431

The smallest defined interaction between the user and the provider of a communication service.

service-primitive; primitive

Rec. X.210

An abstract, implementation independent interaction between a service-user and the service-provider.

service profile

Rec. Q.932

Service profile refers to the information that the network maintains for a given user to characterize the service offered by the network to that user. As an example, this may contain the association of feature identifiers to specific supplementary services. A service profile may be allocated to an access interface or to a particular user equipment or a group of user equipments.

service profile identifier (SPID)

Rec. Q.932

The service profile identifier is a parameter carried in a service profile identification information element that is sent from the user to network to allow network assignment of a USID and TID. A user's SPID should uniquely identify a specific profile of service characteristics stored within the network.

The SPID will allow the network to distinguish between different terminals that would otherwise be indistinguishable (e.g., same ISDN number). The SPID value is provided to the user at subscription time.

service-provider

Rec. X.210

An abstract machine which models the behaviour of the totality of the entities providing the service, as viewed by the user.

service retainability

Rec. E.800

The *probability* that a *service*, once obtained, will continue to be provided under given conditions for a given *time duration.*

service retainability performance

Recs. E.800, M.60

The ability of service, once obtained, to continue to be provided under given condition for a requested duration.

Note – Generally this depends on the transmission tolerances, the propagation performance and reliability performance of the related systems. For some services, for example packet switching, this also depends on the trafficability performance and the availability performance of the related systems.

service signal

U.140

Signal transmitted automatically by the network to the calling terminal indicating the progress of a call or the cause of failure of the call attempt.

service support performance

Recs. E.800, M.60

The ability of an organization to provide a service and assist in its utilization.

Note – An example of service support performance is the ability to provide assistance in commissioning a basic service, or a supplementary service such as the call waiting service or directory enquiries service.

service telex calls

Rec. F.60

Those telex calls that relate to the working of the international telecommunication services.

service-user

Rec. X.210

An abstract representation of the totality of those entities in a single system that make use of a service through a single access point.

service user abandonment probability

Rec. E.800

The *probability* that a *user* abandons the attempt to use a *service.*

Note – Abandonments may be caused by excessive *user* mistake rates, by excessive service access delays, etc.

service user mistake probability

Rec. E.800

Probability of a *mistake* made by a *user* in his attempt to utilize a *service.*

serving MSC

Rec. Q.1001

The Serving MSC is the MSC which handles the call at the moment.

session

Rec. T.62

A session is the interval during which a logical, mutually agreed correspondence between two application/presentation processes exists for the transfer of application and presentation related information.

session-connection synchronization

Rec. X.200

A facility of the session-service which allows presentation-entities to define and identify synchronization points and to reset a session-connection to a predefined state and to agree on a resynchronization point.

session protocol machine (SPM)

Rec. X.225

An abstract machine that carries out the procedures specified in this protocol.

Note – A session entity is comprised of one or more SPMs.

session service user; SS-user

Rec. X.225

An abstract representation of the totality of those entities within a single system that make use of the session service.

session status

Rec. Z.341

Information reflecting the current status of the *session* in terms of *user* identity, destination identity, etc.

SET

Rec. Z.333

Place equipment in a specified state (number of states >2). Possible states include in service and out of service.

set

Rec. Z.341

An *action* to place equipment units in a specified state (number of possible states greater than 2); possible states include in service and out of service.

set

Rec. Z.100

Set is an operation defined for *timers* which allow *timers* to be made *active.*

set of circuits; group of circuits

U.140

A group of circuits established between two exchanges, any circuit of which may be chosen without preference for the setting up of a connection.

set-of type

Rec. X.208

A structured type, defined by referencing a single existing type; each value in the new type is an unordered list zero, one or more values of the existing type.

Note – Encoding rules do not limit the number of values in a set-of value.

set type

Rec. X.208

A structured type, defined by referencing a fixed, unordered, list of distinct types (some of which may be declared to be optional); each value in the new type is an unordered list of values, one from each of the component types.

Note – Where a component type is declared to be optional, the new type need not contain a value of that component type.

setting-up time

Rec. U.1

Period of time from the initiation of the call on the international circuit until the initiation of the return of either the call-connected signal or a service signal indicating that the call has been unsuccessful, provided the selection signals have been transmitted at the maximum speed.

setting-up times of an international call

See:

answering time of operators; request transmission time; delay time; setting-up times of an international call.

seven (7) kHz audio

Rec. I.140

Digital representation of audio information with a bandwidth of 7 kHz, the encoding rule being specified.

severely errored seconds (SES)

Rec. M.60

A severely errored second is a second with a binary error ratio [as can be measured using a QRSS (quasi-randon signal source)] greater than or equal to 10^{-3}, or at least one defect (except slips).

A pseudo-severely errored second is a second with at least N1 anomalies (when the anomaly is not a binary error, i.e. when it is an error indicator such as a code violation, CRC error, etc.), or one defect (except slips). The value of N1 is an estimator defined to correspond to a BER of 10^{-3} in one second. N1 is a function of the accuracy of the anomaly detectors.

severity

Rec. M.30

An alarm attribute indicating the magnitude of the related failure. Some measures of severity include major, minor, service affecting and non-service affecting.

shared terminal

Suppl. No. 2 (II.4)

A facility offered to certain subscribers permitting the use of the same *terminal*, sharing the corresponding costs and charges.

ship earth station (SES)

Suppl. No. 3 (II.4)

Defined in Article 1, Section 4.16 of the *Radio Regulations*, ITU, Geneva, 1982, but may be viewed as the combination of a data circuit-terminating equipment (DCE) and a radio transceiver.

ship earth station (SES)

Rec. M.1100

In the Maritime Mobile-Satellite Service, a mobile earth station which provides a 4-wire analogue interface for connection of a *maritime satellite circuit* to a *maritime local system* and a 4-wire circuit test access point.

See Figure 1/M.1100.

ship earth station (SES)

Recs. Q.9, Q.1100

A station in the maritime mobile satellite service intended to be used while in motion or during halts at unspecified points and which is located on board a ship (see Radio Regulations, Article 1, No. 73, § 4.16).

ship earth station

See:
maritime terminal.

ship position reports (prefix 43)

Recs. E.216, F.126

Prefix 43 provides connection to an appropriate national or international centre collecting ship movement information for search and rescue (or other) purposes.

ship station identity

Rec. E.210

The ship's identification X_1, X_2 ... X_k identifying the ship uniquely. The ship station identity may be transmitted on the radio path.

ship station identity

Recs. E.215, F.125

As defined in the Radio Regulations, Appendix 43. See also Recommendations E.210 and F.120.

ship station number

Recs. E.210, F.120

The number that identifies a ship for access from a public network and forms part of the international number to be dialled or keyed by a public network subscriber.

Note 1 – The formats of the ship station number are defined in the following Series E and F Recommendations:

- Recommendation E.215 for telephone and ISDN numbering in the Maritime Mobile-Satellite Service;
- Recommendation F.125 for telex numbering in the Maritime Mobile-Satellite Service;
- numbering plans for maritime mobile (terrestrial) systems for further study.

Note 2 – In this Recommendation the term ship station is intended to also include, for simplicity, ship earth station.

shore station

See:
maritime centre.

short transaction transmissions

Rec. D.21

Short duration virtual calls for which the information to be exchanged is low in volume and which must be quickly transmitted through the network. Normally there are less than 100 characters of user data and less than 30 s in connect time per call.

shorthand notation

Rec. Z.100

A *shorthand notation* is a *concrete syntax* notation providing a more compact representation implicitly referring to *Basic SDL* concepts.

sidetone balance network

Rec. P.10

An electrical network as part of a 2- to 4-wire balance point within a telephone set circuit for the purpose of controlling the telephone sidetone path loss.

sidetone masking rating (STMR)

Rec. P.10

The loudness of a telephone sidetone path compared with the loudness of the intermediate reference system (IRS) overall in which the comparison is made incorporating the speech signal heard via the human sidetone path L_{MEHS} as a masking threshold.

sidetone of a telephone set

Rec. P.11

The transmission of sound from the telephone microphone to the telephone receiver in the same telephone set.

sidetone path

Rec. P.10

Any path, acoustic, mechanical or electrical by which a telephone user's speech and/or room noise is heard in his own ear(s) (at the ERP).

sidetone path loss

Rec. P.10

The loss of the sidetone path expressed as a loss compared with the speech at the MRP. Symbols in common use are:

L_{MEHS} for sidetone paths within a human head,

L_{MEST} for electro-acoustic sidetone paths within the telephone set,

L_{MEMS} for mechanical sidetone paths within a telephone handset.

L_{RNST} for elctro-acoustic sidetone path from a diffuse room noise source to the earphone.

Each of these paths may be measured as sensitivities, in which case they become S_{MEHS}, S_{MEST}, S_{MEMS} and S_{RNST}, and experience a change of sign. Thus, for example, $S_{MEST} = -L_{MEST}$.

SIG

Recs. G.960, I.430

A signal representing an exchange of layer 1 information between line terminations of a digital transmission system for basic access.

signal

Recs. G.701, I.112

A physical phenomenon one or more of whose characteristics may vary to represent information.

signal

Rec. Z.100

A *signal* is an instance of a signal *type* communication information to a *process instance.*

signal (general sense)

Rec. Q.9

Aggregate of waves propaged along a transmission channel and intended to act on a receiving unit.

Note – "General sense" applies only to the area of telecommunications. The ordinary dictionary sense is still wider, viz: "A preconcerted or intelligible sign conveying information or direction at a distance, a physical phenomenon or characteristic quantity of such a phenomenon whose time variations represent information, etc."

signal (in signalling applications)

Rec. Q.9

A transferable element of information relating to a particular circuit, a particular transaction or to the network management.

Note 1 – A signal as defined above may be generated by a change of state.

Note 2 – A qualification may precede the term, e.g. "answer signal". The qualification represents the name of the signal and generally refers to the kind of information the signal conveys or its main function. A great many of such qualifications are defined in standard signalling system's specifications.

signal (general sense)

Rec. Q.9

Aggregate of waves propagated along a transmission channel and intended to act on a receiving unit.

signal (in SDL)

Rec. Q.9

A signal is a flow of data conveying information to a *process.* (See Recommendation Z.100, § 2.5.4.)

signal definition

Rec. Z.100

A *signal definition* defines a *named signal type* and associates a list of zero or more *sort identifiers* with the *signal name.* This allow *signals* to carry *values.*

signal element

Rec. G.701

A part of a digital signal, characterized by its discrete timing and its discrete value, and used to represent a digit.

signal element

Rec. R.140

Each of the parts constituting a signal and distinguished from the others by one or more characteristics such as its nature, magnitude, duration and relative position.

signal imitation (in VF signalling)

Rec. Q.9

An unwanted signal produced within the signalling band by speech or other currents which are not genuine signals causing the response of a signal receiver.

signal list

Rec. Z.100

A *signal list* is a list of *signal identifiers* used in *channel* and *signal route definitions* to indicate all the *signals* which may be conveyed by the *channel* or *signal route* in one direction.

signal list area

Rec. Z.100

The *signal list area* in an *interaction diagram* represents a *signal list* associated with a *channel* or *signal route.*

signal message

See:
(signal) message.

signal repetition

Rec. R.140

A function signal which is used in an error detecting and feedback system to request a repetition or to precede a retransmission.

Note – In the International Telegraph Alphabet No. 3 this signal corresponds to the code combination AZZAZAA.

signal route

Rec. Z.100

A *signal route* indicates the flow of *signals* between a *process type* and either another *process type* in the same *block* or the *channels* connected to the *block.*

signal spillover (in VF signalling)

Rec. Q.9

That part of a VF signal which passes in band from one link to the other in a multi-link connection before the connection between the links has been split at the incoming end.

signal transfer point

Rec. Q.253

A signal transfer point is a signal relay centre handling and forwarding telephone signals from one signalling link to another in case of signalling in a *non-associated mode of operation.*

Note – Following this definition there is no need for a signal transfer point to have any connection with, or relation to, a switching centre.

However, in the case of a *quasi-associated mode of operation,* it is obvious that a signal transfer point may coincide with the System No. 6 exchange where the signalling links terminate and that the equipment may be incorporated into the signalling equipment of that System No. 6 exchange.

See Figure 4/Q.253.

signal transfer point

Gloss. (VI.3)

A signal relay centre handling and transferring signals from one signalling link to another in a non-associated mode of operation.

signal unit (SU)

Rec. Q.275, Gloss. (VI.3)

The smallest defined group of bits on the signalling channel (28 bits), used for the transfer of signal information.

signal unit (SU)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A group of bits forming a separately transferable entity used to convey information on a signalling link.

signal unit

See:
signal unit.

signal unit alignment

Glos. (VI.7, VI.8, VI.9)

Signal unit alignment exists when flags are received at intervals which correspond to integral numbers of octets and which fall within certain upper and lower limits.

signal unit error rate monitoring

Glos. (VI.7, VI.8, VI.9)

A procedure by which the error rate of an active signalling link is measured on the basis of a count of correctly checking and erroneous signal units.

signal unit sequence control

Glos. (VI.7, VI.8, VI.9)

Procedures used at level 2 to ensure that message signal units are transported in sequence, without loss or duplication, over a particular signalling link.

signalling

Rec. I.112

The exchange of information specifically concerned with the establishment and control of connections, and with management, in a telecommunication network.

signalling

Rec. Q.9

a) The exchange of information (other than by speech) specifically concerned with the establishment, release and other control of calls, and network management, in automatic telecommunications operation.

b) A qualification implying an action as defined above, e.g.:

signalling channel	signalling procedure
signalling equipment	signalling relation
signalling information	signalling route
signalling link	signalling system
signalling message	signalling time slot

signalling access protocol layer 1-3, information access protocol layer 1-3

Rec. I.140

These attributes characterize the protocol on the signalling or user information transfer channel at a given access point or reference point.

signalling area/network code (SANC)

Glos. (VI.7, VI.8, VI.9)

The field in the international signalling point code that identifies the zone and national signalling area or network. It consists of a code for the world geographical zone (3-bit) and a code for the area or network in a specific zone (8-bit).

signalling channel (Signalling System No. 6)

Rec. Q.9, Glos. (VI.3)

A data channel in combination with the associated signalling terminal equipment at each end.

Signalling Connection Control Part (SCCP)

Glos. (VI.7, VI.8, VI.9)

Additional functions to the MTP to cater for both connectionless as well as connection-oriented network service and to achieve an OSI compatible network service.

signalling connection control part (SCCP)

Rec. Q.1100

This provides in SS No. 7 additional functions to the message transfer part to cater for both connectionless as well as connection oriented network services, to transfer circuit related, non-circuit related signalling information, and other types of information between exchanges and specialised centres in telecommunication networks (see CCITT Recommendation Q.711).

signalling connection establishment failure probability

Rec. Q.716

A signalling connection establishment failure is defined as a connection refusal or a time-out for the connection establishment timer coming from the SCCP.

The dimensioning of the SCCP regarding the number of local reference numbers will impact this signalling connection establishment failure probability. The unavailability of a SCCP relation is also an internal parameter impacting this probability.

The connection refusals coming from the called user must not be taken into account. This also applies for the time-out coming from this called user.

Note – It is possible for the connection refusals to distinguish between the one coming from the user and the one coming from the SCCP, but that is impossible for the time-out of the connection establishment timer.

signalling connection establishment time

Rec. Q.716

This parameter is the elapsed time between a N-CONNECT request and the corresponding N-CONNECT confirmation primitive for a successful signalling connection establishment.

This delay is composed of two parameters: one which depends of the user at the destination node and one which depends of the NSP. The first one which is the elapsed time between a N-CONNECT indication and response at the destination will be specified for each user. The second one is an internal parameter of the SCCP and will be called SCCP component of the signalling connection establishment time. It will be specified in this SCCP performances Recommendation.

Moreover it is possible to specify here the maximum signalling connection establishment time. It is equal to the connection establishment timer (see Recommendation Q.714).

signalling connection reset delay

Rec. Q.716

This parameter is the elapsed time between a N-RESET request and the corresponding N-RESET confirmation primitive for a successful signalling connection reset.

signalling connection unsolicited reset and premature release probability

Rec. Q.716

This parameter gives the probability that a connection release or reinitialization due to the SCCP occurs on a signalling connection during a given time.

The unavailability of a SCCP relation is an internal parameter to be considered when calculating the probability of a connection release occurence due to the SCCP.

signalling data link

Gloss. (VI.3)

A combination of two data channels operating together in a single signalling system.

signalling data link

Rec. Q.9

A combination of two data channels operating together in a single signalling system. The data channels operate in opposite directions and at the same data rate.

signalling end point

Glos. (VI.7, VI.8, VI.9)

A node in a signalling network associated with a call originating local exchange, terminating local exchange, or gateway exchange.

signalling information

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The information content of a signal or a signalling message.

signalling information (field) (SIF)

Glos. (VI.7, VI.8, VI.9)

The bits of a message signal unit which cary information particular to a certain user transaction and always contain a label.

signalling interworking

Rec. Q.300

Signalling interworking is the controlled transfer of signalling information across the interface between signalling systems where the significance of the transferred information is identical or where the significance is translated in a defined manner.

signalling link

Gloss. (VI.3)

A combination of two signalling channels operating together in a single signalling system.

signalling link

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A transmission means which consists of a signalling data link and its transfer control functions, used for reliable transfer of a signalling message.

signalling link activation

Glos. (VI.7, VI.8, VI.9)

The process of making a signalling link ready to carry signalling traffic.

signalling link blocking

Glos. (VI.7, VI.8, VI.9)

An event causing the unavailability of a signalling link, typically consisting in a "processor outage" condition at one end of that signalling link.

signalling link code (SLC)

Glos. (VI.7, VI.8, VI.9)

A field of the label in the signalling network management messages, which indicates the particular signalling link to which the message refers among those interconnecting the two involved signalling points.

signalling link deactivation

Glos. (VI.7, VI.8, VI.9)

The procedure by which a signalling link is taken out of service.

signalling link error monitoring

Glos. (VI.7, VI.8, VI.9)

This comprises two functions: initial alignment error rate monitoring and signal unit error rate monitoring.

signalling link failure

Glos. (VI.7, VI.8, VI.9)

An event causing the unavailability of a signalling link, typically consisting in a failure in signalling terminal equipment or in the signalling data link.

signalling link group

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A set of signalling links directly connecting two signalling points and having the same physical characteristics (bit rate, propagation delay, etc.).

signalling link management functions

Glos. (VI.7, VI.8, VI.9)

Functions that control and take actions, when required, to preserve integrity of locally connected signalling links, e.g. by reconfiguration of the signalling link sets.

signalling link restoration

Glos. (VI.7, VI.8, VI.9)

An event consisting in the initial alignment procedure on a signalling link following the removal of the previous causes of failure; if no other causes of unavailability exist (i.e. a signalling link blocked condition) then the signalling link becomes available.

signalling link selection field

Glos. (VI.7, VI.8, VI.9)

A field of the routing label which is typically used by the message routing function to perform load sharing among different signalling links/link sets.

signalling link set

Glos. (VI.7, VI.8, VI.9)

A set of one or more signalling links directly connecting two signalling points.

signalling link unblocking

Glos. (VI.7, VI.8, VI.9)

An event consisting in the removal of the previous causes of signalling link blocking; if no other causes of unavailability exist (i.e. a signalling link failed condition), then the signalling link becomes available.

signalling management application process (SMAP)

Glossary

The application process associated with the operation, administration, and management of the Signalling System No. 7.

signalling message

Glos. (VI.7, VI.8, VI.9)

An assembly of signalling information pertaining to a call, management transaction, etc., that is transferred as an entity.

signalling message

Rec. Q.9

An assembly of signalling information pertaining to a call, management transaction, etc., comprising also elements for delimitation, sequencing and error control, that is transferred as an entity.

signalling message handling functions

Glos. (VI.7, VI.8, VI.9)

Functions that, at the actual transfer of a message, direct the message to the proper signalling link or User Part.

(signalling) message route

Rec. Q.9

The signalling link or consecutive links connected in tandem that are used to convey a signalling message from an originating point to its destination point.

signalling message transfer delay

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

The time a message will take to pass through the signalling network.

signalling network

Glos. (VI.7, VI.8, VI.9)

A network used for signalling by one or more users and consisting of signalling points and connecting signalling links.

signalling network

Rec. Q.9

A network used for signalling and consisting of signalling points and connecting signalling links.

signalling network

Rec. Q.9

A network used for transfer of signalling messages and consisting of signalling points and connecting common channel signalling links.

signalling network components

Glos. (VI.7, VI.8, VI.9)

Components which make up the signalling network, such as signalling points and common channel signalling links.

signalling network functions

Glos. (VI.7, VI.8, VI.9)

The functions which are performed by the Message Transfer Part at level 3 and are common to, and independent of, the operation of individual signalling links. They include the signalling message handling functions and the signalling network management functions.

signalling network management functions

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Functions that, on the basis of predetermined data and information about the status of the signalling network, control the current message routing and configuration of signalling network facilities.

signalling-network-management signals

Rec. Q.256

Information regarding the conditions of signalling links which may be required to modify signal routings. This excludes information relevant to the signals concerned with individual calls or speech circuits.

signalling point

Glos. (VI.7, VI.8, VI.9)

A node in a signalling network which either originates and receives signalling messages, or transfers signalling messages from one signalling link to another, or both.

signalling point

Rec. Q.9

A node in a signalling network which either originates and receives signal messages, or transfers signal messages from one signalling link to another, or both.

Note – Signalling point may be qualified by a prefix, such as International, to denote a specific application.

signalling point code

Rec. Q.762

Information sent in a release message to identify the signalling point in which the call failed.

signalling point code

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A binary code uniquely identifying a signalling point in a signalling network. This code is used, according to its position in the label, either as destination point code or as originating point code.

signalling point numbering plan

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A formal description of the method of translating end-user provided address information into an address understandable by the signalling network.

signalling point restart

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure that allows a graceful increase of traffic to a restarting node.

signalling point with SCCP relay function (SPR)

Glos. (VI.7, VI.8, VI.9)

A node in a signalling network with SCCP relay functions.

(signalling) protocol

Rec. Q.9

A protocol used for effecting the exchange of signalling information between network service users, or between exchanges and/or other network entities.

signalling relation

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A relation between two signalling points involving the possibility of information interchange between corresponding User Part functions.

signalling route

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A predetermined path described by a succession of signalling points that may be traversed by signalling messages directed by a signalling point towards a specific destination point.

signalling route management functions

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Functions that transfer information about changes in the availability of signalling routes in the signalling network.

signalling route set

Rec. Q.9

The combination of all the permitted signalling routes that may be used to pass signalling messages from a signalling point to a specific destination.

signalling route-set-test procedure

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure, included in the signalling route management which is used to test the availability of a given signalling route, previously declared unavailable.

signalling routing

Rec. Q.9

Procedures for directing the choice and allocation of signalling paths.

signalling system

Gloss. (VI.3)

The combination of all of the equipment and channels necessary to provide signalling for one or more groups of circuits between two No. 6 exchanges. It thus includes a data link, signalling terminal equipment, and necessary portion of the processor at each No. 6 exchange.

signalling system

Rec. Q.9

The procedures for the interpretation and use of a repertoire of signals together with the hardware and/or software needed for the generation, transmission, and reception of these signals.

signalling time-slot

Rec. G.701

A time slot occupying a specific position in a frame and allocated to the transmission of signalling.

signalling time slot

Rec. Q.9

A time slot starting at a particular phase in each frame and allocated to the transmission of signalling.

signalling traffic management functions

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Functions that control and, when required, modify routing information used by the Message routing function and control the transfer of signalling traffic in a manner that avoids irregularities in the message flow.

signalling transfer delay

Rec. Q.543

The exchange signalling transfer delay is the time taken for the exchange to transfer a message from one signalling system to another with minimal or no other exchange actions required. The interval is measured from the instant that a message is received from a signalling system until the moment the corresponding message is passed to another signalling system. Examples of messages are ALERT to ADDRESS COMPLETE, ADDRESS COMPLETE to ADDRESS COMPLETE, CONNECT to ANSWER, RELEASE to DISCONNECT, etc.

For transit connections, the requirements of the appropriate signalling system Recommendation should apply, e.g. Recommendations Q.725 and Q.766 for T_{cu} value (case of a simple message).

Note – User-to-user signalling may imply additional functions in the exchanges, e.g. charging, flow control, etc. The requirements for user-to-user signalling transfer delay and the impact of user-to-user signalling on exchange performance is for further study.

signalling transfer point (STP)

Glos. (VI.7, VI.8, VI.9)

A signalling point with the function of transferring signalling messages from one signallig link to another and considered exclusively from the viewpoint of the transfer.

significance level (of a statistical test) α

Suppl. No. 6 (II.3)

The given value which limits the *probability* of the *null hypothesis* being rejected, if the *null hypothesis* is true.

Note – The *critical region* is determined in such a way that if the *null hypothesis* is true, the *probability* of this *null hypothesis* being rejected should be not more than this given value.

significant condition

Rec. R.140

Condition of a signal element defining the meaning of that signal element, in accordance with a code.

Note – This condition can be a function of the value of the signal element e.g. amplitude, frequency, phase or a combination of these.

significant instant; significant instant of a digital signal

Rec. G.701

The instant at which a signal element commences in a discretely-timed signal.

significant instant

Rec. R.140

That instant at which a change-over occurs.

Note – The instant of change from one significant condition to another.

significant instant of a digital signal

See:
significant instant; significant instant of a digital signal.

significant interval

Rec. R.140

Time interval between two consecutive significant instants.

significant number

See:
national (significant number).

significant points

Rec. E.710

Points in the network where traffic flows and grades of service should be evaluated.

simple authentication

Rec. X.509

Authentication by means of simple password arrangements.

simple connection

Rec. I.140

A connection consisting of only one connection element.

simple expression

Rec. Z.100

A *simple expression* is an *expression* which only contains *operators, synonyms,* and *literals* of the predefined *sorts.*

simple multipoint circuit

Rec. V.7

A multipoint circuit that does not contain more than two data circuit terminating equipments (DCEs) in series and that provides for centralized multipoint operation.

simple parameter argument

Rec. Z.341

A *parameter argument* made up of only one *information unit.*

simple transmissions

Rec. D.180

One-way transmissions from a point of origin in one country to a receiving point in another

simple type

Rec. X.208

A type defined by directly specifying the set of its values.

simplex

Rec. R.140

Designating or pertaining to a mode of operation or the equipment concerned, by which information can be transmitted in either direction but not simultaneously, between two points.

sine-squared pulse

Rec. G.601

A unidirectional pulse defined by the expression:

$$y = K \sin^2 (\pi t/2T);\ 0 \leqslant t \leqslant 2T$$

$$y = 0;\ t < 0 \text{ and } t > 2T$$

where

K is the amplitude

T is the *pulse duration* at half-amplitude

t is the time.

single channel voice-frequency telegraphy (SCVFT)

Rec. R.140

Voice-frequency telegraphy providing a single telegraph channel in a telephone type channel.

Note – The term SCVF is usually applied to a telegraph circuit (32.02) rather than to a telegraph channel (32.01).

single clique working (point-to-point operation)

Rec. P.84

The system of two DCMEs interconnected by one set of bearer channels. This working of a DCME is the most efficient mode of operation for a DCMS. It utilizes the maximum bearer pool capacity and the minimum inter-DCME control information. It is an exclusive mode of operation. Another term for point-to-point is circuit-based DCMS. Figure 1/P.84 shows an example of point-to-point or circuit-based DCMS.

single current transmission

Rec. R.140

Direct current transmission effected by applying voltages of the same polarity, producing currents of the same direction.

single-ended synchronization

Rec. G.701

A method of synchronizing a specified synchronization node with respect to another synchronization node in which synchronization information at the specified node is derived from the phase difference between the local clock and the incoming digital signal from the other node.

single-line subscriber line

Recs. Z.334, Z.341

A line between a public exchange and a subscriber set.

single-valued attribute

Rec. X.413

An attribute which can only have one value associated with it.

sixty four (64) kbit/s connected ratio

Rec. G.763

The ratio of the number of non-preassigned TCs which are classified as 64 kbit/s connect-called plus 64 kbit/s connect-calling, to the total number of non-preassigned TCs. The ratio is expressed as a percentage to the nearest integer.

$$\text{64 kbit/s connected ratio} = \frac{\sum_{N} \text{No. of non-preassigned 64 kbit/s TCs connect-called and connect-calling}}{\text{No. of non-preassigned TCs} \times N} \times 100$$

The data activity ratio includes hangover time.

sixty four (64) kbit/s DLC-on ratio

Rec. G.763

The ratio of the number of frames during which DLC for 64 kbit/s unrestricted is ON, to the total number of frames. The ratio is expressed as a percentage to the nearest integer.

$$\text{64 kbit/s DLC-on ratio} = \frac{\text{No. of sampled DCME frames with DLC for 64 kbit/s ON}}{N} \times 100$$

sixty four (64) kbit/s failed seizures ratio

Rec. G.763

The percentage of 64 kbit/s on demand seizure (S64) attempts that receive a 64 kbit/s negative acknowledgment (S64 NACK) from the DCME, given as an integer.

$$\text{64 kbit/s FSR} = \frac{\text{Count of S64 NACK signals sent in STI}}{\text{Count of S64 signals received in STI}} \times 100$$

sixty four (64) kbit/s unrestricted digital data ratio

Rec. G.763

The radio of the number of trunk channels carrying 64 kbit/s unrestricted digital data signals, to the total number of trunk channels averaged over a fixed interval of time.

size limit

Rec. F.500

A service control which indicates the maximum number of objects to be returned in the results of a search or list operation (the control is only applicable to those operations). If the list size is exceeded, any results equal in number to the size limit should be returned, with the indication that the results are incomplete due to the size limit constraint. If this component is omitted, no maximum is implied.

skew

Rec. T.0

A defect in reproduction in which lines that should be at right-angles to the scanning direction are inclined to it, owing to a difference between the scanning speeds at transmission and reception.

slave clock

Rec. G.810

A clock whose timing output is phase-locked to the timing signal received from a higher quality clock. Requirements for slave clocks are given in Recommendation G.812.

Note – The highest quality slave clock is sometimes referrred to as a transit node clock, or a Stratum 2 clock. The second highest quality slave clock is sometimes referred to as a local node clock, or a Stratum 3 clock.

slip

Rec. G.810

The repetition or deletion of a block of bits in a synchronous or plesiochronous bit stream due to a discrepancy in the read and write rates at a buffer.

slip (deprecated)

See:

controlled slip.

smooth traffic

Rec. E.600

Traffic that has a peakedness factor less than 1.

soft line terminator

Rec. T.411

A line terminator that is allowed to be removed, relocated or replaced in a subsequent layout process.

software

Rec. Q.9

Computer programs, procedures, rules and any associated documentation concerned with the operation of a system.

solicited guidance; on-line help

Rec. Z.341

System's capability to provide a user with information on how to use the system while using it.

solicited information indicator

Rec. Q.762

Information sent in an information message to indicate whether or not the message is a response to an information request message.

solid fault

See:

persistent fault; permanent fault; solid fault.

SORT

Rec. Z.333

Rearrange the order of a data set according to specified (or default) criteria. The contents of the original set is not affected by this action, only its order.

sort

Rec. Z.341

An *action* to rearrange the order of a *data set* according to specified (or default) criteria; the contents of the original set is not affected by this *action*, only its order.

sort

Rec. Z.100

A *sort* is a set of *values* with common characteristics. *Sorts* are always nonempty and disjoint.

sound- and television-programme connections

Rec. D.180

An international sound- or television-programme connection consists of one or more unidirectional circuits between broadcasting organizations and comprises:

a) the point to be regarded as that of the origin of the transmission (Point A of Figures 1/D.180 and 2/D.180);

b) the outgoing national circuit which connects Point A to the first ISPC or ITPC (Point B);

c) an international circuit comprised of any combination of international or national terrestrial, submarine cable, radio or satellite circuits or circuit sections. (A satellite circuit consists of a satellite section, including the earth stations, extended by terrestrial means to the ISPCs or ITPCs at the ends of the satellite circuit);

d) the incoming national circuit which connects the last ISPC or ITPC (Point C) to Point D;

e) the point of destination of the transmission (Point D).

The various parts of international connections are illustrated in Figures 1/D.180 and 2/D.180.

sound-programme circuit

Rec. D.180

A unidirectional circuit for the transmission of a sound programme or a sound component of a television programme.

Note – More than one such sound-programme circuit may be required for association with a single television circuit.

The various types of audio circuits are described in Recommendation D.180 § 3.

sound-programme circuit-section

Rec. J.13

Part of an international sound-programme circuit between two stations at which the programme is transmitted at audio frequencies.

The normal method of providing a sound-programme circuit section in the international network will be by the use of carrier sound-programme equipment. Exceptionally sound-programme circuit sections will be provided by other means, for example, by using amplified unloaded or lightly loaded screened-pair cables or by using the phantoms of symmetric-pair carrier cables. See Fig. 1/J.13.

sound-programme circuit section

Rec. N.1

The unidirectional national or international sound-programme transmission path between two stations at which the programme is accessible at audio frequencies. The transmission path may be established via terrestrial or single destination satellite routing. (See Note 2 to Recommendation N.1 and Figures 1/N.1 and 3/N.1.)

sound retrieval service

Rec. I.113

On-demand (user initiated) retrieval of music and other audio information.

source identification

Rec. N.13

An announcement should be used to identify the originating point of the test signals and should be preferably as short as possible. It is suggested that such an announcement contain at least the following information:

- name of originating organization;
- location;
- country.

The sound programme signal should be controlled by the sending broadcaster so that the amplitudes of the peaks only rarely exceed the peak amplitude of the permitted maximum (sine-wave test) signal.

source identifier

Rec. Z.341

One or more *information units* indicating the physical area where an *output* was generated.

source language

Rec. Q.9

A language from which statements are translated.

source/sink relationship

Rec. T.62

User information is transferred from a source to a sink.

space

See:
mark; space; marking; spacing.

space (between characters and words in Morse code)

Rec. R.140

A signal element of space condition and nominal duration of two unit intervals between characters and six unit intervals between words.

space condition (in Morse code only)

Rec. R.140

Designation given to one of the two significant conditions in Morse code, the other condition being designated "mark".

space division

Rec. Q.9

The separation in the space domain of a plurality of transmission channels between two points.

space division switching

Rec. Q.9

The switching of inlets to outlets using space division techniques.

space signal

Rec. S.140

Signal corresponding to a *code combination* which causes the printing position to be advanced by the character pitch without printing.

spacing

See:

mark; space; marking; spacing.

spacing ratio

Rec. T.411

The ratio of line spacing to pel spacing.

spacing ratio

Rec. T.417

This attribute specifies the ratio between the line spacing and the pel spacing of the image represented by the content portion. This ratio is to be observed by the raster graphics content layout process (defined in Rec. T.416, § 10) in determining the block size, and by the imaging process (defined in Rec. T.416, § 11) to avoid image distortion.

span

Rec. X.413

A component in the summarize abstract-operation result containing the lowest and highest sequence-numbers of the entries that matched the selection criteria.

spark-over

Rec. K.12

An electrical breakdown of a discharge gap of a gas discharge tube. Also referred to as "breakdown".

spark-over voltage

Rec. K.12

The voltage which causes spark-over when applied across the terminals of a gas discharge tube.

spark-over voltage, a.c.

Rec. K.12

The minimum r.m.s. value of sinusoidal voltage at frequencies between 15 Hz and 62 Hz that results in spark-over.

spark-over voltage, d.c.

Rec. K.12

The voltage at which the gas discharge tube sparks over with slowly increasing d.c. voltage.

spark-over voltage, impulse

Rec. K.12

The highest voltage which appears across the terminals of a gas discharge tube in the period between the application of an impulse of given waveshape and the time when current begins to flow.

SPC system

See:

stored program controlled (SPC system; SPC system).

SPDU identifier (SI)

Rec. X.225

Heading information that identifies the SPDU concerned.

special dial tone

Rec. E.182

A tone advising that the exchange is ready to receive call information and inviting the user to start sending call information, at the same time reminding the user that special conditions apply to the termination from which the call is being made.

special information tone

Rec. E.182

A tone advising the caller that the called number cannot be reached for reasons other than "subscriber busy" or "congestion".

The tone may also be used in conjunction with recorded announcements to signify that what the caller is about to hear is a recording. It should always be used to precede all call failure announcements.

special keys and directives information window area

Rec. Z.341

This *window area* should display *function key* labels and specifies about the use of *directives.*

specialized access

Recs. F.400, X.400

In the context of message handling, the involvement of specialized access units providing intercommunication between message handling services and other telecommunication services.

specific layout structure

Rec. T.411

A set of layout objects and associated content portions.

specific logical structure

Rec. T.411

A set of logical objects and associated content portions.

specific negative recorded announcement without supplementary information

Rec. E.182

A recorded announcement indicating to the user that the request for a particular supplementary service cannot be executed or that the call cannot be completed.

Examples

"Your order for call transfer cannot be executed."

"The called number is not obtainable because of a network fault."

specific positive recorded announcement with supplementary information

Rec. E.182

A recorded announcement complete with the supplementary information received indicating to the user that a certain condition is being established.

Example

"An alarm call is booked for 06.30."

specific positive recorded announcement without supplementary information

Rec. E.182

A recorded announcement indicating to the user that the request for a particular supplementary service has been accepted.

Example

"The call barring service is now in operation."

specific recorded announcement

Rec. E.182

A recorded announcement giving specific information about a call attempt or control order.

specification

Rec. Z.100

A *specification* is a definition of the requirements of a *system.* A *specification* consists of *general parameters* required of the *system* and the *functional specification* of its required *behaviour. Specification* may be also used as a shorthand for "*specification* and/or *description*", e.g., in *SDL specification* or *system specification.*

specification (in SDL)

Rec. Q.9

The requirements of a system are defined in a specification of that system. A specification consists of *general parameters* required of the system and the *functional specification (FS)* of its required behaviour. (See Recommendation Z.100, §§ 1.1.)

specification and description language (SDL)

Rec. Q.9

The CCITT language used in the presentation of the *functional specification* and *functional description* of the internal logic processes in stored programmed control (SPC) switching systems.

specification and description language (SDL)

Rec. Z.341

The specification and description language specified in the Z.100-series Recommendations.

CCITT Specification and Description Language (*SDL*)

Rec. Z.100

CCITT *Specification and Description Language (SDL)* is a formal language providing a set of constructs of the *specification* for the functionality of a system.

speech

Rec. I.140

Digital representation of speech coded according to a specified encoding rule (e.g. A-law, μ-law).

speech activity factor

Rec. G.763

The radio of the time speech signals with their corresponding hangover time and front-end delay occupy a trunk channel, to the total measuring time, averaged over the total number of trunk channels carrying speach.

speech digit signalling

Recs. I.112, Q.9

A type of channel associated signalling in which digit time-slots primarily used for the transmission of encoded speech are periodically used for signalling.

speech information transfer

Rec. Q.71

This bearer service category is intended to support speech.

The digital signal at the S/T reference point is assumed to conform to the internationally agreed encoding laws for speech (i.e. Recommendation G.711 A-law, μ-law) and that the network may use processing techiques appropriate for speech such as analogue transmission, echo cancellation and low bit rate encoding. Hence, bit integrity is not assured. This bearer service is not intended to support modem derived voiceband data.

All CCITT Recommendations for the transfer of speech information in the network apply to this service.

speech level

Rec. P.10

A general term embracing speech volume, active speech level and any other similar quantity expressed in decibels relative to a stated reference.

speech plus duplex equipment; S + D equipment

Rec. R.140

Equipment for intraband telegraphy providing a duplex telegraph circuit by the use of two telegraph carrier frequencies.

speech plus simplex equipment; S + S equipment

Rec. R.140

Equipment for intraband telegraphy providing a simplex telegraph circuit by the use of a single telegraph carrier frequency.

speech volume

See:
volume; speech volume.

speech volume penalty

Rec. P.10

The reduction in a subscriber's talking level (usually expressed as a function of a speech sidetone rating, e.g. STMR) due to the presence of sidetone.

speed conversion

Rec. R.140

The conversion of the modulation rate of the received signal to a different modulation rate suitable for the subsequent equipment.

speed converter concentrator

U.140

The temporary storing of data arriving from slow channels and their retransmission on high speed channels and vice versa.

splitting

Rec. X.200

A function within the (N)-layer by which more than one (N – 1)-connection is used to support one (N)-connection.

Note – The term splitting is also used in a more restrictive sense to refer to the function performed by the sending (N)-entity while the term recombining is used to refer to the function performed by the receiving (N)-entity.

splitting (in VF signalling)

Rec. Q.9

A switching function which provides disconnection or isolation of that part of a channel which:

- preceeds the point where the signalling frequency(ies) is(are) injected;
- succeeds the point where the signal receiver is connected.

Splitting when receiving a signal prevents false operation of signalling equipment by signal reflections and signal spill-over.

Splitting when sending a signal prevents interference from a preceding circuit or near-end equipment.

spontaneous menu

Rec. Z.341

A *menu* that is automatically given at the start of an *information entry.*

spontaneous output

Rec. Z.341

An *output* generated by internal events of the *system*, e.g., an alarm.

SS-user

See:

session protocol machine.

ST signal; end-of-pulsing (sent in the forward direction)

Rec. Q.310

This register signal is sent to indicate that there are no more address signals to follow. The signal is always sent in semi-automatic as well as automatic working.

ST signal (Signalling System No. 5)

See:

end-of-pulsing signal (sent in the forward direction; ST signal (Signalling System No. 5.

stability loss

Rec. G.100

The lowest value of the semi-loop loss in the frequency band to be considered.

stand-alone concentrator

See:

line concentrator; stand-alone concentrator.

standard attribute

Recs. F.400, X.400

An attribute whose type is bound to a certain class of information.

standard attribute

Rec. X.402

An attribute whose type is bound to a class of information by Recommendation X.402.

The value of every standard attribute except terminal-type is either a string or a collection of strings.

standard deviation δ

Suppl. No. 6 (II.3)

The positive square root of the *variance.*

standard digital analyzer

Rec. G.714, G.715

A hypothetical device which is absolutely ideal, i.e. a perfect digital-to-analogue converter followed by an ideal low pass filter (assumed to have no attenuation frequency distortion and no envelope delay distortion), and which may be simulated by a digital processor.

standard digital generator

Rec. G.714, G.715

A hypothetical device which is absolutely ideal, i.e. a perfect analogue-to-digital converter preceded by an ideal low pass filter (assumed to have no attenuation frequency distortion and no envelope delay distortion), and which may be simulated by a digital processor.

standardized option

Rec. F.200

A service feature, defined by CCITT as an addition to the basic requirements, that may optionally be used by subscribers in the international Teletex service.

standardized option

Rec. F.710

A service feature defined by CCITT as an addition to the basic requirements, that may optionally be used by subscribers in the international TCS. These options may be provided from the networks as well from the terminals.

standby-ready-acknowledgement signal

Rec. Q.255

A signal sent on the standby reserve link in response to a standby-ready signal and indicating that the error rate on that link has met the requirements of the *one-minute proving period.*

standby-ready signal

Rec. Q.255

A signal sent on a standby reserve link to indicate that the error rate on that link has met the requirements of the *one-minute proving period.*

standby redundancy

Rec. M.60, Suppl. No. 6 (II.3)

That *redundancy* wherein one means for performing a *required function* is intended to operate, while the alternative means are inoperative until needed.

standby state

Suppl. No. 6 (II.3)

A non-operating *up state* during the *required time.*

stand-by time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *stand-by state.*

START

Rec. Z.333

Initiate a procedure or process.

start

Rec. Z.100

The *start* in a *process* is interpreted before any *state* or *action.* The *start* initializes the *process* by replacing its *formal parameters* by the *actual parameters* as specified in the *create.*

start-aligned

Rec. T.411

1) The result of a layout or imaging process that positions the sequence of character images for a line such that the position point of the first character image of that sequence is positioned on the line home position or at the point specified by the first line indentation or overhang if any.

2) A tabulation alignment that positions the sequence of character images for a specified character string such that the position point of the first character image of that sequence is positioned at the tabulation stop.

start date

Recs. Z.336, Z.341

Start day for the measurement execution.

start-dialling signal; proceed-to-send signal (sent in the backward direction)

Rec. Q.310

This line signal is sent from the incoming exchange subsequent to the sending of a delay-dialling signal to indicate that the incoming register equipment has been connected and is ready to receive address signals.

start edge

Rec. T.411

The edge of the positioning area of a basic layout object that is in the direction opposite to the character path.

start element

Rec. R.140

A start signal limited to one signal element generally having the duration of a unit interval.

start-of-pulsing signal

See:

KP signal; start-of-pulsing signal (sent in the forward direction).

start-of-pulsing signal (sent in the forward direction); KP signal (Signalling System No. 5)

Rec. Q.140

This numerical type signal is sent on receipt of a proceed-to-send signal and may be used to prepare the incoming international register for the receipt of the subsequent numerical signals.

Two different KP signals are provided to discriminate between terminal and transit calls:

a) KP1, terminal; and

b) KP2, transit.

start signal

Rec. R.140

In start-stop transmission, a signal preceding each group of signal elements which prepares the receiving device for the reception of the elements of the group.

start-stop apparatus

Rec. S.140

Telegraph apparatus designed for a start-stop system.

start-stop telegraph signal

Rec. R.140

A telegraph signal containing sequences of unit elements, each sequence being of equal duration and corresponding to a transmitted character and preceded by a start element and followed by a period of condition Z, the duration of which is not fixed.

start-stop transmission

Rec. R.140

A transmission process using start-stop signals.

start-stop transmission

Rec. V.7

A form of anisochronous transmission in which each group of contiguous data units is preceded by a start signal and is terminated by a stop signal.

start time

Recs. Z.336, Z.341

Time for beginning the recording period in a recording day.

starting signal

Rec. V.25

Binary 1, synchronizing signal or equalizer training signal, as appropriate.

start/stop date

Rec. M.251

The start/stop day of a test/measurement on a routine basis.

start/stop time

Rec. M.251

The start/stop time of a test/measurement on a routine basis.

state

Rec. Z.100

A *state* is a condition in which a *process instance* can consume a *signal.*

state (in SDL)

Rec. Q.9

A state is a condition in which the action of a *process* is *suspended* awaiting an *input.* (See Recommendation Z.100, § 2.6.3.)

state area

Rec. Z.100

A *state area* is the *SDL/GR* representation of one or more *states.*

state or province name

Rec. F.500

Identifies the geographical subdivision in which the named object is physically located or with which it is associated in some other important way.

state picture

Rec. Z.100

A *state picture* is a *state symbol* incorporating pictorial elements used to extend *SDL/GR* to *SDL/PE.*

state-transition diagram

Suppl. No. 6 (II.3)

A diagram showing the set of possible states of an *item* and the possible one-step transitions between these states.

statement of call account

Suppl. No. 2 (II.4)

The sending by the network upon request of a subscriber, an Administration, *closed user group* or *private network,* of a detailed account of his call charges either since his last request or over a nominated period.

static conformance

Rec. X.209

A statement of the requirement for support by an implementation of a valid set of features from among those defined by this Recommendation.

static conformance requirements

Rec. X.290

Constraints which are placed in OSI* Recommendations* to facilitate interworking by defining the requirements for the capabilities of an implementation.

Note – Static conformance requirements may be at a broad level, such as the grouping of functional units and options into protocol classes, or at a detailed level, such as the ranges of values that are to be supported for specific parameters or timers.

static conformance review

Rec. X.290

A review of the extent to which the static conformance requirements are met by the IUT, by comparing the static conformance requirements expressed in the relevant Recommendation(s)* with the PICS and the results of any associated capability testing.

static multiplex

Recs. G.960, I.430

A multiplex where each tributary channel is assigned to one or more main-stream time-slots and the assignment is fixed.

static multiplex

Rec. Q.9

Digital bit streams between reference points into which lower bit rate channels have been combined, each into an assigned channel or slot.

staticizer (deprecated)

See:
serial to parallel converter;
serial to parallel converter; deserializer.

statistic

Suppl. No. 6 (II.3)

A function of the *observed values* derived from a sample.

statistical; ATM statistical transfer mode

Rec. I.113

A specific transfer mode of the asynchronous transfer mode (ATM) in which the average information transfer capacity specified for a given service is provided to the user throughout a call.

statistical multiplex (deprecated)

See:
dynamic multiplex.

statistical test

Suppl. No. 6 (II.3)

A procedure that is intended to decide whether a hypothesis about the distribution of one or more populations should be rejected or not rejected (accepted).

Note 1 – The decision taken is a result of the value of an appropriate *statistic* or *statistics*, calculated from values observed in samples taken from the populations under consideration. As the value of the *statistic* is subject to random variations, there is some risk of *error* when the decision is taken.

Note 2 – It is important to note that, generally speaking, a *test* assumes *a priori* that certain assumptions are fulfilled (for example, assumption of independence of the observations, assumption of normality, etc.). These assumptions serve as a basis of the *test.*

statistical tolerance interval

Suppl. No. 6 (II.3)

A random interval limited by two *statistics* or by a single *statistic*, such that the *probability* that a fraction of the population, equal to or greater than a given value between 0 and 1, is covered by this interval is equal to a given value $1 - \alpha$, where α is the *significance level.*

statistics on request

Suppl. No. 2 (II.4)

Provision for the network to send to the subscriber at this request, details of his calls under defined headings, e.g. international calls, national calls, calls to certain subscribers or total of all calls.

status

Rec. M.30

Information on the current state of an NE.

status

Rec. Q.762

Information sent in a circuit group supervision message (e.g. circuit group blocking) to indicate the specific circuits, within the range of circuits stated in the message, that are affected by the action specified in the message.

status field (SF)

Glos. (VI.7, VI.8, VI.9)

The bits of a link status signal unit which indicate one of the major signalling link states.

status report (SRPT)

Rec. U.82

A type of SMXU used to report the status of a message and sent only in response to a SRQ.

status request (SRQ)

Rec. U.82

A type of SMXU used to request, from a destination telex SFU, the present status of the message.

status window area

Rec. Z.341

This *window area* should contain alarm indicators of the system being controlled, trouble reporting information from connected equipment, and message waiting indicators.

steady-state availability

See:
(asymptotic) availability A; (steady-state) availability.

steady-state throughput

Rec. X.135

The steady-state throughput for a virtual connection is the value to which a throughput measurement converges as the duration of the observation period increases with statistically constant load on the virtual connection. Assuming successful transfer, steady-state throughput is the same when measured at every pair of section boundaries of the virtual connection.

step stress test

Suppl. No. 6 (II.3)

A *test* consisting of several stress levels applied sequentially for periods of equal *time duration* to an *item*, in such a way that during each *time interval* a stated stress level is applied and the stress level is increased from one *time interval* to the next.

Rec. Z.333

Terminate the specified activity and leave the system in a defined state.

stop

Rec. Z.100

A *stop* is an action which terminates a *process instance*. When a *stop* is interpreted, all *variables* owned by the *process instance* are destroyed and all *retained signals* in the *input port* are no longer accessible.

stop date

Recs. Z.336, Z.341

Stop day for the measurement execution.

stop date
See:
start/stop date.

stop element

Rec. R.140

A stop signal limited to one signal element having any duration equal to or greater than a specified minimum value.

stop signal

Rec. R.140

In start-stop transmission, a signal following each group of signal elements which prepares the receiving device for the reception of the subsequent start signal, or brings the device to rest.

stop time

Recs. Z.336, Z.341

Time for terminating a recording period in a recording day.

stop time
See:
start/stop time.

storage and transfer system (ST/SYS)

Rec. X.402

Contains one or more MSs; one MTA; optionally, one or more AUs; and no UA.

A ST/SYS can serve multiple users.

storage installation

Suppl. No. 2 (II.4)

An installation that provides a *store-and-forward* function.

Note – This installation may be provided at a *terminal* or at a centralized installation.

storage keyboard

Rec. S.140

An alphanumeric keyboard in which the combination set up by the depression of a key does not directly control the transmitter but is transferred to one or more sets of storage members for subsequent control of the transmitter.

storage of call content

Suppl. No. 2 (II.4)

The storage for a specified length of time by the network at the subscriber's request of the contents of some or all of his calls sent or received.

storage system (S/SYS)

Rec. X.402

Contains one MS and neither a UA, a MTA, nor a AU.

A S/SYS is dedicated to a single user.

storage within the network

Rec. F.200

A network-provided facility that will accept and store messages and relay them to the addressee(s), or (in case of store-and-retrieve) will be retrieved by the addressee.

store-and-forward

Suppl. No. 2 (II.4)

The process of storing *messages* or parts of messages and their subsequent transmission to the designated address or addresses.

store-and-forward (international) (prefix 21)

Recs. E.216, F.126

Prefix 21 is used for gaining access to a store-and-forward unit (SFU) for international calls.

store-and-forward (national) (prefix 22)

Recs. E.216, F.126

Prefix 22 is used for gaining access to a store-and-forward unit (SFU) for national calls.

store-and-forward conversion facility (CF using store-and-forward principles)

Suppl. No. 1 (II.4)

CFs that "store" the received telex (or teletex) messages before "forwarding" them to the called teletex (or telex) terminal; see the definition of *real conversion facility.*

store-and-forward switching

See:
channel switching;
message switching; store and forward switching.

store and forward unit (SFU)

Rec. U.82

Computer equipment with associated storage that accepts messages from telex subscribers for subsequent delivery to specified telex address or addresses. Conversational mode operation is not provided.

stored-messages

Rec. X.413

The most important information-base in Recommendation X.413, used to store entries containing messages and reports delivered by the MTS to the MS.

stored program control (SPC)

Recs. Q.9, U.140

The control of an exchange by means of a set of instructions which are stored and can be modified.

stored program controlled (SPC) system; SPC system

Rec. Z.341

A system (this includes switching *systems*) that provides telecommunication services.

street address

Recs. F.400, X.400

A standard attribute in a postal address giving information for the local distribution and physical delivery, i.e. the street name, the street identifier (like street, place, avenue) and the house number.

street address

Rec. F.500

An attribute type which specifies a site for the local distribution and physical delivery in a postal address, i.e. the street name, place, avenue and the house number. When used as a component of a directory name, it identifies the street address at which the named object is located or with which it is associated in some other important way.

stress analysis

Suppl. No. 6 (II.3)

A quantitative or qualitative determination of the physical, chemical or other stresses an *item* is subjected to under given use conditions.

stress model

Suppl. No. 6 (II.3)

A mathematical model which describes how a *reliability performance measure* of an *item* varies as a function of the applied stresses.

stretching

Rec. M.30

Holding the indication of an alarm condition for a predetermined amount of time, even after the condition resolves to increase the chance that the TMN has scanned the indication.

string

Rec. Z.100

String is a predefined *generator* used to introduce lists. The predefined *operators* include Length, First, Last, Substring and concatenation.

strong authentication

Rec. X.509

Authentication by means of cryptographically derived credentials.

structural element

Rec. T.411

The structural elements of a document are the content portion, the object and the object class.

structure

Rec. I.140

This attribute refers to the capability of the ISDN to deliver information to the destination access point or reference point in a structure (e.g. time interval for circuit mode, service data unit for packet mode), that was presented in a corresponding signal structured at the origin (access point or reference point).

structured sort

Rec. Z.100

A *structured sort* is a *sort* with implicit *operators* and *equations* and special *concrete syntax* for these implicit *operators.* The *structured sort* is used to make *values* with so called fields. The *values* of the fields can be *accessed* and *modified* independently.

structured type

Rec. X.208

A type defined by reference to one or more other types.

stuffable digit time-slot (deprecated)
See:
justifiable digit time-slot.

stuffing (deprecated)
See:
justification.

stuffing digit (deprecated)
See:
justifying digit.

stuffing rate (deprecated)
See:
justification rate.

stuffing ratio (deprecated)
See:
justification ratio.

stuffing service digit (deprecated)
See:
justification service digit.

subblock

Rec. Z.100

A *subblock* is a *block* contained within another *block. Subblocks* are formed when a *block* is *partitioned.*

sub-centre

U.140

A switching centre which serves a group of terminals and concentrates the traffic from this group towards a larger parent switching centre in which it is dependent for the routing of the whole of its traffic.

sub-channel

Rec. R.140

A tributary channel which is allocated a proportion of a standard channel rate.

Example: A transmission channel obtained by time-division and which is allocated a submultiple of an actual character transfer rate of a standard channel.

subchannel

Rec. R.140

In synchronous telegraphy a channel having a sub-multiple of the full character rate.

subchannel

Rec. Z.100

A *subchannel* is a *channel* formed when a *block* is *partitioned.* A *subchannel* connects a *subblock* to a boundary of the *partitioned block* or a *block* to the boundary of a *partitioned channel.*

subclass

Recs. F.500, X.501

Relative subordinate to a superclass, an object class derived from a superclass. The members of the subclass share all the characteristics of another object class (the superclass) and additional characteristics possessed by none of the members of that class (the superclass).

sub-control station

Recs M.60, M.90

A sub-control station is a point within the general maintenance organization which fulfills the sub-control responsibilities of the circuit, group, supergroup, etc., digital section assigned to it.

sub-control station

Rec. R.140

A station, located on the circuit, responsible to the controlling testing station, and having responsibility for the quality of transmission on the section of the circuit within its territory.

subdivision

Rec. Z.341

A symbolic means in the *decomposition meta-language* of indicating the division of an entity into its constituent parts.

subframe

Rec. G.701

A sequence of noncontiguous time-slots within a frame, each occurring at n times the frame repetition rate where n is an integer >1.

subframe

Rec. Q.9

A sequence of noncontiguous sets of digits assembled within a frame, each set occurring at n times the frame repetition rate where n is an integer > 1.

subframe

Rec. R.140

A fixed number of time slots within a frame, which comply with the definition of a frame, but constitute a shorter cycle than the original frame.

subject

Recs. F.400, X.400

In the context of message handling, the information, part of the header, that summarizes the content of the message as the originator has specified it.

subject message

Recs. F.400, X.400

The message that is the subject of a report.

subject probe

Recs. F.400, X.400

The probe that is the subject of a report.

sublayer

Rec. X.200

A sub-division of a layer.

submarine system/overland system interconnection point

Rec. G.371

The interconnection points are defined as the output(s) S and the input(s) S' of the special equipments which ensure the passage between the frequency allocation used in the submarine cable system and a line-transmitted frequency allocation for an overland system (or part of such an allocation plan), so as to enable group, supergroup, or mastergroup translating equipment (depending on the capacity of the system) which conforms to CCITT Recommendations to be used on the other side of these interconnection points. See Figure /G.371.

submission

Recs. F.400, X.400

Direct submission or indirect submission.

submultiplex

Rec. R.140

A multiplex whose bearer is part of a higher-order multiplex.

subnetwork

Rec. X.200

A set of one or more intermediate open systems which provide relaying and through which end systems may establish network-connections.

Note – A subnetwork is a representation within the OSI Reference Model of a real network such as a carrier network, a private network or a local area network.

subnetwork

Rec. X.300

A functional abstraction of a set of one or more intermediate systems which provide relaying and through which end systems may establish network connection, only related to the lower three layers of the OSI model (see Recommendation X.200).

subnetwork-connection

Rec. X.200

A communication path through a subnetwork which is used by entities in the network layer in providing a network-connection.

subnetwork functionality

Rec. X.300

Functionalities residing within a subnetwork are related to the ways the subnetwork supports connections through it. These functionalities may differ in each type of subnetwork depending on the call control and data transfer phases.

subnetwork point of attachment

Rec. X.213

A point at which a real end system, interworking unit, or real subnetwork is attached to a real subnetwork, and a conceptual point at which a subnetwork service is offered within an end or intermediate system.

subnetwork point of attachment address

Rec. X.213

Information used in the context of a particular real subnetwork to identify a subnetwork point of attachment; or information used in the context of a particular subnetwork to identify the conceptual point within an end or intermediate system at which the subnetwork service is offered. This term is used interchangeably with the (equivalent) shortened form *subnetwork address.*

subnetwork service

Rec. X.300

A service supported by the protocols used in a subnetwork for an instance of communication. This service is the same at the service access points.

subnetwork type

Rec. X.300

A subnetwork with a functionality defined on the capability to support the OSI connection-mode network service. The term is only valid in this specific context.

subordinate reference

Rec. X.518

A knowledge reference containing information about the DSA that holds a specific subordinate entry.

subordinate/inferior

Rec. X.501

The converse of superior.

subordinates

Rec. T.412

This attribute identifies the set of objects immediately subordinate to the object for which this attribute is specified.

subrequest

Rec. X.518

A request generated by request decomposition.

subroutine

Rec. Q.9

A sequence set of statements which taken as an entity may be used in one or more programs and at one or more points in a program, as required for repetitive occurrence of the same task.

subscriber

Rec. F.500

A user of a telecommunication service, normally based on a contract with the provider of a public service.

subscriber access (deprecated)

See:

access connection element.

subscriber access maintenance centre (SAMC)

Recs. I.601, M.36, M.60

A SAMC represents a group of functions, network equipment elements and staff controlled by the Administration, which together have the responsibility and capability for maintenance functions and maintenance actions within the subscriber access, such as defined in Figure 2/I.601.

subscriber access maintenance entity (SAME)

Recs. M.36, M.60

The SAME controls the subscriber access maintenance functions and provides communications for such activities. The SAME might be distributed.

subscriber-busy signal (electrical)

Rec. Q.254

A signal sent in the backward direction indicating that the line(s) connecting the called party with the exchange is (are) engaged. The subscriber-busy signal will also be sent in case of complete uncertainty about the place where the busy or congestion conditions are encountered and in the case where a discrimination between subscriber-busy and national-network congestion is not possible.

subscriber cable (deprecated)

See:

installation cable.

subscriber call charge meter service

Suppl. No. 1 (II.2)

Meters at the subscriber's premises showing call charge units debited.

subscriber channel in a multiplexed DTE/DCE interface

*Series X**

A two-way path in a time division multiplexed link exclusively assigned in a multiplex DTE/DCE interface to carry call control information to the network and data between two subscribers.

subscriber data

Rec. Q.1003

All information concerning a specific MS which is required for service provisions, identification, authentication, routing, call handling, charging, operation and maintenance purposes. Some subscriber data are referred to as permanent subscriber data, i.e. they can only be changed by administrative means. Other data are temporary subscriber data which may change as a result of normal operation of the system. Some data are referred to as flexible length data, i.e. further values than those listed may be required in the future.

subscriber equipment (deprecated)

See:

customer equipment.

subscriber installation (deprecated)

See:

customer equipment.

subscriber installation maintenance entity (SIME)

Recs. I.601, M.36, M.60

A SIME represents a group of dedicated functions contained within the functional groups (as specified in Recommendation I.411) of the subscriber insallation (i.e. TE1 and NT2) which have the following purposes; e.g.

- interaction with the (human) user;
- handling of maintenance protocol from the SAME and/or MSP;
- control of internal testing and maintenance mechanisms.

subscriber line (deprecated)

See:

local line.

subscriber line busy (sent in the backward direction)

Rec. Q.400

A signal indicating that the line or lines connecting the called subscriber to the exchange are busy.

subscriber line free, charge (sent in the backward direction)

Rec. Q.400

A signal indicating that the called subscriber's line is free and that the call is to be charged on answer.

subscriber line free, no charge (sent in the backward direction)

Rec. Q.400

A signal indicating that the called subscriber's line is free and that the call is not to be charged on answer. This signal is used only for calls to special destinations.

subscriber line group

Recs. Z.334, Z.341

A group of line groups which are recognized and managed by a public exchange as a logical group.

subscriber line out of order (sent in the backward direction)

Rec. Q.400

A signal indicating that the subscriber's line is out-of-service or faulty.

subscriber loop

See:

subscriber's line; subscriber loop;
subscriber's (telephone) line; subscriber loop (in telephony).

subscriber number

Recs. E.160, Q.10

The number to be dialled or called to reach a subscriber in the same local network or numbering area.

This number is the one usually listed in the directory against the name of the subscriber.

Note – Care should be taken not to use the term "local number" instead of "subscriber number".

subscriber serving exchange

U.140

A public switching exchange which connects subscribers in a same area to one another, or which establishes connection between them and the other exchanges.

subscriber system (in transmission planning)

Rec. P.10

A *subscriber's line* associated with that part of the *private telephone installation* connected to this line during a telephone *call.*

Note – This term is used in the context of *transmission* planning and *performance.*

subscriber's alpha-numerical display

Suppl. No. 1 (II.2)

The visual display at a subscriber's telephone terminal of information sent to or received from the public telephone network. This display comprises outgoing and/or incoming information.

subscriber's facsimile station

Rec. F.160

Equipment made available to a facsimile service subscriber, including a facsimile terminal, access to the appropriate public telecommunication networks as well as connecting and possible additional equipment.

subscriber's installation

Rec. S.140

The lines, the terminals and any extension, private exchange, control units and any other equipment located at the subscriber's premises.

subscriber's line

Rec. Q.9

The telephone line connecting the subscriber's equipment to the exchange.

subscriber's line
See:
subscriber's (telephone) line; subscriber loop (in telephony).

subscriber's line; subscriber loop

U.140

A link between equipment in a subscriber's premises and the local telecommunication centre providing required services.

subscriber's national telex number

Rec. F.68

Set of figures to be selected by a caller in the same country to obtain this subscriber.

subscriber's (telephone) line; subscriber loop (in telephony)

Rec. P.10

A link between a public *switching entity* and a *telephone station* or a *private telephone installation* or another terminal using signals compatible with the *telephone network.*

Note – In French, the term "ligne de réseau" is used only when the private telephone installation is a *private branch exchange* or an *internal telephone system.*

subscription

Rec. X.413

A long-term agreement between the MS supplier or administrator and the MS customers (MS-owners) on the availability and use of optional MS features such as optional services and attributes. Recommendation X.413, assumes that such a mechanism is provided, but does not prescribe or offer any standardized method for how to provide this.

subsequent address message (SAM)

Gloss. (VI.3)

An address message, which may be either a one-unit or a multi-unit message, sent following the initial address message.

subsequent address message (SAM)

Rec. Q.762

A message that may be sent in the forward direction following an initial address message, to convey additional called party number information.

subsequent address message (SAM)

Rec. Q.9

A type of message sent in the forward direction subsequent to the initial address message and containing further address information.

subsequent address message with one signal

Rec. Q.9

A type of message sent in the forward direction subsequent to the initial address message or to the subsequent address message and containing only one address signal.

subsequent handover procedure

Recs. Q.1002, Q.1005

Procedure where the call is handed over from MSC-B to MSC-A or from MSC-B to a third MSC (MSC-B').

subsequent signal unit (SSU)

Rec. Q.257

The second and any following signal unit of a multi-unit message are called subsequent signal units (SSU).

subsequent signal unit (SSU)

Gloss. (VI.3)

A signal unit of a multi-unit message other than the initial signal unit.

subservice field (SSF)

Glos. (VI.7, VI.8, VI.9)

The level 3 field containing the network indicator and two spare bits.

subsignal

Rec. Z.100

A *subsignal* is a *refinement* of a *signal* and may be further *refined.*

substitute recipient

Recs. F.400, X.400

In the context of message handling, the user or distribution list to which a preferred, alternate, or member (but not another substitute) recipient can have elected to redirect messages (but not probes).

substring

Rec. X.413

A filter-item used to specify string of characters which appear (in the same given order) in a value of an attribute.

subsystem

Glos. (VI.7, VI.8, VI.9)

A direct user of the Signalling Connection Control Part (SCCP) of Signalling System No. 7.

subsystem-allowed (SSA)

Rec. Q.712

A *subsystem-akllowed* message is sent to concerned destinations to inform those destinations that a subsystem which was formerly prohibited is now allowed.

It is used for SCCP subsystem management.

subsystem multiplicity indicator

Rec. Q.712

The "subsystem multiplicity indicator" is used in SCCP management messages to indicate the number of associated replicated subsystems.

subsystem number (SSN)

Glos. (VI.7, VI.8, VI.9)

A number to identify a subsystem using the SCCP either directly, like the ISDN User Part, or indirectly (via the Transaction Capabilities) like the OMAP.

subsystem-out-of-service-grant (SOG)

Rec. Q.712

A *subsystem-out-of-service-grant* message is sent, in response to a *subsystem-out-of-service-request* message, to the requesting SCCP if both the requested SCCP and the backup of the affected subsystem agree to the request.

It is used for SCCP subsystem management.

subsystem-out-of-service-request (SOR)

Rec. Q.712

A *subsystem-out-of-service* message is used to allow subsystems to go out-of-service without degrading performance of the network. When a subsystem wishes to go out-of-service, the request is transferred by means of a *subsystem-out-of-service-request* message between the SCCP at the subsystem's node and the SCCP at the duplicate subsystem's node.

It is used for SCCP subsystem management.

subsystem-prohibited (SSP)

Rec. Q.712

A *subsystem-prohibited* message is sent to concerned destinations to inform SCCP Management (SCMG) at those destinations of the failure of a subsystem.

It is used for SCCP subsystem management.

subsystem-status-test (SST)

Rec. Q.712

A *subsystem-status-test* message is sent to verify the status of a subsystem marked prohibited.

It is used for SCCP subsystem management.

subtelephone telegraphy

Rec. R.140

Telegraphy using a frequency band below that part of the audio range usually employed in telephone transmission.

subtype (of a parent type)

Rec. X.208

A type whose values are specified as a subset of the values of some other type (the parent type).

subtype specification

Rec. X.208

A notation which can be used in association with the notation for a type, to define a subtype of that type.

subtype value set

Rec. X.208

A notation forming part of a subtype specification, specifying a set of values of the parent type which are to be included in the subtype.

successful call

Rec. E.600

A call that has reached the wanted number and allows the conversation to proceed.

successful call attempt; fully routed call attempt

Rec. E.600

A call attempt that receives intelligible information about the state of the called user.

successive phases of a call

Rec. E.100

The characteristic instants in the successive phases of the setting-up of an international telephone call in the manual or semiautomatic service are distinguished as follows:

t_0 the caller has placed his request;

t_1 the controlling operator has received all of the call details;

t_2 the controlling operator has made the first attempt to set up the call (this instant corresponds practically to the seizure of the international circuit);

t_3 the called number has replied or the caller has been informed why the call cannot be connected;

t_4 the called person (or called extension) has been obtained or the caller has been informed why the call cannot be connected (the instant is only significant for personal calls);

t_5 the end of the conversation, generally when the caller replaces the receiver;

t_6 disconnection, normally when the international circuit is released by the operator.

Note – In automatic service it is in general difficult to define all the characteristic instants specified above, either because it is impossible to distinguish between them with accuracy or because of differences between the switching systems used. It is, however, possible to define the *total setting-up time* (see definitions answering time of operators).

sudden failure

Suppl. No. 6 (II.3)

A *failure* that could not be anticipated by prior examination or monitoring.

summarize abstract-operation

Rec. X.413

An abstract-operation which allows a quick overview of the kind and number of entries which are currently stored in an information-base.

superclass

Rec. F.500

Relative superior to a subclass, an object class from which a subclass is derived.

superclass

Rec. X.501

Relative to a subclass – an object class from which a subclass is derived.

supergroup

Rec. M.300

A supergroup consists of a supergroup link connected at each end to terminal equipments. These terminal equipments provide for the setting-up of five group links or sections occupying adjacent frequency bands in a 240 kHz band or for one or more data transmission or facsimile channels, etc.

See Figures 1/M.300 to 4/M.300. The basic supergroup occupies the band 312 to 552 kHz. Figure 1/M.330 shows the position of groups and channels within the supergroup.

supergroup link

Recs. G.211, M.300

The whole of the means of transmission using a frequency band of specified width (240 kHz) connecting two terminal equipments, for example group translating equipments, wideband sending and receiving equipments (modems, etc.). The ends of the link are the points on supergroup distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more supergroup sections. See Figures 3/G.211 and 1/M.300 to 4/M.300.

supergroup section

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (240 kHz) connecting two consecutive supergroup distribution frames (or equivalent points) via at least one line link. See Figure 3/G.211

supergroup section

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (240 kHz) connecting two consecutive supergroup distribution frames (or equivalent points).

See Figures 1/M.300 to 4/M.300.

superior

Rec. X.501

Applying to entry or object, immediately superior, or superior to one which is immediately superior (recursively).

superior reference

Rec. X.518

A knowledge reference containing information about the DSA that holds a superior entry.

supermastergroup

Rec. M.300

A supermastergroup consists of a supermastergroup link connected at each end to terminal equipments. These terminal equipments provide for the setting-up of three mastergroup links or sections separated by two free spaces of 88 kHz and occupying a band whose total width is 3872 kHz. The basic supermastergroup is composed of mastergroups 7, 8 and 9 occupying the frequency band 8516-12 388 kHz.

See Figures 1/M.300 to 4/M.300 and 1/M.350.

supermastergroup link

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (3872 kHz) connecting two terminal equipments, for example mastergroup translating equipments, wideband sending and receiving equipments (modems, etc.). The ends of the link are the points on supermastergroup distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more supermastergroup sections.

See Figure 3/G.211

Note – As the frequency band occupied by 15-supergroup assembly No. 3 (8620 to 12 336 kHz) lies within the frequency band occupied by the basic supermastergroup (8516 to 12 388 kHz), the basic supermastergroup link can transmit one supermastergroup or an assembly of 15 supergroups.

supermastergroup link

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (3872 kHz) connecting two terminal equipments, for example, mastergroup translating equipments, wideband sending and receiving equipment (modems, etc.). The ends of the link are the points on supermastergroup distribution frames (or their equivalent) to which the terminal equipments are connected.

It can include one or more supermastergroup sections.

See Figures 1/M.300 to 4/M.300.

supermastergroup section

Rec. G.211

The whole of the means of transmission using a frequency band of specified width (3872 kHz) connecting two supermastergroup distribution frames (or equivalent points) via at least one line link.

See Figure 3/G.211 *Note* – As the frequency band occupied by 15-supergroup assembly No. 3 (8620 to 12 336 kHz) lies within the frequency band occupied by the basic supermastergroup (8516 to 12 388 kHz), the supermastergroup section can transmit one supermastergroup or an assembly of 15 supergroups.

supermastergroup section

Rec. M.300

The whole of the means of transmission using a frequency band of specified width (3872 kHz) connecting two consecutive supermastergroup distribution frames (or equivalent points).

See Figures 1/M.300 to 4/M.300.

super-telephone telegraphy

Rec. R.140

Telegraphy using a frequency band above that part of the audio range usually employed in telephone transmission.

supervision

Suppl. No. 6 (II.3)

Activity, performed either manually or automatically, intended to observe the state of an *item.*

Note – Automatic *supervision* may be performed internally or externally to the *item.*

supervisor

See:

executive program; supervisory program; supervisor.

supervisory program

See:

executive program; supervisory program; supervisor.

supervisory signal

Rec. M.30

A signal indicating the state or change of state of a circuit.

supplementary information

Rec. E.131

Any information, except the mode or type of communication identification, access to supplementary services, service identification, function identification, block separation and message suffix, which is required to be sent by the subscriber to the exchange for the performance of a control operation. The supplementary information may consist of one or more blocks.

supplementary information

Rec. Z.341

Information presenting an explanation to the *user* if required so as to ease the *input* of the *parameter value.*

supplementary information (of internal automatic observations)

Rec. E.425

Information on signalling faults, subscriber behaviour and the network.

supplementary service

Rec. Q.9

Any service provided by a network in addition to its basic service or services.

supplementary services provided

Rec. I.140

This attribute refers to the supplementary services associated with a given telecommunication service.

supplementary telephone service

Rec. E.131

Any service provided by the telephone network in addition to the fundamental telephone service.

supported application context

Rec. F.500

An attribute type which specifies the object identifier of an application context that the object (an OSI application entity) supports.

suppressed traffic

Rec. E.600

The traffic that is withheld by users who anticipate a poor quality of service (QOS) performance.

suppression hangover time

Rec. G.164

The time interval between the instant when defined test signals applied to the send- and/or receive-in ports are altered in a defined manner, and the instant when the suppression loss is removed from the send path.

suppression loss

Rec. G.164

The specified minimum loss which an echo suppressor introduces into the send path (of the echo suppressor) to reduce the effect of echo currents.

See Figure 5/G.164.

suppression operate time

Rec. G.164

The time interval between the instant when defined test signals, applied to the send- and/or receive-in ports, are altered in a defined manner and the instant when the suppression loss is introduced into the send path of the echo suppressor.

surname

Rec. F.500

An attribute type which specifies the linguistic construct which normally is inherited by an individual from the individual's parent or assumed by marriage, and by which the individual is commonly known.

SUSPEND

Rec. Z.333

Hold an activity temporarily.

suspend message (SUS)

Rec. Q.762

A message sent in either direction indicating that the calling or called party has been temporarily disconnected.

suspend/resume indicator

Rec. Q.762

Information sent in the suspend and resume messages to indicate whether suspend/resume was initiated by an ISDN subscriber or by the network.

switch (circuit)

See:

circuit switching exchange; switch (circuit).

switch (message)

See:

message switching exchange; switch (message).

switched (connection)

Rec. I.140

ISDN circuit switched connections/connection elements are set up at any time on demand via e.g. a bit channel in response to signalling information received from subscribers, other exchanges or other networks, i.e. on a per-call-basis. Message/packet switched connections/connection elements provided by an ISDN may be set up on demand via circuit-mode channels (e.g. B-channels) and special packet switching units or via the D-channel subject to any D-channel priority/flow control restrictions that may be applicable.

switched connection

Rec. I.112

A connection that is established by means of switching.

Note – A switched connection may be used to support both demand and reserved circuit services.

switched connection element; switched ISDN connection element

Rec. I.112

An ISDN connection element that is established by means of switching.

switched-transit country

Rec. D.000

A transit country through which traffic is routed by switching in an international transit exchange.

switched virtual connection

See:

virtual call;
virtual call; switched virtual connection.

switching

Rec. I.112

The process of interconnecting functional units, transmission channels or telecommunication circuits for as long as is required to convey signals.

switching

Rec. Q.9

(1) The establishing, on demand, of an individual connection from a desired inlet to a desired outlet within a set of inlets and outlets for as long as is required for the transfer of information.

(2) A qualification implying the action as defined above, e.g.:

switching centre	switching network
switching delay	switching node
switching device	switching point
switching equipment	switching system
switching exchange	switching unit
switching matrix	

switching centre

See:

exchange; switching exchange; switching centre.

switching delay; processing time; handling time

Rec. Q.9

The interval of time attributable to the functions performed in a switching exchange in the process of setting up a call.

switching-equipment-congestion signal

Rec. Q.254

A signal sent in the backward direction indicating the failure of the call set-up attempt due to congestion encountered at international switching equipment.

switching exchange

See:

exchange; switching exchange; switching centre.

switching matrix

Rec. Q.9

An array of crosspoints in a space division exchange which, from a traffic point of view, operates as a switch.

switching network

Rec. Q.9

The switching stages of a telecommunication exchange taken collectively.

switching node

Rec. Q.9

An interstitial point in a telecommunication network where temporary interconnection of inlets and outlets may be undertaken as required.

switching node

See:

node; switching node.

switching signal

U.140

A signal transmitted between two exchanges or between one exchange and a terminal for establishing and clearing a call.

switching signal telex-data

Rec. S.140

A signal which switches a *terminal* from the telex mode to the *data transmission* mode.

switching stage

Rec. Q.9

An aggregate of switching devices constituting a subset of the switching network in an exchange and designed to operate as a single unit from a traffic handling point of view. (See Figure 1/Q.9.)

symbol

Rec. E.121

A symbol is an abstract pictorial representation: it commonly stands for something and tells a person *what* he is faced with. It is not necessarily ralistic and often requires a learning process in order to be understood.

symbol

Recs. Q.9, Z.341

A conventional representation of a concept or a representation of a concept upon which agreement has been reached.

symbol

Rec. Z.100

A *symbol* is a terminal in the *concrete syntaxes.* A *symbol* may be one of a set of shapes in the *concrete graphical syntax.*

symbol (in SDL)

Rec. Q.9

In the context of SDL, a symbol is a representation of the concept of either a *state, input, task, output, decision* or *save.*

symbol rate (deprecated)

See:
line digit rate.

symbolic name

Rec. Z.341

A character string used for the representation of an entity.

symmetric

Rec. X.402

Said of an ASE by means of which a UE both supplies and consumes a service. The ASE for message transfer, e.g., is symmetric because both open systems, each of which embodies an MTA, offer and may consume the service of message transfer by means of it.

symmetrical binary code

Rec. G.701

A pulse code in which the sign of the quantized value, is represented by one digit, and in which the remaining digit constitute a binary number representing the magnitude.

Note 1 – In a particular symmetrical binary code, the order of the digits and the use made of the symbols 0 and 1 in the various digit positions must be specified.

Note 2 – This term should not be used for line transmission.

symmetrical through connection

Rec. Q.9

The through connection of both directions of transmission simultaneously.

symmetry

Rec. I.140

This attribute describes the relationship of information flow between two (or more) access points or reference points involved in a communication.

symmetry/and or topology change

Rec. I.140

When the symmetry attribute value of the connection element can be changed during a call.

synchronization

Recs. G.701, Q.9

The process of adjusting the corresponding significant instants of signals to make them synchronous.

synchronization

Rec. T.0

The establishment of equal scanning line frequencies at the transmitter and receiver.

synchronization

Rec. T.412

This attribute specifies that the content associated with the component and with another specified component are to be laid out aligned along a line orthogonal to the direction of the layout path.

synchronization bit

Rec. R.140

A binary digit which is used for frame synchronization.

synchronization frame

Rec. R.140

Sequence of a fixed number of consecutive fundamental frames containing one synchronization word.

synchronization information

Rec. G.701

Information that indicates the relationship between the timing of two or more signals.

synchronization link

Rec. G.701

A link between two synchronization nodes over which synchronization information is transmitted.

synchronization network

Rec. G.701

An arrangement of synchronization nodes and synchronization links provided in order to synchronize the clocks at, or connected to, those nodes.

synchronization node

Rec. G.701

A point in a synchronized network at which synchronization information is derived, sent or received.

synchronization signal

Rec. Q.255

A signal sent in order to establish and maintain synchronization between the two ends of a signalling channel.

synchronization signal unit (SYU)

Gloss. (VI.3)

A signal unit containing a bit pattern and information designed to facilitate rapid synchronization and which is sent on the signalling channel when synchronizing or when no signal messages are available for transmission.

synchronization word

Rec. R.140

Sequence of bits allocated to synchronization and appearing periodically in one or a fixed number of consecutive fundamental frames.

synchronized network

Rec. G.701

A network in which the corresponding significant instants of nominated signals are adjusted to make them synchronous.

synchronized network

Rec. Q.9

A network in which the corresponding significant instants of nominated signals are adjusted to make them synchronous.

Note – Ideally the signals are synchronous, but they may be mesochronous in practice. By common usage such mesochronous networks are frequently described as synchronized.

synchronous

Rec. G.701

The essential characteristic of time-scales or signals such that their corresponding significant instants occur at precisely the same average rate.

Note – The timing relationship between corresponding significant instants usually varies between specified limits.

synchronous

Rec. Q.9

Signals are synchronous if their corresponding significant instants have a desired phase relationship with each other.

synchronous network (deprecated)

See:
synchronized network.

synchronous network node

Rec. G.810

A geographical location at which there are one or more interconnected synchronous digital equipments.

synchronous (start-stop) margin

Rec. S.140

The maximum value of the margin of a start-stop apparatus obtained by adjusting the modulation rate of the input signals to the most favourale value with respect to the time-base characteristics of the receiver.

synchronous system

Rec. R.140

A system of alphabetic telegraphy using synchronous transmission.

synchronous time division multiplexing

Rec. I.113

A multiplexing technique supporting the synchronous transfer mode (STM).

synchronous transfer mode (STM)

Rec. I.113

A transfer mode which offers periodically to each connection a fixed-length word.

synchronous transmission

Rec. R.140

Transmission using isochronous signals in which the sending and receiving instruments are operating continuously in a constant time difference between corresponding significant instants.

syncpoint identifier

Rec. X.226

A synchronization point serial number if the session activity management functional unit has not been selected; or a pair of synchronization point serial number and original activity identifier of the activity in progress if the session activity management functional unit has been selected. The order of syncpoint identifiers is defined as the order of their synchronization point serial number components.

synonym

Rec. Z.100

A *synonym* is a *name* which represents a *value.*

synopsis

Rec. X.413

A content specific attribute that may be used to show how child-entries, containing parts of the content, are related to each other and the main-entry. The attribute has to be specified in the Recommendation, which describes the content-type, e.g. see IPM-synopsis defined in Recommendation X.420.

syntactically invalid test event

Rec. X.290

A test event which syntactically is not allowed by the protocol Recommendation*.

Note – The use of "invalid test event" is deprecated.

syntax

Rec. Q.9

The relationships among characters or groups of characters, independent of their meanings or the manner of their interpretation and use.

syntax

Rec. Z.341

The rules for the formation of permissible constructions (e.g., character strings) in a language, without regard to meaning.

syntax diagram

Rec. Q.9

The syntax diagrams are a method of defining the *syntax* of the *input* and *output* language by pictorial representation.

syntax diagram

Rec. Z.341

A representation either of the syntactic structure of the construct or of a portion of the *dialogue procedure.*

syntax diagram

Rec. Z.100

Syntax diagrams are illustrations of the definitions of the *concrete textual syntax.*

syntax-matching services

Rec. X.218

Local services provided by the presentation-service provider enabling the transformation from the local representation of an application-protocol-data-unit value into a representation specified by a negotiated transfer syntax and vice versa.

syntype

Rec. Z.100

A *syntype* determines a set of *values* which corresponds to a subset of the *values* of the parent *type.* The *operators* of the *syntype* are the same as those of the parent *type.*

system ; machine

Rec. Z.341

Computer-based equipment and the *applications* used in telecommunications to provide service to the subscriber or to support administration personnel in their *jobs.*

system

Rec. Z.100

A *system* is a set of *blocks* connected to each other and the *environment* by *channels.*

system (deprecated)

See:
digital system; digital transmission system.

system (in MML)

Rec. Q.9

Refers to a stored program controlled switching *system* and also to its man-machine communication facility.

system area

Rec. Q.1001

The system area consists of one or more service areas with fully compatible MS-BS interfaces.

Note – The location registers of the individual service areas remain autonomous; updating of the location information is not performed when a roaming mobile station moves from one service area to another. The overall composition of the international land mobile system is shown in Figure 3/Q.1001.

system area

Rec. Q.9

A service area or a collection of service areas accessible by fully compatible mobile stations.

system availability information point

Recs. M.60, M.721

The system availability information point is an element within the general maintenance organization for the international automatic and semi-automatic telephone service associated with one or more international centres. It collects and disseminates information concerning the non-availability of telecommunications systems which affects the international service. The term availability is used here in the broadest sense of the word.

system conformance statement

Rec. X.290

A document summarizing which OSI* Recommendations* are implemented and to which conformance is claimed.

system conformance test report (SCTR)

Rec. X.290

A document written at the end of the conformance assessment process, giving the overall summary of the conformance of the system to the set of protocols for which conformance testing was carried out.

system control signal unit (SCU)

Gloss. (VI.3)

A signal unit carrying a signal concerning the operation of the signalling system – e.g. changeover, load-transfer.

system control station

Rec. R.140

A terminal station of a multichannel system which is responsible for maintenance and clearance of faults on the system.

system control station

U.140

Station which is responsible for maintenance and clearance of faults on a transmission system.

system definition

Rec. Z.100

A *system definition* is the *SDL/PR* representation of a *system.*

system diagram

Rec. Z.100

A *system diagram* is the *SDL/GR* representation of a *system.*

system information

Rec. Z.341

Information related to the status of the system. It may contain items such as: system status *indicators,* alarm *indicators,* and a *message waiting indicator.*

system management application entity (SMAE)

Glos. (VI.7, VI.8, VI.9)

The aspect of system Management Application Process involved with communication.

system management application process

Glos. (VI.7, VI.8, VI.9)

The set of functions which collectively encompass system management.

System No. 6 exchange

Gloss. (VI.3)

An exchange utilizing Signalling System No. 6.

System No. 6 exchange, first

Gloss. (VI.3)

The exchange closest to the calling party in each No. 6 section of a connection where, unless it is the calling party's exchange, interworking with other signalling systems takes place.

System No. 6 exchange, intermediate

Gloss. (VI.3)

A transit exchange where interworking to and from Signalling System No. 6 takes place.

System No. 6 exchange, last

Gloss. (VI.3)

The exchange closest to the called party in each No. 6 section of a connection where, unless it is the called party's exchange, interworking with other signalling systems takes place.

system under test (SUT)

Rec. X.290

The real open system in which the IUT resides.

systematic failure; reproducible failure; deterministic failure

Suppl. No. 6 (II.3)

A *failure* related in a deterministic way to a certain cause, which can only be eliminated by a *modification* of the design or manufacturing process, operational procedures, documentation or other relevant factors.

Note 1 – *Corrective maintenance* without *modification* will usually not eliminate the *failure cause.*

Note 2 – A *systematic failure* can be induced at will by simulating the *failure cause.*

systematic fault

Suppl. No. 6 (II.3)

A *fault* resulting from a *systematic failure.*

systems-management

Rec. X.200

Functions in the Application Layer related to the management of various OSI resources and their status across all layers of the OSI architecture.

systems-management-application-entity

Rec. X.200

An application-entity which executes systems-management functions.

T

TA

Rec. V.110

A terminal adaptor.

table

Rec. Z.341

An ordered presentation of interrelated information.

tabulation alignment

Rec. T.411

A layout or imaging process that causes the sequence of character images for a specified character string to be positioned according to a specified method, (start-aligned, end-aligned, centred or aligned-around) at a specified point (tabulation stop) along a reference line.

tabulation stop

Rec. T.411

A position along a reference line that is to be used for a specified method (start-aligned, end-aligned, centred or aligned-around) of tabulation alignment.

tag

Rec. X.208

A type denotation which is associated with every ASN.1 type.

tag (key) (label)

Glos. (VI.7, VI.8, VI.9)

The tag distinguishes one information element from another, and governs the interpretation of the contents.

tag

See:
key; tag; label.

tagged type

Rec. X.208

A type defined by referencing a single existing type and a tag; the new type is isomorphic to the existing type, but is distinct from it.

tagging

Rec. X.208

Replacing the existing (possibly the default) tag of a type by a specified tag.

take-up factor

Rec. G.601

Ratio between the value of a linear parameter measured on the length unit of a cable and the value of the same parameter measured on the length unit of a pair of that cable.

The result of cabling (assembly of components and possibly twisting of wires in pairs and then in quads) is that the length of the cable components is greater than that of the axial length of the cable. The take-up factor is the ratio between these two lengths.

talker echo

Rec. G.100

Echo produced by reflection near the listener's end of a connection, and affecting the talker.

talker echo loudness rating (of an international connection)

Rec. G.100

The sum of the sending loudness rating, receiving loudness rating of the talker's national system, twice the loss of the international chain and the *echo loss* (a-b) of the listener's national system, as defined at the virtual switching point. (Points a and b are shown in Recommendation G.122.)

talking resistance

Rec. P.10

Fixed resistance used for test purposes, which has a resistance equal to that of a carbon microphone at a particular current.

tandem central office tandem office (deprecated)

See:
transit exchange.

tandem connection

Rec. I.140

Two or more connection elements in series form a connection.

tandem exchange

See:
transit exchange.

(tape) perforator

Rec. S.140

An apparatus which records telegraph signals on a paper tape by combination of holes punched in accordance with a predetermined code.

tape printer

Rec. S.140

Apparatus which reads the signals recorded, for instance, on perforated tape and prints the corresponding characters on a paper tape or page without the intervention of transmission.

For exemple, a Morse printer or a five-unit printer.

tape-reader

See:
tape-reading head; tape-reader.

tape-reading head ; tape-reader

Rec. S.140

A device which reads a recording tape and produces signals corresponding to the data recorded on the tape.

tape teleprinter

Rec. S.140

A teleprinter which prints characters in a single line on a continuous paper tape.

target language

See:
object language; target language.

target MSC

Rec. Q.1001

The Target MSC is the MSC controlling the cell(s) selected as target(s) for a handover.

target program ; object program

Rec. Q.9

A program in a target language that has been translated from a source language.

task

Rec. Z.100

A *task* is an action within a *transition* containing either a sequence of *assignment statements* or *informal text.* The interpretation of a *task* depends on and may act on information held by the *system.*

task (in SDL)

Rec. Q.9

A task is any action within a *transition* which is neither a *decision* nor an *output.* (See Recommendation Z.100, § 2.7.1.)

task area

Rec. Z.100

A *task area* is the SDL/GR representation of a *task.*

technical assistance (prefix 33)

Recs. E.216, F.126

For the maritime satellite service, prefix 33 provides connection to the technical personnel of the coast earth station in case difficulties are experienced in establishing communication.

For other maritime systems, further study is required.

technical delay

Suppl. No. 6 (II.3)

The *accumulated time* necessary to perform auxiliary technical actions associated with the *maintenance action* itself. See Figure 3, Suppl. No. 6 (II.3)

teleaction service

Rec. I.112

A type of telecommunication service that uses short messages, requiring a very low transmission rate, between the user and the network.

Note – Examples of teleaction services are: telealarm, telecommand, telealerting.

telecommunication

Recs. G.701, M.60

Any transmission and/or emission and reception of signals representing signs, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

telecommunication

Rec. Q.9

Any process that enables a correspondent to pass to one or more given correspondents (telegraphy or telephony), or possible correspondents (broadcasting), information of any nature delivered in any usable form (written or printed matter, fixed or moving pictures, words, music, visible or audible signals, signals controlling the functioning of mechanisms, etc.) by means of any electromagnetic system (electrical transmission by wire, radio transmission, optical transmission, etc., or a combination of such systems).

telecommunication capability

Rec. X.300

The combined functionality of the communication capability and the transmission capability.

telecommunication circuit

See:

circuit; telecommunication circuit.

telecommunication network

Rec. F.300

Telecommunications means for transmission of Videotex information.

telecommunication network

See:

network; telecommunication network.

telecommunication path

See:

path; telecommunication path.

telecommunication service (deprecated)

See:

teleservice.

telecommunication service

See:

service; telecommunication service.

telecommunication service attribute

See:

service attribute; telecommunication service attribute.

telecommunications

Rec. F.710

All the transmissions, emissions, receptions of signals, writings, images, sounds of every nature by wires, electricity, or other electromagnetical systems.

telecommunications Administration

Recs. D.70, D.71, M.60

An Administration, or part of a combined postal and telecommunications Administration, concerned with the provision of telecommunications services.

telecommunications management network (TMN)

Rec. M.60

A telecommunications management network provides the means used to transport and process information related to management functions for the telecommunications network.

telecommunications traffic; teletraffic

Rec. E.600

A process of arrivals and releases of demands for resources in a network.

Note – The unit for the variable traffic is the Erlang (symbol: E).

teleconference service

Rec. F.710

Provides the necessary arrangements for a real-time conferencing among single individuals or groups of individuals at two or more locations, by means of telecommunication networks.

telefax

Suppl. No. 1 (II.4)

International public facsimile service between subscriber stations on the public switched telephone network or on circuits intended for DATEL (see Recommendation F.180, § 5).

telefax

Rec. F.180

The public facsimile service between subscriber stations on a public telecommunication network shall be known as the Telefax service.

telefax 2

Rec. F.180

Telefax service using Group 2 terminals shall be known as Telefax 2.

telefax 3

Rec. F.180

Telefax service using Group 3 terminals shall be known as Telefax 3.

Telefax service using Group 3 terminals for A5 documents shall be known as mini telefax 35.

Telefax service using Group 3 terminals for A6 documents shall be known as mini telefax 36.

telefax 4

Rec. F.180

Telefax service using Group 4 terminals shall be known as Telefax 4.

telefax 4

Rec. I.240

Telefax 4 is an international service enabling subscribers to exchange office correspondence in the form of documents containing facsimile coded information automatically via the ISDN.

telegraph alphabet

Rec. R.140

A convention indicating correspondence between a set of characters and a set of groups of elements which represent them.

telegraph channel

Rec. R.140

A means of transmission of telegraph signals in one direction between two points.

Note 1 – A telegraph channel may be characterized by the number of significant conditions, by the nominal modulation rate and by the code format it is designed to admit.

Example: A 50 baud channel for two-condition modulation.

Note 2 – Several telegraph channels may share a common path; for example each channel is allocated a particular frequency band or particular time slot.

telegraph circuit

Rec. R.140

A pair of associated telegraph channels permitting transmission in both directions between two points.

telegraph code

Rec. R.140

A system of rules and conventions according to which a succession of significant conditions representing a message should be formed and translated in alphabetic telegraphy.

telegraph demodulator

Rec. S.140

A demodulator controlled by a telegraph signal.

telegraph discriminator

Rec. R.140

A device for converting frequency shift telegraphy signals into direct current transmission signals.

telegraph discriminator

Rec. S.140

A discriminator for converting frequency shift telegraphy signals into direct current transmission signals.

telegraph distortion; time distortion

Rec. R.140

The undesired effect on a telegraph signal, when the significant instants do not coincide with the corresponding ideal instant.

Note – A telegraph signal suffers from telegraph distortion when the significant intervals have not all exactly their theoretical durations.

telegraph junction circuit

U.140

A telegraph circuit connecting a sub-centre with its parent switching centre.

telegraph modulator

Rec. S.140

A modulator controlled by a telegraph signal.

telegraph radioconverter

Rec. S.140

A device which accepts telegraph signals at audio frequency or intermediate frequency and converts them into signal elements capable of operating a telegraph recorder.

telegraph regenerative repeater

Rec. R.140

A telegraph repeater designed to retransmit signals free from telegraph distortion.

telegraph repeater

Rec. R.140

A device which can receive telegraph signals and immediately retransmit them with the same meaning on the next line section.

telegraph signal

Rec. R.140

A signal representing all or part of one or more telegraph messages.

telegraph switching exchange

U.140

The set of equipments installed at a single location to switch telegraph traffic.

(telegraph) terminal

Rec. S.140

Pertaining to or designating equipments connected to the end of the subscriber's line or telegraph circuit, which can either establish or receive calls, or store and retransmit signals, and which can be uniquely identified.

telegraph transmitter

Rec. S.140

A device for the transmitting telegraph signals over a telegraph channel.

telematic services

Suppl. No. 1 (II.4)

International telecommunication services, excluding telephone, telegraph and data transmission services, offered by Administrations and defined by CCITT for the purpose of exchange of information via telecommunication networks.

Note 1 – The definition of service covers the full range of functions according to the Open System Interconnection (OSI) model.

Note 2 – Examples of telematic services are teletex service, facsimile service, Message Handling services and videotex service. *Note 3* – The term "teleservice" belongs to the concept of ISDN. Telematic services provided on an ISDN may be considered as teleservices.

telemessage

Rec. F.50

A telemessage is a document printed in letter style preferably including the printing of capital and small letters. It includes the address of the recipient, and where requested the sender, normally for delivery by post in a distinctive envelope designed for use with the service.

telemessage service

Rec. F.50

The telemessage service is an international public service provided to enable the transmission of character coded messages input electronically on public telecommunication networks or by other means normally for postal delivery in the destination country.

telemessage switching centre

Rec. F.50

A unit used to automatically switch international and/or national telemessage traffic.

telemetry service (deprecated)

See:

teleaction service.

telephone booth

Rec. P.10

A small cabin containing a *telephone station* and providing a certain measure of acoustic insulation and privacy for the user.

telephone call

Rec. E.100

The interconnection of two telephone stations.

telephone circuit

Rec. Q.9

A permanent electrical connection permitting the establishment of a telephone communication in both directions between two telephone exchanges.

telephone circuit (international or trunk circuits)

Rec. E.100

The whole of the facilities whereby a direct connection is made between two exchanges (manual or automatic) is called a telephone circuit.

A circuit is called an international circuit when it directly connects two international exchanges in two different countries.

The term *trunk circuit* is reserved for the designation of exclusively national circuits.

telephone instrument

See:

telephone set; telephone instrument.

telephone message

Rec. E.100

An effective call over a connection established between the calling and the called stations.

telephone number

Rec. F.500

An attribute type which specifies a telephone number associated with an object.

Note – The format of internationally agreed telephone numbers follows Recommendation E.164.

telephone set; telephone instrument

Rec. P.10

An assembly of apparatus for *telephony* including at least a *telephone transmitter*, a *telephone receiver* and the wiring and components immediately associated with these transducers.

Note – A telephone set usually includes other components such as a *switchhook*, a built-in *telephone bell*, and a *dial*.

telephone signal

Gloss. (VI.3)

Any signal which pertains to a particular telephone call or to a particular speech circuit.

telephone stall

Rec. P.10

A *telephone booth* without a door.

telephone station

Rec. P.10

A *telephone set* with associated wiring and auxiliary equipment connected to a *telephone network* for the purpose of *telephony*.

Note – The auxiliary equipment may include, for example, an external *call indicating device*, a protector, a *local battery*.

telephone-type channel

Rec. R.140

A transmission channel of characteristics suitable for the transmission of speech but which is used for the transmission of other signals.

telephone-type circuit

Rec. R.140

A pair of associated telephone-type channels permitting transmission in both directions between two points.

Telephone User Part (TUP)

Glos. (VI.7, VI.8, VI.9)

The User Part specified for telephone services.

Telephone User Part (TUP)

Rec. Q.1100

This defines the necessary telephone signalling functions for use of Signalling System No. 7 (SS No. 7) for international call control signalling. It is specified with the aim of providing the same feature for telephone signalling as other CCITT telephone signalling systems (see Recommendation Q.721).

telephony

Rec. I.240

The "telephony service" provides users with the ability for real-time two-way speech conversation via the network.

telephony input and output points for the line link

Rec. G.213

These are points (marked T and T' in Figure 1/G.213) located in principle in a main repeater station where the standard conditions given in Recommendation G.213, § 1 are found at the output and input of a line link (comprising a cable system or radio link). These standard conditions permit interconnection with other line links or with telephony equipment (including, where appropriate, direct through-connection filters as well as translating equipment).

teleprinter; teletypewriter

Rec. S.140

A start-stop apparatus comprising an alphanumeric keyboard transmitter with a printing character receiver.

(teleprinter) control unit

Rec. S.140

Unit associated with a teleprinter and containing the necessary auxiliary equipment for operating this instrument on a switched network.

teleprinting over radio circuits (TOR)

See:

Van Duuren radiotelegraph system; teleprinting over radio circuits.

teleservice

Recs. I.112, M.60, Q.9

A type of telecommunication service that provides the complete capability, including terminal equipment functions, for communication between users according to protocols established by agreement between Administrations and/or RPOAs.

teletex

Rec. I.240

Teletex is an international service enabling subscribers to exchange office correspondence in the form of documents containing Teletex coded information on an automatic memory-to-memory basis via the ISDN.

teletext

See:

broadcast videography; teletext.

teletex basic control function repertoire

Rec. T.61

A comprehensive list of control functions communicated between teletex terminals whose effect on the receiving terminal is defined and guaranteed by the service.

teletex basic graphic character repertoire

Rec. T.61

A comprehensive list of graphic characters whose communication is guaranteed by the Teletex service, and which are capable of being presented on all teletex terminals.

teletex call

Rec. F.200

The temporary connection (or apparent connection as perceived by the caller) of Teletex equipment to other Teletex devices for the purpose of exchanging information.

teletex character repertoire

Rec. T.61

The total range of graphic characters and control functions that may be communicated between teletex terminals.

other teletex character repertoires

Rec. T.61

National or application-oriented lists of graphic characters and control functions, in addition to the teletex basic repertoires of graphic characters and control functions, that may be communicated between teletex terminals by mutual agreement.

Note – Specific additional character repertoires may be the subject of CCITT Recommendations.

teletex control function repertoire

Rec. T.61

The total range of control functions communicated between teletex terminals to enable the action of the receiving terminal to be controlled.

teletex document

Rec. F.200

A sequence of one or more pages intended by the originator to be delivered as a single entity in the original page sequence.

teletex equipment

Rec. F.200

A device that is capable of transmitting and receiving teletex documents in accordance with the basic requirements of Recommendation T.60.

teletex graphic character repertoire

Rec. T.61

The total range of graphic characters that may be communicated between and presented by teletex terminals.

teletex page

Rec. F.200

The smallest unit of text treated as an entity in office correspondence in the Teletext service. One A4 (or A4L or North American Standard) page or the information that may be presented on it. Paper sizes other than ISO A4 or A4L may be included as standardized options.

Teletex service

Suppl. No. 1

An international telematic service offered by Administrations enabling subscribers to exchange correspondence via telecommunication networks.

teletex terminal

Recs. T.62, T.62 bis

A device that is capable of transmitting and receiving Teletex documents in accordance with the basic requirements of Recommendation T.60.

teletex terminal identifier

Rec. F.500

An attributed type which specifies the teletex terminal identifier for a teletex terminal associated with an object.

Note – The format follows Recommendation F.200.

teletraffic

See:
telecommunications traffic; teletraffic.

teletypewriter

See:
teleprinter; teletypewriter.

television circuit

Rec. D.180

A unidirectional circuit for the transmission of the video component of a television programme.

television circuit section

Rec. N.51

The unidirectional national or international television transmission path between two stations at which the programme is accessible at video frequencies. The transmission path may be established via terrestrial or single destination satellite routing. (See Note 2 to Recommendation N.51 and Figures 1/N.51 and 3/N.51.)

television receive-only station (TVRO)

Rec. N.51

An earth station which is used only for reception (see Figure 6/N.51). In this respect the term is used to denote any TVRO whose owner is authorized to receive the programme material.

telewriting

Rec. F.710

It is a text communication service which enables the transmission of graphic information to be displayed at the receiving side in accordance with the writing movements at the sending side. This display is normally effected on a real-time basis; a delay in the transmission may be included.

telewriting image

Rec. T.150

A collection of telewriting presentation elements, to be displayed together.

Note – The telewriting image can exist in visible form at the output device, or in the form of a coded representation.

telex

Rec. I.240

This service provides interactive text communication. The digital signal at the S/T reference point follows the internationally agreed Recommendations for telex above the ISDN physical layer.

telex answer-back

Rec. F.500

An attribute type which specifies the telex terminal identifier for a telex terminal associated with an object.

Note – The format follows Recommendation F.60.

telex call

See:
(telex) call.

telex conversation mode

Suppl. No. 2 (II.4)

The use of a telex connection for a dialogue or exchange of information between two *terminals.*

telex destination code

Rec. F.68

A group of digits characterizing, for routing purposes, the subscribers or stations of a country, or of a network in a country.

telex letter service (prefix 24)

Recs. E.216, F.126

Prefix 24 is used for directly transmitting a message originated from a ship earth station (SES) to a selected telegraph office for delivery by mail or any appropriate means.

telex network identification code

Rec. F.68

Letter or group of two letters serving to identify the subscribers or stations of a country (or a network in a country).

telex number

Rec. F.500

An attribute type which specifies the telex number, country code, and answer-back code of an telex terminal.

Note – The format follows Recommendation F.69.

telex relation

See:
(telex relation).

temporary mobile station identity (TMSI)

Rec. Q.1003

Assigned by the VLR and used for identification of an MS within the area controlled by the VLR. The purpose of the TMSI is to support location confidentiality to mobile subscribers. TMSIs may not be allocated to all MSs, e.g. if the location confidentiality service is offered only on a subscription basis.

The TMSI is temporary subscriber data.

temporary trunk blocking after release

Rec. Q.762

Information sent to the exchange at the other end of a circuit (trunk) to indicate low level of congestion at the sending exchange and that the circuit (trunk) should not be re-occupied by the receiving exchange for a short period of time after release.

term

Rec. Z.100

A *term* is syntactically equivalent to an *expression. Terms* are only used in *axioms* and are distinguished from *expressions* for reasons of clarity.

terminal

Rec. Z.341

Abbreviation for *man-machine terminal.*

terminal adaptor

See:
TA.

terminal connection method (in telex)

U.140

The characteristics of the interface between a telex subscriber's line and a subscriber-serving exchange.

terminal country (or Administration)

Rec. D.000

An origin country and a destination country in a given relation.

terminal echo suppressor

Rec. G.164

An echo suppressor designed for operation at one or both terminals of a circuit.

See Figure 5/G.164.

terminal equipment

Rec. I.112

Equipment that provides the functions necessary for the operation of the access protocols by the user.

terminal equipment (TE)

Recs. G.960, I.430

The functional group on the user side of a user network interface.

Note – In Recommendations I.430 and I.431, "TE" is used to indicate terminal terminating layer 1 aspects of TE1, TA and NT2 functional groups.

terminal identifier

Recs. F.400, X.400

Standard attribute in an O/R address providing information for identifying a terminal amongst others.

Note – Examples are telex answerback and teletex terminal identifier.

terminal identifier (TID)

Rec. Q.932

A TID value is unique within a given USID. If two terminals on an interface subscribe to the same service profile, then the two terminals will be assigned the same service USID. However, two different TIDs are required to uniquely identify each of the two terminals.

terminal identity

Rec. Z.331

Identifies a physical terminal, a channel or a port to an SPC system.

terminal international centre

Recs. M.60, M.900

The international centre (for example, an international repeater station) serving the renter in the country in which the renter's installation is situated. There will be two terminal international centres in an international leased group or supergroup link, or more in the case of a multiterminal link.

See Figure 1/M.900.

terminal international centre

Recs. M.60, M.1010

The terminal international centre (TIC) for leased and special circuits is the international centre serving the renter in the country in which the renter's installation is situated. It marks the interface of the international and national lines and is normally located in association with a terminal international centre for the international public telephony circuits.

Some Administrations may wish to locate the TIC for international leased and special circuits independently of that for public telephony circuits.

In all cases there will be a transmission maintenance point (international line) (MTP-IL) (see Recommendation M.1014) located at each TIC for leased and special circuits.

There will be two TICs in a point-to-point international circuit. There may be more in a multiterminal circuit.

See Figure 2/M.1010.

terminal international exchange

Rec. F.68

An international exchange of this type would not be connected directly to intercontinental transit circuits, but would gain access to the intercontinental transit network through one (or more) intercontinental transit exchanges.

terminal national centre

Recs. M.60, M.900

The nearest national installation (for example, a repeater station) to which the renter's equipment is connected by the terminal national section. This centre will normally be staffed and equipped to make transmission measurements.

See Figure 1/M.900.

terminal national centre

Recs. M.60, M.1010

The national centre (e.g. repeater station, telephone exchange) that is:

- nearest to the renter's installation,
- provided with a circuit test point, so that transmission measurements can be made by appropriate staff.

See Figure 2/M.1010.

terminal national section

Recs. M.60, M.900

The lines and apparatus between the defined test access points at the interface in the renter's premises and corresponding defined test access points at the terminal national centre.

See Figure 1/M.900.

terminal national section

Recs. M.60, M.1010

The lines and apparatus connecting the renter's installation with the terminal national centre concerned. There may be intermediate installations (e.g. telephone exchanges) in the terminal national section but they are assumed to have no testing facilities normally available.

See Figure 2/M.1010.

terminal operating mode

*Series X**

In the context of the public data transmission service, the way a data terminal equipment is designed to meet the parameters of an international user class of service.

terminal O/R address

Recs. F.400, X.400

In the context of message handling, an O/R address that identifies a user by means of the network address of his terminal and that can identify the ADMD through which that terminal is accessed. The terminals identified can belong to different networks.

terminal port

See:
(terminal) port.

terminal share

Rec. D.000

The part of the accounting rate which is due to a terminal Administration.

terminal symbol

Rec. Z.341

A *symbol* containing a character or string of characters which actually appear in the *input* or *output.*

terminal type

Recs. F.400, X.400

Standard attribute of an O/R address that indicates the type of a terminal.

Note – Examples: telex, teletex, G3 facsimile, G4 facsimile, IA5, videotex terminal.

terminate and leave (T&L)

Rec. M.30

Terminating one or both direction of transmission on an outgoing transmission path.

terminating connection

Rec. Q.9

An exchange connection for a call incoming from an interexchange circuit and terminating on a subscriber line or channel.

terminating traffic

Rec. E.600

Traffic which has its destination within the network considered, whatever its origin.

terminology harmonization

Rec. Z.341

Standardization of the terminlogy to be used in the generation of *MML function semantics.*

tertiary digital muldex

Rec. Q.9

A digital multiplexer-demultiplexer that converts signals between 64 kbit/s and 34 368 kbit/s bit streams. See Figure 2/Q.9.

test

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An experiment made in order to measure or classify a *characteristic.*

test

Rec. M.60

A direct practical trial in whatever manner it may be made.

test; functional test

Rec. M.60

A *yes or no* test made to indicate whether a circuit, equipment or part of an equipment will function or not function under actual working conditions.

test; limit test

Rec. M.60

A test made to indicate whether a quantity would fall within or outside a pair of limits or boundaries.

test; yes or no test

Rec. M.60

A test made to indicate whether a quantity or magnitude would fall above or below a specified limit or boundary defined to distinguish pass and fail conditions.

test access point (TAP)

Rec. M.30

A virtual or physical testing path between a test system and the circuit under test in the NE.

test balance return loss (TBRL)

Rec. G.100

The *balance return loss* measured against a test impedance (i.e. in this case the impedance Z_2 – cf. definition of *balance return loss* – is a specified test impedance).

Note – The TBRL characterizes the precision of the balance network.

test body

Rec. X.290

The set of test steps that are essential in order to achieve the test purpose and assign verdicts to the possible outcomes.

test call indicator (sent in the forward direction)

Rec. Q.400

A signal occupying the position of the language digit when the call is originating from test equipment.

test case

Rec. X.290

A generic, abstract or executable test case.

test case

Rec. X.403

Specifies the sequences of test events required to achieve the purpose of the test and to assign a verdict "pass", "fail" or "inconclusive".

test configuration

Rec. Q.782

A test configuration defined as being:

a) the set of points, real or simulated, linked between them by signalling linksets, real or simulated, and of which some are connected to the point under test by one or several signalling linksets,
b) the set of routing rules applied in different points and also in point under test,
c) the flows of test traffic generated and received by:
d) a set of generation and reception means (see § 2.3),
e) the means (program, operator interface, etc.) to run the described tests; notably the possibilities of storage and analysis of test traffic and level 3 messages, and, in the case of validation tests, the possibility to send at any stage of a test, any messages (level 3 or test) valid or not.

test coordination procedures

Rec. X.290

The rules for cooperation between the lower and upper testers during testing.

test data

Suppl. No. 6 (II.3)

Observed data obtained during *tests.*

test/measurement day

Rec. M.251

Day in which the test/measurement is performed according to the associated schedule.

test event

Recs. X.290, X.403

An indivisible unit of test specification at the level of abstraction of the specification (e.g., sending or receiving a single PDU).

test group

Rec. X.290

A named set of related test cases.

test group

Rec. X.403

A set of related test cases. Test groups may be nested to provide a logical structuring of test cases.

test laboratory

Rec. X.290

An organization that carries out conformance testing. This can be a third party, a user organization, an Administration, or an identifiable part of the supplier organization.

test levels at exchange boundaries

Rec. Q.45 bis

At the nominal reference frequency, test levels are defined in terms of the apparent power relative to 1mW. At frequencies different from the nominal reference frequency, test levels are defined as having the same voltage as the test level at the nominal reference frequency. Measurements are based on the use of a test generator with a frequency-independent e.m.f. and which has an impedance equal to the nominal impedance.

test loop (deprecated)

See:
digital loopback.

test management protocol

Rec. X.290

A protocol which is used as a realization of the test coordination procedures for a particular test suite.

test purpose

Rec. X.290

A description of the objective which an abstract test case is designed to achieve.

test realizer

Rec. X.290

An organization which takes responsibility for providing, in a form independent of client and IUT, the means of testing IUTs in conformance with the abstract test suite.

test section

Rec. R.140

The section of a channel that is contained between two stations having measuring equipment enabling tests of telegraph transmission to be made.

test step

Rec. X.290

A named subdivision of a test case, constructed from test events and/or other test steps, and used to modularize abstract test cases.

test suite

Rec. X.290

A complete set of test cases, possibly combined into nested test groups, that is necessary to perform conformance testing or basic interconnection testing for an IUT or protocol within an IUT.

test suite

Rec. X.403

A set of test cases, possibly combined into nested test groups, necessary to perform conformance testing of an implementation.

The test suites do not imply an order of execution.

tested RQ

Rec. R.140

A procedure in which a check is made for the presence of a signal repetition and for the ratio of the number of elements A to the number of elements Z in each of the characters received after the signal repetition within the non-print cycle.

Note – See CCIR Recommendation 342-2.

testing point (line signalling)

Rec. M.60

The testing point (line-signalling) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre. It carries out line signalling tests on international circuits using channel-associated signalling systems, e.g., R2, No. 5, whether provided by wholly analogue transmission and switching systems or by a mixture of analogue and digital systems.

Note – In practice, at digital international exchanges, a line access point at the circuit level may not exist when the exchanges is interfaced by primary (or higher order) digital paths. Thus, all signalling testing may need to be carried out from one location – generally the testing point (switching and interregister signalling). Signalling tests on Signalling System No. 6 are controlled and coordinated by the administrative control (see Recommendation M.762).

testing point (line signalling)

Rec. M.718

The testing point (line signalling) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre. It carries out line signalling tests on international circuits using channel-associated signalling systems, e.g. R2, No. 5, whether provided by wholly analogue transmission and switching systems or by a mixture of analogue and digital systems.

Note – In practice, at digital international exchanges, a line access point at the circuit level may not exist when the exchange is interfaced by primary (or higher order) digital paths. Thus, all signalling testing may need to be carried out from one location – generally the testing point (switching and interregister signalling). Signalling tests on Signalling Systems No. 6 and No. 7 are controlled and coordinated by the administrative control (see Recommendations M.762 and M.782).

testing point (switching and interregister signalling)

Recs. M.60, M.719

The testing point (switching and interregister signalling) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre. It carries out tests concerned with switching and interregister signalling functions associated with international circuits, whether provided by wholly analogue transmission and switching systems or by a mixture of analogue and digital systems.

Note – In practice, at digital international exchanges, a line access point at the circuit level may not exist when the exchange is interfaced by primary (or higher order) digital paths. Thus, all signalling testing may need to be carried out from one location, generally the testing point (switching and interregister signalling). This would include line signalling aspects, if any.

testing point (transmission)

Recs. M.60, M.717

The testing point (transmission) is an element within the general maintenance organization for the international automatic and semi-automatic telephone service at each international centre. It carries out transmission testing on international circuits whether provided by wholly analogue transmission and switching systems or by a mixture of analogue and digital systems.

testing repetition cycle

Rec. R.140

A non-print cycle in which a check is made for the presence of a signal repetition and for the correct ratio of the number of elements A to the number of elements Z in all the characters received.

Note – See CCIR Recommendation 342-2.

text

Rec. T.60

Text is information for human comprehension that is intended for presentation in a two-dimensional form, e.g. printed on paper or displayed on a screen. Text consists of symbols, phrases or sentences in natural or artificial languages, pictures, diagrams and tables.

text area

Rec. T.61

The part of a printed page that is actually used for the presentation of text. The active position moves within the text area only. For Teletex, the text area is the *maximum printable area* (see Recommendation T.60).

text block

Rec. Z.341

Any combination of *clarifying texts, named-defined parameters* and/or *tables* which gives *output* information wherever it is needed or requested.

text delivery

See:

message deposit/message delivery; text deposit/delivery.

text deposit/delivery

See:

message deposit/message delivery; text deposit/delivery.

text extension symbol

Rec. Z.100

A *text extension symbol* is a container of text which belongs to the *graphical symbol* to which the *text extension symbol* is attached. The text in the *text extension symbol* follows the text in the symbol to which it is attached.

text string

Rec. Z.341

A character string (excluding " (quotation mark) and *correction characters*) not interpreted within the *man-machine language* but stored in the *system* for later *output* in its original form.

text transfer (TT)

Rec. U.82

A type of UMXU used to transfer address information and the subscriber message.

text unit

Rec. T.411

A data structure representing a content portion description.

theoretical duration of a significant interval

Rec. R.140

The exact duration prescribed for a significant interval.

Note – In determining this duration, the standardized and, where necessary, the mean modulation rate has to be taken into account.

theoretical margin

Rec. S.140

The margin that could be evaluated from the manufacturing data of the equipment, assuming that it is working under perfect conditions.

three condition

See:

two condition; three condition; four condition.

three-party service

Rec. I.250

A supplementary service which enables a user who is active on a call to hold that call, make an additional call to a third party, switch from one call to the other as required (privacy being provided between the two calls), and/or release one call and return to the other. Optionally, the served user could subscribe to an ability to join the two calls together into a three-way conversation.

three party services

Suppl. No. 1 (II.2)

The possibility for a busy subscriber to hold the existing call and make a call to a third party. The following arrangements may then be possible: the ability to switch between the two calls, the introduction of a common speech path between the three parties and the connection of the other two parties.

three point one (3.1) kHz audio

Rec. I.140

Digital representation of audio information such as voice-band data and speech with a bandwidth of 3.1 kHz, the encoding rule being specified (e.g. A-law, μ-law).

three point one (3.1) kHz audio information transfer

Rec. Q.71

This bearer service corresponds to the service which is currently offered in the PSTN.

This bearer service provides the transfer of speech and for the transfer of 3.1 kHz bandwidth audio information such as voiceband data via modems, groups I, II and III facsimile information (see Note). The digital signal at the S/T reference point is assumed to conform to the internationally agreed encoding laws for speech A-law, μ-law, i.e. Recommendation G.711. Connections provided for this service should provide for the transfer of the information indicated above. (This means that the network may include speech processing techniques provided that they are appropriately modified, or functionally removed prior to non-speech information transfer.) The control of echo control devices, speech processing services etc. is only made by use of a 2100 Hz (disabling) in-band tone.

All CCITT Recommendations for the transfer of speech information in the network apply to this service.

Note – The maximum modem bit rate that can be used by users in applications of this bearer service depends on the modulation standard employed by the user and on the transmission performance within, or between, different Administrations. The extent of support is a network, or bilaterally agreed matter.

thresholding

Rec. M.30

Assignment of a specified value of a monitored parameter such that trouble indication is generated only when this value is exceeded.

through connection

Rec. Q.9

The processes performed by control and switching equipment in order to establish an exchange connection.

through-connection delay

Rec. E.600

The interval from the instant when the information required for setting up a through-connection in an exchange is available for processing in the exchange, to the instant when the switching network through-connection is established and available for communication.

through-connection delay

Rec. Q.543

Through-connection delay is defined as the interval from the instant at which the information required for setting up a through-connection is available for processing in an exchange, or the signalling information required for setting up a through-connection is received from the signalling system, to the instant at which the appropriate transmission path is available for carrying traffic between the incoming and outgoing exchange terminations.

The exchange through-connection delay does not include an inter-office continuity check, if provided, but does include a cross-office check if one occurs during the defined interval.

When the through-connection is established during call set-up, *the recommended values for exchange call set-up delay apply.* When the through-connection in an exchange is not established during the exchange call set-up interval, the through-connection delay may then contribute to the network call set-up delay.

For connections terminating on ANALOGUE SUBSCRIBER LINES, the through-connection delay is the interval from the instant at which the called subscriber off-hook condition (answer) is recognizable at the subscriber line interface of the exchange until the through-connection is established and available for the carrying traffic or a consequent signal is sent backwards by the exchange.

For connections terminating on DIGITAL SUBSCRIBER LINES, the through-connection delay is the interval from the instant at which the CONNECT message is received from the signalling system until the through-connection is established and available for carrying traffic as those indicated by passing to the respective signalling systems of the ANSWER and CONNECT ACKNOWLEDGE messages.

through connection delay

Rec. Q.543

For originating outgoing and transit traffic 64 kbit/s switched circuit connections, through connection delay is defined as the interval from the instant that the signalling information required for setting up a connection through the exchange is received from the incoming signalling system to the instant that the transmission path is available for carrying traffic between the incoming and outgoing terminations on the exchange.

Usually, both directions of transmission will be switched through at the same time. However, at an originating exchange, on certain calls, there may be a requirement to effect switch through in two stages, one direction at a time. In this case, different signalling messages will initiate the two stages of switch through and the recommended delay applies to each stage of switch through.

For internal and terminating traffic 64 kbit/s switched circuit connections the through connection delay is defined as the interval from the instant that the CONNECT message is received from the called line signalling system until the through connection is established and available for carrying traffic and the ANSWER and CONNECT ACKNOWLEDGEMENT messages have been passed to the appropriate signalling systems.

through-connection delay

Rec. Q.9

The interval from the instant at which the information required for setting up a through-connection in an exchange is available for processing in the exchange to the instant that the switching network through-connection is established and available for carrying traffic between the incoming and outgoing 64-kbit/s circuits.

through-connection delay (end-to-end channel associated or common channel signalling)

Rec. E.543

The interval from the instant when the information required for setting up a through-connection in an exchange is available for processing in the exchange to the instant when the switching network through-connection is established between the incoming and outgoing circuits.

through-connection delay (link-by-link channel associated signalling)

Rec. E.543

The interval from the completion of outpulsing to the establishment of a communication path through the exchange between the incoming and the outgoing circuits.

through-fifteen (15)-supergroup assembly connection point

Rec. G.211

When a 15-supergroup assembly link is made up of several 15-supergroup assembly sections, these sections are interconnected in tandem by means of through-15-supergroup assembly filters at points called through-15-supergroup assembly connection points.

As an alternative when the 15-supergroup assembly equipment provides sufficient filtering (corresponding to the definition of through-connection equipments – see Recommendation G.242, § 6) through-15-supergroup assembly filters can be dispensed with.

Note – When a 15-supergroup assembly is connected by means of through-supermastergroup filters, the point of interconnection is the through-supermastergroup connection point and not a through-15-supergroup assembly connection point.

through-fifteen (15) supergroup assembly connection point

Rec. M.300

When a 15 supergroup assembly link is made up of several 15 supergroup assembly sections, these sections are interconnected in tandem by means of through-15 supergroup assembly filters at points called through-15 supergroup assembly connection points.

Note – In a country normally using mastergroup and supermastergroup arrangements, a 15 supergroup assembly can be through-connected without difficulty at the supermastergroup distribution frame by means of through-supermastergroup filters. In this case, the 15 supergroup assembly is through-connected to position 3 (8620-12 336 kHz) instead of position 1 (312-4028 kHz) as required by the definition of the through-connection point of such an assembly. The point where this through-connection is made is a through-supermastergroup connection point and not a through-15 supergroup assembly connection point.

through-group connection point

Recs. G.211, M.300

When a group link is made up of several group sections, they are connected in tandem by means of through-group filters at points called through-group connection points.

See Figures 2/M.300 to 4/M.300.

through-mastergroup connection point

Recs. G.211, M.300

When a mastergroup link is made up of several mastergroup sections, they are connected in tandem by means of through-mastergroup filters at points called through-mastergroup connection points.

through-supergroup connection point

Recs. G.211, M.300

When a supergroup link is made up of several supergroup sections, they are connected in tandem by means of through-supergroup filters at points called through-supergroup connection points.

See Figures 2/M.300 to 4/M.300.

through-supermastergroup connection point

Recs. G.211, M.300

When a supermastergroup link is made up of several supermastergroup sections they are connected in tandem by means of through-supermastergroup filters at points called through-supermastergroup connection points.

throughput

Rec. I.113

The number of data bits contained in a block (e.g. between the address field and the CRC field of the LAPD-based frames) successfully transferred in one direction across a section per unit time.

throughput

Rec. I.122

Throughput for a virtual connection section in a network providing the frame relaying bearer service, is the number of data bits contained between the address field and the FCS field of the frames successfully transferred in one direction across that section per unit time. Successful transfer means that the FCS check for each frame is satisfied.

Note – Virtual connection section is defined in Rec. X.134.

throughput

Rec. Q.716

This parameter is specified independently for each direction of transmission and corresponds to a number of octets of user data (contained in NSDU) transferred per second on a signalling connection.

Note – Only successfully transferred user data are taken into account; that means: to the correct destination, error-free and without missequencing.

throughput

Rec. Q.543

The number of call attempts processed successfully by an exchange per unit time.

throughput

Rec. X.135

Throughput for a virtual connection section is the number of user data bits successfully transferred in one direction across that section per unit time.

Note – User data bits are the bits of the user data field in data packets of the X.25 or X.75 packet level (protocols and data above the packet level). Framing, routing, bit stuffing, error control, and other protocol fields introduced by all protocols at or below the packet level are excluded.

Successful transfer means that no user data bits are lost, added, or inverted in transfer.

throughput capacity

Rec. X.135

Let B_i and B_j be two virtual connection section boundaries. Assume steady-state throughput is to be estimated with data packets flowing from B_i to B_j. Assume there is a statistically constant load, L, on the virtual connection section between B_i and B_j. Then the throughput capacity of that section under load L is defined as the steady-state throughput maximized over all offered combinations of virtual connection parameter settings and choices for the performance and loading outside B_i and B_j.

time

Rec. Z.100

Time is a *sort* defined in a predefined *partial type definition* for which the *values* are denoted as the *values* of *Real*. The predefined *operators* using *Time* and *Duration* are + and −.

time acceleration factor

Suppl. No. 6 (II.3)

The ratio between the *time durations* necessary to obtain the same stated number of *failures* or degradations in two equal size samples under two different sets of stress conditions involving the same *failure mechanisms* and *fault modes* and their relative prevalence.

Note – One of the two sets of stress conditions should be a reference set.

time and charges requested at end of call (prefix 37)

Recs. E.216, F.126

Prefix 37 provides, upon completion of the call, either automatic printout of charging information, or connection to an operator who will supply charging information on the call. The prefix is followed by the number of the called party.

time between failures

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The *time duration* between two successive *failures* of a *repaired item.*

Note 1 – Those parts of *non-operating time* which are included must be identified.

Note 2 – In some applications only the *up time* is considered.

time between interruptions

Rec. E.800

The *time duration* between the end of one *interruption* and the beginning of the next.

time compression multiplex

Recs. G.960, I.430

A transmission method used in digital transmission systems in which bi-directional transmission occurs in non-overlapping uni-directional bursts.

time congestion

Rec. E.600

The proportion of time that a particular pool of resources does not contain any idle resource.

time consistent busy hour

Rec. E.600

The 1-hour period starting at the same time each day for which the average traffic of the resource group concerned is greatest over the days under consideration.

time distortion

See:
telegraph distortion; time distortion.

time division

Rec. Q.9

The separation in the time domain of a plurality of transmission channels between two points.

(time division) highway (in switching)

See:
(time division) highway (in switching); bus.

time-division multiplexing

Rec. G.701

Multiplexing in which several signals are interleaved in time for transmission over a common channel.

time division multiplexing (TDM)

Rec. R.140

Multiplexing in which a separate periodic time interval is allocated to each tributary channel in the common channel.

time division switching

Rec. Q.9

The switching of inlets to outlets using time division (multiplexing) techniques.

time duration

See:
(time) duration.

time interval

Suppl. No. 6 (II.3)

All *instants of time* between two given *instants of time.*

time interval error

Rec. G.701

The total difference over a specified interval of time in the significant instants of a digital signal from their ideal positions in time.

time limit

Rec. F.500

A service control that indicates the maximum elapsed time, in seconds, within which the service should be provided. If the constraint connot be met, an error is reported, unless it was a search or a list operation, in which case partial results should be returned to the DUA with the indication that a time limit problem has been encountered. If this component is omitted, no time limit is implied.

Note – This service control is an essential optional user facility.

time-out

*Series X**

A parameter related to an enforced event designed to occur at the conclusion of a predetermined elapsed time.

Note – A time-out condition can be cancelled by the receipt of an appropriate time-out cancellation signal.

time quantized control

Rec. G.701

A method of controlling clocks in which each clock control signal is derived or utilized only at a number of discrete instants, which may or may not be equally separated in time.

time sharing

Rec. Q.9

A mode of operation of a data processing system that provides for the interleaving in time of two or more processes in one processor.

time sharing (deprecated)

See:
time slicing.

time slicing

Rec. Q.9

A mode of operation in which two or more processes are assigned quanta of time on the same processor.

time slicing (deprecated)

See:
time sharing.

time slot

Recs. G.701, Q.9

Any cyclic time interval that can be recognized and defined uniquely.

time slot interchange

Rec. Q.9

The transfer of information from one time slot to another between incoming and outgoing time division highways.

time slot sequence integrity

Rec. I.140

This value applies when

i) at each user-network interface, time slots are implicitly or explicitly demarcated for each access channel of an aggregate of access channels, and

ii) the information parts delivered from the time slots at the receiving end are in the same order as submitted at the transmitting end.

Note – Preserving the order of bits within an individual time slot from the transmitting to the receiving end is not part of this definition.

time slot sequence integrity

Rec. Q.9

The assurance that the digital information contained in the *n* time slots of a multislot connection arrives at the output (or terminal) in the same sequence as it was introduced.

time to failure

Suppl. No. 6 (II.3)

Total *time duration* of the *operating time* of an *item*, from the *instant of time* it goes from a *down state* to an *up state*, after a corrective *maintenance action*, until the next *failure*.

time to first failure

Suppl. No. 6 (II.3)

Total *time duration* of the *operating time* of an *item* from the *instant of time* it is first put in an *up state*, until *failure*.

time to recovery

See:

time to restoration; time to recovery.

time to restoration; time to recovery

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in a *down state* due to a *failure*.

timer

Rec. Z.100

A *timer* is an object, owned by a *process instance*, that can be *active* or *inactive*. An *active timer* returns a *timer signal* to the owning *process instance* at a specified time. See the definitions of the terms *set* and *reset*.

timing extraction (deprecated)

See:

timing recovery.

timing extraction

See:

timing recovery; timing extraction.

timing for start of charging (circuit switched calls)

Rec. Q.543

When required, timing for charging at the exchange where this function is performed, shall begin after receipt of an ANSWER indication from a connecting exchange or the called user.

timing information

Rec. G.701

Information contained in a signal relating to the timing of another signal.

timing jitter

Rec. G.810

The short term variations of the significant instants of a digital signal from their ideal positions in time (where short term implies these variations are of frequency greater than or equal to 10 Hz).

timing recovery; timing extraction

Recs. G.701, Q.9

The derivation of a timing signal from a received signal.

timing signal

Rec. G.701

A cyclic signal used to control the timing of operations.

title

Rec. F.500

An attribute type which specifies the designated position or function of the object within an organization.

title

Rec. X.200

A permanent identifier for an entity.

title-domain

Rec. X.200

A subset of the title space of the OSI environment.

title-domain-name

Rec. X.200

An identifier which uniquely identifies a title-domain with the OSI environment.

Note – Title-domains of primary importance are the layers. In this specific case, the title-domain-name identifies the (N)-layer.

to assemble

Rec. Q.9

To translate a program expressed in an assembly language and perhaps to link subroutines.

to compile

Rec. Q.9

To translate a program expressed in a high level language into a program expressed in a computer language.

to debug (in programming)

Rec. Q.9

To detect, to trace, to eliminate mistakes in programs or in other software.

to designate

Recs. T.51, T.61

To identify a set of characters that are to be represented, in some cases immediately and in others on the occurrence of a further control function, in a prescribed manner.

to dump

Rec. Q.9

To write the contents of a storage, or part of a storage, usually from an internal storage, on to an external medium for a specific purpose such as to allow other use of the storage, as a safeguard against faults or errors, or in connection with debugging.

to invoke

Rec. T.51

To cause a designated set of characters to be represented by the prescribed bit combinations whenever those bit combinations occur, until an appropriate code extension function occurs.

to invoke

Rec. T.61

To cause a designated set of characters to be represented by the prescribed bit combinations.

to link (in programming)

Rec. Q.9

To provide a link.

to map (over)

Rec. Q.9

To establish a set of values having a defined correspondence with the quantities or values of another set.

to pack

Rec. Q.9

To store data in a compact form in a storage medium by taking advantage of known characteristics of the data and of the storage medium, in such a way that the original form of the data can be recovered.

Example: To make use of bit or byte locations that would otherwise go unused.

to patch

Rec. Q.9

To make an improvized modification.

to relocate

Rec. Q.9

To move a computer program or part of a computer program, and to adjust the necessary address references so that the computer program can be executed after being moved.

to represent

Rec. T.51

a) to use a prescribed bit combination with the meaning of a character in a set of characters that has been designated and invoked; or

b) to use an escape sequence with the meaning of an additional control function.

token

Rec. X.215

An attribute of a session connection which is dynamically assigned to one SS-user at a time to permit certain services to be invoked.

token

See:
authentication token; token.

tone

Rec. E.182

An audible indication comprising a small number of discrete frequencies, but excluding speech.

tone on hold

Rec. E.182

A tone used to reassure a calling subscriber who has been placed on "hold" by a subscriber with PBX or other facilities.

tool

Rec. Z.341

A means by which the task of one or more *phases* of the *methodology* for the specification of the *man-machine interface* may be accomplished.

top edge

Rec. T.411

The edge of the positioning area of a basic layout object that is in the direction opposite to the line progression.

top left corner

Rec. T.411

The corner of a layout object that is least progressed both in the horizontal and vertical directions of this layout object.

top right corner

Rec. T.411

The corner of a layout object that is most progressed in the horizontal direction and least progressed in the vertical direction of this layout object.

topology change

See:

symmetry and/or topology change.

total call connection delay (TCCD)

Rec. X.130

The time interval between the transmission of the *call request* signal and receipt of the *ready for data* signal by the calling DTE.

total electroacoustic gain

Rec. P.10

Ratio of the pressure at the ear reference point of a listener to the pressure at the mouth reference point of a talker connected by a telephone channel.

total transit delay of a UDT message

Rec. Q.716

This parameter is the elapsed time between a N-UNITDATA request issued by a SCCP user at the originating node and the correponding N-UNIDATA indication issued to the SCCP user at the destination node.

- sending time of a UDT message by the SCCP;
- MTP overall transfer time;
- transit time of a UDT message for the relay function at a relay point;
- receiving time of a UDT message by the SCCP

Depending on the configuration, the second parameter could appear one or several times and the third parameter could appear zero, one or several times. This is illustrated in Figure 1/Q.716.

A probabilistic approach has to be taken to give values to this parameter, considering the various possible SCCP routes and the existence of queues at several points.

trace

Rec. M.30

A report of the execution flow of a specified event.

trace

Rec. T.150

Presentation element being a curve of an arbitrary shape, starting from a defined position, being completed incrementally and ending at a defined position.

traffic carried

Rec. E.600

The traffic served by a pool of resources.

traffic-carrying device

Rec. Q.9

Functional unit used directly or indirectly during the establishment and sustaining of a connection.

traffic distribution imbalance

Rec. E.600

Unevenly distributed traffic among similar resources.

traffic flow control (signalling-)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Actions and procedures intended to limit signalling traffic at its source in the case when the signalling network is not capable of transferring all signalling traffic offered by the User Parts, because of network failures or overload situations.

traffic flow control

See:

(signalling) traffic flow control.

traffic matrix

Rec. E.600

A structured presentation of the traffic between a number of origins and destinations.

traffic offered

Rec. E.600

The traffic that would be carried by an infinitely large pool of resources.

traffic relation

Rec. E.600

The traffic between a particular origin and a particular destination.

traffic route

Rec. X.110

A predetermined sequence of *trunk circuits* that is used to carry traffic between two points. (See Figure A-1/X.110.)

traffic routing

Rec. E.600

The selection of routes, for a given traffic relation; this term is applicable to the selection of circuit groups by switching systems or operators, or to the planning of routes.

traffic routing (in circuit switching)

U.140

Designating in accordance with given rules the set of circuits to be used for setting up a connection from a given exchange for a given call attempt.

traffic-unit price procedure

Rec. D.000

The procedure whereby remuneration of an Administration is based on traffic units.

traffic volume

Rec. E.600

The integral of the instantaneous traffic over a given time interval.

Note 1 – Traffic volume is equal to the sum of the holding times of the resources.

Note 2 – A unit used for traffic volume is the Erlang hour (symbol: E).

trafficability performance

Recs. E.800, M.60

The ability of an item to meet a traffic demand of a given size and other characteristics, under given internal conditions.

Note – Given internal conditions refer, for example, to any combination of faulty and non-faulty sub-items.

trailing edge

Rec. T.411

The edge of a frame or block that is orthogonal to the direction of the layout path and that is met first, from the outside of the frame or the block, in the direction of the layout path.

transaction

Glos. (VI.7, VI.8, VI.9)

An association between two TC providers.

transaction (in signalling applications)

Rec. Q.9

An interchange of enquiry and response messages between signalling points that transfers information.

transaction capabilities (TC)

Glos. (VI.7, VI.8, VI.9)

Functions which control information transfer between two or more nodes via a signalling network.

Transaction Capabilities Application Part (TCAP)

Glos. (VI.7, VI.8, VI.9)

The part of the transaction capabilities that resides in the application layer of the OSI protocol references model.

transaction portion

Glos. (VI.7, VI.8, VI.9)

The portion of the TCAP message that identifies whether the transaction is expected to consist of single or multiple messages and provides a means to associate these messages with a specific transaction and to terminate a transaction. The part of TCAP messages dealing with the control of transactions.

transceiver

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A tone device inserted in the outgoing end of a circuit which performs the transmitter and receiver check test through a check loop.

transcoding gain (TG)

Rec. G.763

The transmission channel multiplication ratio which is achieved through LRE, which effectively creates a number of low rate encoded bearer channels which is greater than the number of available transmission channels. When only a transcoding process conforming to Recommendation G.721 (i.e 32 kbit/s ADPCM) is used, the TG will equal 2. When no transcoding is used the TG will equal 1. When overload channels are created the TG will be greater than 2.

transfer

Recs. F.400, X.400

In the context of message handling, a transmittal step in which one MTA conveys a message, probe, or report to another.

transfer-allowed (procedure)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure, included in the signalling route management, which is used to inform a signalling point that a signalling route has become available.

transfer-allowed-acknowledgement signal

Rec. Q.256

A signal sent in response to the reception of a transfer-allowed signal.

transfer-allowed signal

Rec. Q.256

A signal sent by a signal transfer point when it is once again ready to transfer signals for the particular group of circuits.

transfer channel

Gloss. (VI.3)

A voice-frequency channel or a digital channel.

transfer controlled (procedure)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure, included in signalling route management, which does inform a signalling point of the congestion status of a signalling route.

transfer delay

Rec. R.140

Duration between the beginning of transmission and complete reception of a signal.

transfer link

Gloss. (VI.3)

A combination of two transfer channels operating together in a single signalling system.

transfer mode

Rec. I.113

Aspects covering transmission, multiplexing and switching in a telecommunications network.

transfer-prohibited (procedure)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A procedure, included in the signalling route management, which is used to inform a signalling point of the unavailability of a signalling route.

transfer-prohibited signal

Rec. Q.256

A signal sent by a signal transfer point when it is unable to transfer signals for a particular group of circuits.

transfer restricted (procedure)

Glos. (VI.7, VI.8, VI.9)

A procedure, included in signalling route management, which does inform a signalling point of the restriction of a signalling route.

transfer-restricted (procedure)

Rec. Q.9

A procedure, included in the signalling route management, which is used to inform a signalling point that a signalling route is not optimal and should be avoided where possible (national option).

transfer syntax

Rec. X.200

That concrete syntax used in the transfer of data between open systems.

transfer syntax name

Rec. X.216

A name which unambiguously identifies either a transfer syntax or a set of rules for generating a transfer syntax from a given abstract syntax.

transfer system

Recs. F.400, X.400, X.402

A messaging system that contains one MTA; optionally one or more access units, and neither a UA nor a message store.

transfer time, T_t

Rec. M.495

The time interval after the confirmation that a fault requires a restoration to the completion of the transmission restoration operation; $T_t = T_3 + T_4$.

transferred account (TA) service

See:
international transferred account (TA) service.

transient fault

See:
intermittent fault.

transit connection

Rec. Q.9

An exchange connection for a call incoming from one interexchange circuit and outgoing on another.

transit country (or Administration)

Rec. D.000

A country through which traffic is routed between two terminal countries.

transit delay

Rec. I.113

The time difference between the instant at which the first bit of the address field of a frame crosses one designated boundary, and the instant at which the last bit of the closing flag of the frame crosses a second designated boundary.

transit delay

Rec. I.122

Transit delay is defined only between pairs of section boundaries. Transit delay of a frame protocol data unit (FPDU) starts at the time t_1 at which the first bit of the FPDU crosses the first boundary, and ends at the time t_2 at which the last bit of the FDPU crosses the second boundary.

Transit delay $= t_2 - t_1$.

Note – The definition of FPDU is given in the definition of *residual error rate.*

transit exchange

Rec. Q.9

An exchange used primarily as a switching point for traffic between other exchanges. (See Figure 1/Q.9.)

transit exchange

U.140

A telegraph exchange which enables connections between other telegraph exchanges to be established.

transit network identification

*Series X**

A network utility that names each transit network controlling a portion of the established or partially established virtual circuit.

transit network section

Rec. X.134

A network section between two internetwork circuit sections.

transit network selection

Rec. Q.762

Information sent in the initial address message indicating the transit network(s) requested to be used in the call.

transit node

Rec. G.810

A synchronous network node which interfaces with other nodes and does not directly interface with customer equipment.

transit share

Rec. D.000

The part of the accounting rate which is due to an intermediate Administration whose territory, installations or circuits are used to route traffic between two terminal countries.

transit time of a CC message for the relay function at a relay point with coupling

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive corresponding to an incoming CC message at a relay point with coupling, and the associated MTP-TRANSFER request primitive corresponding to the outgoing CR message.

transit time of a CR message for the relay function at a relay point with coupling

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive corresponding to an incoming CR message at a relay point with coupling, and the associated MTP-TRANSFER request primitive corresponding to the outgoing CR message (which may differ from the incoming one only by the called party address).

transit time of a CR message for the relay function at a relay point without coupling

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive corresponding to an incoming CR message at a relay point without coupling, and the associated MTP-TRANSFER request primitive corresponding to the outgoing CR message.

transit time of a DT message for the relay function at a relay point with coupling

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive corresponding to an incoming DT message at a relay point with coupling, and the associated MTP-TRANSFER request primitive corresponding to the outgoing DT message.

transit time of a UDT message for the relay function at a relay point

Rec. Q.716

This parameter is the elapsed time between a MTP-TRANSFER indication primitive corresponding to an incoming UDT message at a relay point (i.e. a signalling point where are implemented the SCCP translation functions), and the associated MTP-TRANSFER request primitive corresponding to the outgoing UDT message (which may differ from the incoming one by the called party address).

A probabilistic approach has to be taken to give values to this parameter, considering the existence of queues and that it is possible for the translation functions to be congested.

transit traffic

Rec. E.600

Traffic passing through the network considered.

transition

Rec. R.140

A transient phenomenon separating two successive signal elements having different significant conditions.

transition

Rec. Z.100

A *transition* is an active sequence which occurs when a *process instance* changes from one *state* to another.

transition (in SDL)

Rec. Q.9

A transition is a sequence of *actions* which occurs when a *process* changes from one *state* to another in reponse to an *input.* (See Recommendation Z.100, § 2.6.7.)

transition area

Rec. Z.100

A *transition area* is the *SDL/GR* representation of a *transition.*

transition string

Rec. Z.100

A *transition string* is a sequence of zero or more *actions.*

transition string area

Rec. Z.100

A *transition string area* is the *SDL/GR* representation of a *transition string.*

translation

Rec. Q.9

In automatic telephony: the retransmission of received trains of impulses after changing the number of impulses in each train and/or changing the number of trains.

translation (in telegraphy and data transmission)

Rec. S.140

Function of a telegraph receiver in reestablishing the text of a *message* from the received signal, including the recording of the text.

translator

Rec. Q.9

In automatic telephony: a device used for the *translation* of trains of impulses.

transmission

Recs. G.701, I.112, M.60

The action of conveying signals from one point to one or more other points.

Note 1 – Transmission can be effected directly or indirectly, with or without intermediate storage.

Note 2 – The use of the English word "transmission" in the sense of "emission" is deprecated.

transmission buffer (TB)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

Storage in the signalling link control for message signal units not yet transmitted.

transmission capability

Rec. X.300

Transmission capability consists of all the necessary mechanisms required through a subnetwork (or subnetworks interworking) for the transparent transfer of data between users' equipment or application intermediate system, including the related mechanism within the end systems. This includes all mechanism required to access subnetworks, as defined in the I.230-series Recommendations and Recommendation X.10 as far as the purpose of transparent transmission of information is concerned. It may also include special management functions; such functions are for further study.

Note – It is understood that some optional user facilities/supplementary services as defined in Recommendation X.2 and the I.230-series related to transmission capability only, while others also relate to communication capability. The exact lists in each category is not subject of Recommendation X.300.

transmission channel

Rec. G.763

A 64 kbit/s time slot within a DCME frame.

transmission channel

See:
channel; transmission channel.

transmission delay (through a digital exchange)

Rec. Q.9

The sum of the times necessary for an octet to pass in both directions on a connection through a digital exchange due to buffering, frame alignment and time-slot interchange functions for digital-to-digital connections and in addition, for analogue-to-analogue connections, to the A/D conversions.

transmission interruption

Rec. E.855

Temporary inability of the user-to-user transmission path to be provided persisting for less than 10 seconds (maximum duration) and more than another given time duration (or minimum duration) characterized by a reduction below a certain threshold in received signal power level.

transmission link

Recs. I.112, M.60

A means of transmission with specified characteristics between two points.

Note – The type of the transmission path or the capacity is normally indicated, e.g. radio link, coaxial link, or 2048 kbit/s link.

transmission loss of path a-t-b; semi-loop loss

Rec. G.100

The transmission loss between the points "a" and "b" of the 4-wire termination (as defined at the virtual switching points) independent of whether there exists or not a physical point "*t*".

Possible alternative to this definition:

In an arrangement comprising a 4-wire circuit (or a cascade connection of several 4-wire circuits) with unwanted coupling between the go and return direction at the ends of the circuit – usually via a 4-wire terminating set, or via acoustical coupling – the loss measured between the input and output. See Figure 3/G.100.

See Figure 3/G.100.

Note 1 – The semi-loop loss is an important quantity in determining *echo balance return loss, echo loss, listener echo loss* (see also *open-loop loss*).

Note 2 – Distinction may be made between the semi-loop loss of a given piece of equipment and the semi-loop loss of a national system. The latter is measured at equi-level points in an ISC which serves as a national gateway exchange.

transmission maintenance point (international line) (TMP-IL)

Rec. M.1014

The transmission maintenance points (international line) are elements within the general maintenance organization located at the terminals of that part of a leased or special circuit known as the international line. An international line is defined in Recommendation M.1010. The class of circuits considered here are also referred to in Recommendations M.1012 and M.1013 concerning circuit control and sub-control functions for international leased and special circuits.

transmission medium requirement

Rec. Q.762

Information sent in the forward direction indicating the type of transmission medium required for the connection (e.g. 64 kbit/s unrestricted, speech).

transmission method

Recs. G.960, I.430

The technique by which the transmission system transmits and receives signals via the transmission medium.

transmission of a verbal message service

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At the request of a caller (whether a subscriber or not), a short message is transmitted by an operator, either to one or several telephone numbers at a specified time, or to a specified person (whether a subscriber or not) when he calls the operator.

transmission overload

Rec. G.763

The condition when the average bits per sample goes beyond the value set in accordance with speech quality requirements.

transmission overload

Rec. P.84

The condition when the freezeout fraction goes beyond the value set in accordance with the speech quality requirements.

transmission performance

Recs. E.800, M.60

The level of reproduction of a signal offered to a telecommunications system, under given conditions, when this system is in an up state.

transmission plan

Rec. R.140

In a telegraph network a set of limiting values of telegraph distortion and receiver margin compatible with the satisfactory transmission quality of the network.

transmission reference point

Rec. G.100

A hypothetical point at or near to the sending end of each channel (preceding the virtual switching point specified by the CCITT), used as the "zero relative level point" in the computation of nominal relative levels.

transmission reference point

Recs. G.101, Q.43

A hypothetical point used as the zero relative level point in the computation of nominal relative levels.

transmission restoration

Recs. M.60, M.495

The different actions taken in order to restore the transmission of a signal affected by a transmission fault.

transmission restoration control function

Rec. M.495

This is the function which decides whether restoration is necessary on the basis of information from the link supervision system or link alarms.

Note – The control function might be included in a specific equipment, or in the transmission restoration equipment itself, or within a restoration control centre. Control decisions can also be taken by people in, for example, a control centre.

transmission restoration equipment

Rec. M.495

The part of the transmission restoration system that switches the transmission from the normal link to a restoration link.

transmission restoration function

Rec. M.495

The ability to perform under stated conditions and within given time constraints the transmission restoration.

Note 1 – This function is aimed at increasing the transmission availability; it can provide transmission link supervision and control, the sending and receiving of control and check signals, and the changeover from normal to an alternative link, if necessary by assembling links.

Note 2 – This function can allow the restoration of failed transmission systems, links, groups, digital blocks, equipment, etc., as well as the restoration for maintenance purposes such as planned outages, or to remedy conditions that affect transmission such as fading.

Note 3 – The transmission restoration function can be implemented by equipment that is dedicated to it, or by equipment that has other functions, such as, for example, automatic digital distribution frames.

transmission restoration function: automatic or semi-automatic transmission rerouting (protection network switching)

Rec. M.495

Automatic or semi-automatic transmission rerouting is that category of transmission restoration function in which transmission links are assembled together and substituted for another link.

Note – This reflects a configuration in which a certain number of links form a restoration network and protect normal links. Within a given transmission station, or for a given switching equipment, M links protect N links. It is recommended to use the expression N+M automatic transmission rerouting to designate such a configuration.

Figure 2/M.495 shows un example. In Station A, M restoration links can be used for restoration of N normal. A link between A and B can be restored, for example, directly or via C.

transmission restoration function: direct transmission restoration (protection link switching)

Rec. M.495

Direct transmission restoration is that category of transmission restoration function in which one transmission link between two stations is substituted for another between those two stations.

Note – This reflects a configuration in which M links proctect N links, or in which N+M links give redundancy to a relation requiring N links, with the extremities of all links in the same locations. It is recommended to use the expression N+M direct transmission restoration to designate such a configuration.

See Figure 1/M.495.

transmission restoration function: manual transmission rerouting

Rec. M.495

Manual transmission rerouting is that category of transmission restoration function in which one transmission link is replaced manually by another when a complete or partial transmission route failure has occurred or when the normal route restoration link is not available due to a previous or simultaneous interruption, or when there is no such restoration link provided.

Note – Such rerouting is normally effected using plugs and cords.

transmission restoration function: 1+1 restoration

Rec. M.495

1+1 restoration is that category of transmission restoration function in which one transmission link is substituted for another associated link, generally on another transmission route.

See Figure 3/M.495.

transmission restoration system

Rec. M.495

A system that can be used to implement the transmission restoration function. An example is shown in Figure 4/M.495.

transmission route

Recs. M.60, M.495

A transmission facility on a specific medium used by a certain number of transmission systems between two stations.

Note 1 – For example, one cable between two stations could be regarded as one transmission route (whatever the number of systems using this cable might be) and a radio system between these two points could be regarded as an other route.

Note 2 – This definition represents a physical route; this is different from the term "route" which is defined in the Recommendations E.600, Q.9 and Z.341, which represents a logical route.

transmission route diversity

Recs. M.60, M.495

The provision of at least two links between two nodes in a transmission network which are routed over different transmission routes.

Note – In case of a failure of one link, transmission route diversity allows some traffic between the two nodes still to be carried over the remaining link(s).

transmit channel

Rec. R.140

The designation at a terminal or other equipment, of a channel used for transmitting.

transmit window

Rec. X.224

The set of consecutive sequence numbers which a transport entity has been authorised by its peer entity to send at a given time on a given transport connection.

transmittal

Recs. F.400, X.400

The conveyance or attempted conveyance of a message from its originator to its potential recipients, or of a probe from its originator to MTAs able to affirm any described message's deliverability to its potential recipients. It also encompasses the conveyance or attempted conveyance, to the originator of the message or probe, or any report it provokes. It is a sequence of transmittal steps and events.

transmitter distortion

Rec. R.140

The telegraph distorsion of a transmitter measured at the output under specified standard conditions.

transmitting objective loudness rating (TOLR)

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$$TOLR = -20 \log_{10} \frac{V_T}{S_M} \qquad (1\text{-}2)$$

where

S_M is the sound pressure at the mouth reference point (in pascals)

V_T is the output voltage of the transmitting component (in millivolts).

transmultiplexer

Rec. G.701

An equipment that transforms a frequency-division multiplexed signal (such as group or supergroup) into a corresponding time-division multiplexed signal that has the same structure as if it had been derived from PCM multiplex equipment, and that also carries out the complementary function in the opposite direction of transmission.

transmultiplexer

Rec. M.300

An equipment that transforms frequency division multiplexed signals (such as group or supergroup) into corresponding time division multiplexed signals that have the same structure as those derived from PCM multiplex equipment. The equipment also carries out the inverse function.

transmultiplexer channel

Rec. G.791

A frequency band of 4000 Hz on the analogue side, corresponding to a bit rate of 64 kbit/s on the digital side, which permits the transmission of a signal limited to the telephone band 300-3400 Hz. Access may be gained to a given channel:

- either at the level of the time slot associated with the relevant channel of the TDM signal;
- or at the level of the frequency band (f_p, $f_p \pm 4000$ Hz) of the FDM signal, f_p being the virtual carrier frequency associated with the channel concerned. The + sign corresponds to the case of the base supergroup, the − sign to the case of the base group.

Note – Correspondence between out-of-band signalling on the analogue side and channel associated signalling on the digital side will be covered in the Recommendations specific to the various transmultiplexers.

transparency

Rec. Q.300

A transparent state may be said to exist between two defined points when a signal which exists at one point can be transmitted to the second point without any loss or change of information. Signal is understood here in the sense the word has in signalling systems, i.e. a piece or item of information with a standardized meaning.

Transparency of the network of signalling channels would ensure that transfer of signalling information from one link to another is always achieved on a signal-per-signal basis. Thus, laborious analysis of several received signals for deciding which signal to transmit could be avoided.

transparency

Rec. R.140

Possibility to transmit any telegraph signal with the only condition that a specified modulation rate cannot be exceeded.

transparency

Rec. T.412

This attribute defines the transparency of a page, frame or block.

transparency ; digital transparency

Rec. G.701

The property of a digital transmission channel, telecommunication circuit or connection, that permits any digital signal to be conveyed over it without change to the value or order of any signal elements.

Note – The digital transmission channel, telecommunication circuit or connection concerned may introduce delay, and may contain reversible code conversion functions.

transparent (data)

Rec. X.224

TS-user data which is transferred intact between transport entities and which is unavailable for use by the transport entities.

transparent (data)

Rec. X.225

SS-user data which is transferred intact between SPMs and which is unavailable for use by the SPMs.

transparent data transfer phase

*Series X**

The phase of a call during which any bit sequence can be transmitted between DTEs.

transparent loopback

Recs. G.960, I.430, M.60, M.125

A transparent loopback is one in which the signal transmitted beyond the loopback point (the forward signal) when the loopback is activated, is the same as the received signal at the loopback point. See Figures B-1/G.960, E-1/I.430 and 1a/M.125.

transport service provider ; TS-provider

Rec. X.225

An abstract machine which models the totality of the entities providing the transport service, as viewed by a session entity.

transport service user

Rec. X.224

An abstract representation of the totality of those entities within a single system that make use of the transport service.

transverse voltage

Rec. K.12

For a gas discharge tube with several gaps, the difference of the discharge voltages of the gaps assigned to the two conductors of a telecommunications circuit during the passage of discharge current.

trap

Rec. M.30

An automatic report of a specified event which would otherwise not be reported.

tributary channel

Rec. R.140

An individual input channel to a multiplexer.

trombone (loop) connection

Rec. Q.9

The use for a single call of two circuits in tandem between a remote switching stage and its controlling entity.

true ...

Suppl. No. 6 (II.3)

The ideal value which characterizes a quantity perfectly defined under the conditions which exist at the moment when that quantity is observed, or the subject of a determination.

Note – This value could be arrived at only if all causes of measurement *error* were eliminated.

true

Rec. X.208

One of the distinguished values of the Boolean type.

trunk channel (TC)

Rec. G.763

A unidirectional, digital transmission path (generally short distance) used for carrying traffic and which connects a DCME to other equipment, e.g. an International Switching Centre (ISC). Two such trunk channels (transmit and receive) are needed by 4-wire telephone circuits and constitute a trunk circuit.

Note 1 – Signals carried by a trunk channel will be transmitted at a bit rate of 64 kbit/s.

Note 2 – A number of trunk channels in each direction of transmission are required between a DCME and, for instance, an ISC. These trunk channels may be carried by a number of 1544 of 2048 kbit/s systems.

trunk circuit

Rec. E.600

A circuit terminating in two switching centres.

trunk circuit

U.140

Telegraph circuit between two telegraph exchanges not belonging to the same local network.

trunk code

Recs. E.160, Q.10

A digit or combination of digits [not including the national (trunk) prefix] characterizing the called numbering area within a country (or group of countries included in one integrated numbering plan).

The trunk code has to be dialled before the called subscriber's number where the calling and called subscribers are in different numbering areas.

The trunk code varies from one country to another and is composed of:

a) Either a *regional code* indicating the geographical zone to which the called subscriber belongs and within which subscribers can call one another by their subscriber numbers.

Examples:

In France:

Paris area (Departments of Seine, Yvelines, Seine-et-Marne, Oise, etc.): trunk code 1,

Nice area (Department of Alpes-Maritimes): trunk code 93;

In Belgium:

Bruxelles area: trunk code 2,

Namur area: trunk code 81;

In the Federal Republic of Germany and the Netherlands:

the geographical area defined above corresponds in general to the local network:

Düsseldorf local network: trunk code 211,

Amsterdam local network: trunk code 20;

In the United Kingdom:

this definition applies to certain networks such as that of London, for which the trunk code is 1;

In Canada and the USA:

the geographical area defined above corresponds to a *Numbering Plan Area* (NPA):

Montréal area: NPA code 514,

New York City area: NPA code 212;

b) Or a *numbering area code* followed by an exchange code when the directory entry of the called subscriber does not include the exchange code;

Examples:

In certain areas of the United Kingdom:

Truro (group centre): trunk code 872,

Perranporth (in the Truro group): trunk code 872 57.

trunk prefix

See:

national (trunk) prefix.

trust

Rec. X.509

Generally, an entity can be said to "trust" a second entity when it (the first entity) makes the assumption that the second entity will behave exactly as the first entity expects. This trust may apply only for some specific function. The key role of trust in the authentication framework is to describe the relationship between an authenticating entity and a certification authority; an authenticating entity must be certain that it can trust the certification authority to create only valid and reliable certificates.

TS-provider

See:

session service user; SS-user.

twisted pair

Recs. G.960, I.430

A line or part of a line which has each (insulated) conductor twisted around the other to reduce the effect of induction from stray electromagnetic and/or electrostatic fields.

Note – This definition also applies to twisted quad except that two pairs are twisted together.

two condition; three condition; four condition

Rec. R.140

A qualifying term indicating that the number of significant conditions used is two [three] [four].

two-sided test

Suppl. No. 6 (II.3)

A *statistical test* in which the *statistic* used is one-dimensional and in which the *critical region* is the set of values lower than a first given number and the set of values greater than a second given number.

two-step activation

Recs. G.960, I.430

A type of activation which is initiated by one command to invoke a sequence of actions to activate the digital line transmission system and continued by a second command to invoke a sequence of actions to activate the user-network interface.

two tone modulation

See:

frequency-exchange modulation; two tone modulation.

two way; bidirectional

Rec. E.600

A qualification applying to traffic or circuits which implies that the establishment of a connection may occur in either direction.

two-way alternate (TWA)

Recs. T.62, T.62 bis

User information is transferred in both directions, but only in one direction at a time, i.e. the source/sink relation will be changed one or more times during the session. This is also called the half-duplex mode.

two-way-alternate interaction

Rec. X.200

A mode of interaction where the presentation-entity with the turn may send and its correspondent is permitted only to receive.

two-way simultaneous (TWS)

Recs. T.62, T.62 bis

User information is transferred in both directions simultaneously, i.e. both terminals are simultaneously a source as well as a sink. This is also called the duplex mode.

two-way-simultaneous interaction

Rec. X.200

A mode of interaction where both presentation-entities may concurrently send and receive.

two-wire switching

Rec. Q.9

Switching using the same path, frequency band or time interval for both directions of transmission.

type

Rec. X.208

A named set of values.

type

Rec. Z.100

A *type* is a set of properties for entities. Examples of classes of *types* in *SDL* include *blocks, channels, signal routes, signals,* and *systems.*

type

See:
attribute type; type.

type definition

Rec. Z.100

A *type definition* defines the properties of a *type*

type I information

Rec. Q.931

Information about the calling terminal which is only used at the destination end to allow a decision regarding terminal compatibility. An example would be modem type. This information is encoded in octets 5 to 7 of the Low layer compatibility information element.

type I risk

Suppl. No. 6 (II.3)

The *probability* of committing the *error of the first kind,* which varies according to the real situation (within the framework of the *null hypothesis*). Its maximum value is the *significance level* of the *statistical test.*

type II information

Rec. Q.931

The selection of bearer service from the choices of bearer services offered by the network to which the calling user is connected. This type of information is present even if no interworking occurs. An example is unrestricted digital information (UDI). This information is coded in:

i) octets 3 and 4 (including octets 4a and 4b if necessary) of the Bearer capability information element when the transfer mode required by the calling user is circuit mode,

ii) octets 3, 4, 6 and 7 (including 4a and 4b if necessary) of the Bearer capability information element when the transfer mode required by the calling user is packet mode.

type II risk

Suppl. No. 6 (II.3)

The *probability,* designated β, of committing the *error of the second kind.* Its value depends on the real situation and can only be calculated if the *alternative hypothesis* is adequately specified.

type III information

Rec. Q.931

Information about the terminal or intended call which is used to decide destination terminal compatibility and possibly to facilitate interworking with other ISDNs or other dedicated networks. An example is A-law encoding. This information is encoded in octet 5 of the bearer capability information element.

type of coding

Rec. T.412

This attribute specifies the coding used to represent the content, and designates any set of additional coding attributes applicable to the content portion concerned (see Rec. T.412, § 5.9.4).

type of coding

Rec. T.417

For the raster graphics content architectures, the possible values of this attribute are:

- Rec. T.6 encoding, according to the two dimensional encoding scheme defined in Recommendation T.6;
- Rec. T.4 one dimensional encoding, according to the one dimensional encoding scheme defined in Recommendation T.4;
- Rec. T.4 two dimensional encoding, according to the two dimensional encoding scheme defined in Recommendation T.4;
- bitmap encoding.

type P transmultiplexer (TMUX-P)

Rec. G.791

A transmultiplexing equipment in which the analogue interface is made up of several groups.

type (or value) reference name

Rec. X.208

A name associated uniquely with a type (or value) within some context.

Note – Reference names are assigned to the types defined in this Recommendation; these are universally available within ASN.1. Other reference names are defined in other standards and Recommendations, and are applicable only in the context of the standard or Recommendation.

type S transmultiplexer (TMUX-S)

Rec. G.791

A transmultiplexing equipment in which the analogue interface is made up of one or more supergroups.

types of sound-programme circuit

Rec. N.1

The various types of international sound-programme circuit or sections of such circuits should be referred to by quoting the top nominal frequency, in kHz, effectively transmitted.

Example: 10-kHz sound-programme circuit.

U

unacceptable transmission probability

Rec. E.800

The *probability* of a *connection* being established with an unacceptable speech path transmission quality.

unaffected level

Recs G.162, G.166

The unaffected level is the absolute level, at a point of zero relative level on the line between the compressor and the expander of a signal at 800 Hz, which remains unchanged whether the circuit is operated with the compressor or not. The unaffected level is defined in this way in order not to impose any particular values of relative level at the input to the compressor or the output of the expander.

unallocated number (sent in the backward direction)

Rec. Q.400

A signal indicating that the number received is not in use (e.g. an unused country code or an unused trunk code or subscriber number that has not been allocated).

unallocated-number signal

Rec. Q.254

A signal sent in the backward direction indicating that the received number is not in use (for example spare level, spare code, vacant subscriber's number).

unassigned reference

Rec. X.224

A reference that is neither currently in use for identifying a transport connection nor in a frozen state.

unavailability (U)

Rec. X.137

The long-term ratio of unavailable service time to scheduled service time, expressed as a percentage.

unavailability of a relay point

Rec. Q.716

This parameter characterizes the unavailability of the translation functions of the SCCP at a relay point.

unavailability of a SCCP relation

Rec. Q.716

This parameter characterizes the inability for two SCCP users to communicate via the NSP.

This parameter is determined by the unavailability of the individual components of a SCCP relation: SCCP at the two endpoints, one or several signalling relations and zero, one or several relay points with coupling and without coupling.

The unavailability can be reduced by the duplication of routes at the SCCP level.

unavailable signalling link

Rec. Q.9, Glos VI.7, VI.8, VI.9)

A signalling link which has been deactivated and cannot therefore carry signalling traffic.

unblocking acknowledgement message (UBA)

Rec. Q.762

A message sent in response to an unblocking message indicating that the circuit has been unblocked.

unblocking-acknowledgement signal

Rec. Q.254

A signal sent in response to an unblocking signal indicating that the speech circuit has been unblocked.

unblocking message (UBL)

Rec. Q.762

A message sent to the exchange at the other end of a circuit to cancel, in that exchange, the engaged condition of the circuit caused by a previously sent blocking or circuit group blocking message.

unblocking signal

Rec. Q.254

A signal sent to the exchange at the other end of a circuit to cancel in that exchange the engaged conditions of that circuit caused by an earlier blocking signal.

unconfirmed-service

Rec. X.210

A service which does not result in an explicit confirmation.

uncontrolled slip

Rec. G.701

The loss or gain of a digit position or a set of consecutive digit positions in a digital signal resulting from an aberration of the timing processes associated with transmission or switching of a digital signal, and in which either the magnitude or the instant of that loss or gain is not controlled.

undefined

Rec. Z.100

Undefined is a "special" *value* of every *sort* which indicates that a *variable* of that *sort* has not yet been *assigned* a normal *value.* See the definition of the term *access.*

undercharging probability

Rec. E.800

The *probability* that an effective *call* will be undercharged for any reason.

underground duct

Rec. L.11

A vector for the distribution of a fluid, connecting the place of production with the place of consumption or drainage. It covers pipelines for electricity as well as telecommunication cables.

undetected errors

Rec. Q.716

This parameter gives the probability that a UDT message is delivered with user data which is defective.

undetected errors

Rec. Q.716

This parameter gives the probability that a DT message is delivered with user data which is defective.

undetected fault time

Suppl. No. 6 (II.3)

The *time interval* between a *failure* and recognition of the resulting *fault.* See Figure 3, Suppl. No. 6 (II.3)

unequipped circuit identification code message (UCIC)

Rec. Q.762

A message sent from one exchange to another when it receives an unequipped circuit identification code.

unforeseen outcome

Rec. X.290

An outcome not identified or categorized in the abstract test case specification.

unformatted postal O/R address

Recs. F.400, X.400

O/R address based on an unformatted postal address.

unidirectional

Rec. I.140

This value applies when the information flow of messages is provided only in one direction.

unidirectional

Rec. Q.9

A qualification which implies that the transmission of information always occurs in one direction.

unidirectional

Rec. R.140

Pertaining to a link where the transfer of the user's information can occur in one preassigned direction only.

unidirectional

See:
one way; unidirectional.

uniform

Rec. I.140

This value applies when all connection elements have the same attribute values.

uniform encoding

Rec. G.701

The generation of code words to represent uniformly quantized values.

uniform quantizing

Rec. G.701

Quantizing in which all the quantizing intervals lying entirely with the working range are equal. (See Figure 2/G.701.)

unilateral control

Rec. G.701

Control between two synchronization nodes such that the frequency of the clock of only one of these nodes is influenced by timing information derived from the clock of the other node.

unintelligible crosstalk components

Rec. G.242

Transferred speech currents which can introduce unintelligible crosstalk into certain channels at the point considered.

unique postal name

Recs. F.400, X.400

In a postal address a standard attribute describing the point of physical delivery by means of a unique name, e.g. that of a building.

unit element

Rec. R.140

A signal element having a duration equal to the unit interval.

unit element error rate for isochronous modulation

Rec. R.2

The ratio of the number of incorrectly received elements to the number of emitted elements.

unit interval

Rec. G.701

The nominal difference in time between consecutive significant instants of an isochronous signal.

unit interval

Rec. R.140

The shortest theoretical duration of a significant interval.

Note – In telegraphy the unit interval is the same as the minimal interval.

unit scaling

Rec. T.411

A scaling factor (an integer or a fraction) that is applied to the basic measurement unit (BMU) to derive a scaled measurement unit (SMU).

unitdata (UDT)

Rec. Q.712

A *unitdata* message is used by a SCCP wanting to send data in a connectionless mode.

It is used in connectionless protocol classes 0 and 1.

unitdata service (UDTS)

Rec. Q.712

A *unitdata service* message is used to indicate to the originating SCCP that a UDT it sent cannot be delivered to its destination. A UDTS message is sent only when the option field in that UDT is set to "return on error".

It is used in connectionless protocol classes 0 and 1.

universal access number service

Suppl. No. 1 (II.2)

A customer with several installations in different parts of the country can be reached from anywhere in the country by dialling one given number. Calls from subscribers on exchanges in predetermined areas of the country will be routed to installations chosen (with certain restrictions) for the area in question by the customer having the service.

unreasonable message

Rec. Q.9, Gloss. (VI.3)

A message with an inappropriate signal content, an incorrect signal direction, or an inappropriate place in the signal sequence.

unrestricted digital information

Rec. I.140

Transfer of information sequence of bits at its specified bit rate without alteration.

unrestricted information transfer

Rec. Q.71

An unrestricted bearer service provides information transfer without alteration between S/T reference points. It may, therefore, be used to support various user applications. Examples include:

1) speech (Note 2);
2) 3.1 KHz audio (Note 2);
3) multiple subrate information streams multiplexed into 64 kbit/s by the user;
4) transparent access to an X.25 public network (Recommendation I.462, case a).

User information is transferred over a B channel: signalling is provided over a D channel.

Note 1 – During an interim period some networks may only support restricted 64 kbit/s digital information transfer capability, i.e. information transfer capability solely restricted by the requirement that the all-zero octet is not allowed. For interworking the rules given in Appendix 1 of Recommendation I.430 should apply. The interworking functions have to be provided in the network with restricted 64 kbit/s capability. The ISDN with 64 kbit/s transfer capabilities will not be affected by this interworking, other than conveying the appropriate signalling message to and from the ISDN terminal.

Note 2 – Whilst speech and 3.1 kHz audio have been given as one application for this bearer service, it is recognized that it is the responsibility of the customers to ensure that a compatible encoding scheme is in operation. Customers should also recognize that no network provision can be made for the control of such items as echo and loss, as the network is unaware of the application in use. Furthermore, the quality of service attribute for information transfer delay will indicate the suitability of a particular version of this bearer service for speech.

unscheduled maintenance

Suppl. No. 6 (II.3)

The *maintenance* carried out, not in accordance with an established time schedule, but, for example, after reception of an indication regarding the state of an *item.*

unstructured

Rec. I.140

This value is applicable when the telecommunication service or connection neither provides structural boundaries nor preserves structural integrity.

unsuccessful call

U.140

A call attempt which does not result in the establishment of a complete connection.

up state

Suppl. No. 6 (II.3)

A state of an *item* characterized by the fact that it can perform a *required function,* assuming that the external resources, if required, are provided.

Note – This state relates to *availability performance.*

up time

Suppl. No. 6 (II.3)

The *time interval* during which an *item* is in an *up state.*

upper tester

Rec. X.290

The abstraction of the means of providing, during test execution, control and observation of the upper service boundary of the IUT, plus the control and observation of any relevant abstract local primitive.

upper window edge

Rec. X.224

The sequence number which is one greater than the highest sequence number in the transmit window.

upper window edge allocated to the peer entity

Rec. X.224

The value that a transport entity communicates to its peer entity to be interpreted as its new upper window edge.

upstream failure indication

Recs. G.701, M.300

An indication provided by a digital multiplexer, line section or a radio section, that a signal applied at its input port is outside its prescribed maintenance limit.

upstream failure indication (UFI)

Rec. M.60

The upstream failure indication given by a maintenance entity indicates that the signal arriving at that maintenance entity is defective. The UFI indicates that the failure has occurred upstream of this point and no unnecessary maintenance activities are initiated.

useful life

Suppl. No. 6 (II.3)

Under given conditions, the *time interval* beginning at a given *instant of time*, and ending when the *failure intensity* becomes unacceptable or when the *item* is considered unrepairable as a result of a *fault.*

user

Rec. D.000

The individual or entity designated by the customer, individually or by class, as having access to the service/facility and having such authorization, individually or by class, as may be required by the Administrations concerned.

user

Rec. D.1

The individual or entity designated by the customer, individually or by class, as having access to the leased circuit and having such authorization, individually or by class, as may be required by the Administrations concerned.

user

Rec. E.600

Any entity external to the network which utilizes connections through the network for communication.

user

Recs. F.400, X.400

In the context of message handling, a functional object (e.g., a person), a component of the message handling environment, that engages in (rather than provides) message handling and that is a potential source or destination for the information objects an MHS conveys.

user

Rec. F.500

In telecommunication service context: A human being using a service.

In a technical context: A human being, an entity or a process.

Note – A user will not necessarily be a subscriber of a telecommunication service.

user; user of a telecommunication network

Rec. I.112

A person or machine delegated by a customer to use the services and/or facilities of a telecommunication network.

user

Rec. X.403

A user-interface process or a computer application which makes use of a MHS.

user

Rec. Z.341

The human being in *man-machine communication.*

user (of the signalling system)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A functional entity, typically a telecommunication service, which uses a signalling network to transfer information.

user (of ASN.1)

Rec. X.208

The individual or organization that defines the abstract syntax of a particular piece of information using ASN.1.

user

See:
(directory) user.

user access; user-network access

Rec. I.112

The means by which a user is connected to a telecommunication network in order to use the services and/or facilities of that network.

user agent (UA)

Recs. F.400, X.400

In the context of message handling, the functional object, a component of MHS, by means of which a single direct user engages in message handling.

Component of MHS the user interacts with.

user certificate; certificate

Rec. X.509

The public keys of a user, together with some other information, rendered unforgeable by encipherment with the secret key of the certification authority which issued it.

user class-of-service

Suppl. No. 2 (II.4)

The category that defines the characteristics of a call available to a user of a public telecommunication service.

Note – The characteristics for a user class of service could be, for example, *binary rate*, terminal operating mode, code structure, *access barred.*

user class of service

*Series X**

A category of data transmission provided in a network in which the *data signalling, address selection* and *call progress* signals signalling rates and the terminal operating mode are standardized. (See also *international user class of service*).

user class of service signal

See:

(user) class of service signal.

user-element

Rec. X.200

The representation of that part of the application-process which uses those application-service-elements needed to accomplish the communications objectives of that application-process.

user equipment (deprecated)

See:

customer equipment.

user facility

Suppl. No. 2 (II.4)

A facility which may be provided on request to a user of the telecommunication network in addition to the normal service provided.

Note – A user facility may be provided on a per call basis or for an agreed period of time.

user guidance

Rec. Z.341

Información displayed by the *system* to help the *user* to perform the task.

user handling time T_{hu}

Rec. Q.766

T_{hu} is the period which starts when the last bit of the message has entered the upper layer functions and ends when the last bit of the derived message has left the upper layer functions.

user handling time, T_{hu}

Rec. Q.725

T_{hu} is the period which starts when the last bit of the message has entered the Telephone User Part and ends when the last bit of the derived message has left the Telephone User Part. See Figure 1/Q.725.

user information transfer parameters

Rec. X.140

Performance of the user information transfer function is described by six parameters: user information transfer delay, user information transfer rate, user information error probability, extra user information delivery probability, user information misdelivery probability, and user information loss probability.

user message transfer unit (UMXU)

Rec. U.82

Used to carry the message submitted by a telex subscriber for delivery to a specified address.

user-network access

See:

user access; user-network access.

user network interface

Recs. G.960, I.430

An interface, at which the access protocols apply, and which is located at the S or T reference point.

user-network interface

Rec. I.112

The interface between the terminal equipment and a network termination at which interface the access protocols apply.

user-network interface only deactivation

Recs. G.960, I.430

Deactivation of the user-network interface which does not deactivate the digital line transmission system.

user of a telecommunication network

See:

user; user of a telecommunication network.

user packet

Rec. Q.9

A data packet exchanged between users.

User Part (UP)

Rec. Q.9, Glos. (VI.7, VI.8, VI.9)

A functional part of the common channel signalling system which transfers signalling messages via the Message Transfer Part. Different types of User Parts exist (e.g. for telephone and data services), each of which is specified to a particular use of the signallig system.

user password

Rec. F.500

A sequence of characters to identify a user.

user-readable comments

Rec. T.412

This attribute consists of a sequence of characters that is to be interpreted as comments relevant to the constituent and to any associated content portions. This character sequence is not part of the document content.

user service

*Series X**

A service available on demand to a user and provided as part of a public data network transmission service.

user service identifier (USID)

Rec. Q.932

A USID uniquely identifies a service profile on an access interface.

user service information

Rec. Q.762

Information sent in the forward direction indicating the bearer capability requested by the calling party.

user signalling acknowledgement delay

Rec. Q.543

User signalling acknowledgement delay is the interval from the instant a user signalling message has been received from the subscriber line signalling system until a message acknowledging the receipt of that message is passed back from the exchange to the user line signalling system. Examples of such messages are SETUP ACKNOWLEDGEMENT TO SETUP, CONNECT ACKNOWLEDGEMENT to CONNECT and RELEASE ACKNOWLEDGEMENT to RELEASE.

user-to-user indicators

Rec. Q.762

Information sent in association with a request (or response to a request) for user-to-user signalling supplementary service(s).

user-to-user information

Rec. Q.762

Information generated by a user and transferred transparently through the interexchange network between the originating and terminating local exchanges.

user-to-user information message (USR)

Rec. Q.762

A message to be used for the transport of user-to-user signalling independent of call control messages.

user-to-user signalling (UUS)

Rec. I.250

A supplementary service which allows an ISDN user to send/receive a limited amount of information to/from another ISDN user over the signalling channel in association with a call to the other ISDN user.

user-to-user signalling (UUS) supplementary service

Rec. Q.87

A service allowing an ISDN user to send/receive a limited amount of information to/from another ISDN user over the signalling channel in association with a call to the other ISDN user.

Note – These procedures are applicable to user-to-user information (UUI) transfer in association with a circuit-switched telecommunication service only. Procedures to permit UUI transfer in association with other types of calls (e.g. packet bearer services) need to be investigated.

user-user protocol

Rec. I.112

A protocol that is adopted between two or more users in order to ensure communication between them.

user-user protocol

Rec. Q.9

A protocol that is adopted between two or more network users in order to accommodate communication between them.

user-visible name

Rec. T.412

This attribute consists of a sequence of characters that can be used to identify the constituent within the document structure. This character sequence is not part of the document content.

utility processor

Rec. Q.9

A processor in multi-processor exchange design that is used to perform administrative tasks (e.g., processing and storing billing data).

V

V interface

Recs. G.960, I.430

A digital interface which usually coincides with the V reference point.

Note 1 – A specific V interface is denoted by a suffix number.

Note 2 – The V interfaces are internal network interfaces.

V-interface

Rec. Q.9

A digtal exchange interface for subscriber access which coincides with the V reference point.

Note 1 – A specific V interface is denoted by a suffix number.

Note 2 – The V interfaces are internal network interfaces.

V_1 reference point

Recs. G.960, I.430

A V reference point at the network side of a basic access digital section for the provision of a single basic access.

Note – The V_1 interface is a functional boundary between the exchange termination and the line termination and may or may not exist as a physical interface. The V_1 interface structure is comprised of two B-channels, one D-channel, and a C_{V1}-channel.

V_2 reference point

Recs. G.960, I.430

A V reference point at the network side of a concentrator for the provision of a number of basic and/or primary rate accesses.

V_3 reference point

Recs. G.960, I.430

A V reference point at the network side of a primary rate access digital section for the provision of a single primary rate access.

V_4 reference point

Recs. G.960, I.430

A V reference point at the network side of a multiplexer supporting several basic access digital sections.

valid input signal set

Rec. Z.100

The *valid input signal set* of a *process* is the list of all external *signals* handled by any *input* in the *process.* It consists of those *signals* in *signal routes* leading to the *process.* Compare with the term *complete valid input signal set.*

valid presentation-protocol-data-unit

Rec. X.226

A presentation-protocol-data-unit which complies with the requirements of Recommendation X.226 for structure and encoding.

valid SPDU

Rec. X.225

An SPDU which complies with the requirements of Recommendation X.225 with respect to structure and encoding.

valid specification

Rec. Z.100

A *valid specification* is a *specification* which follows the *concrete syntax* and static *well-formedness rules.*

valid test event

Rec. X.290

A test event which is allowed by the protocol Recommendation*, being both syntactically correct and occurring or arriving in an allowed context in an observed outcome.

validation of the called teletex terminal (validation result positive or negative)

Rec. F.201, Suppl. No. 1 (II.4)

This validation is performed by the CF to verify that the teletex terminal is available, i.e. either the teletex terminal has been called with this address (validation call) or this address has been controlled in a data base.

value

Rec. X.208

A distinguished member of a set of values.

value

Rec. Z.100

A *value* of a *sort* is one of the values which are associated with a *variable* of that *sort*, and which can be used with an *operator* requiring a *value* of that *sort*. A *value* is the result of the interpretation of an *expression*.

value

See:
attribute value; value.

value reference name

See:
type (or value) reference name.

Van Duuren radiotelegraph system; teleprinting over radio circuits (TOR)

Rec. R.140

A radiotelegraphy system with correction by repetition, in general time-division multiplex in two or four channels and using the Van Duuren code.

Note – The main characteristics are defined in Recommendation 342-2 of CCIR, Geneva 1982.

variable

Rec. Z.100

A *variable* is an entity owned by a *process instance* or *procedure instance* which can be associated with a *value* through an *assignment statement*. When *accessed*, a *variable* yields the last *value* which was assigned to it.

variable bit rate (VBR)

Rec. G.763

The capability of the encoding algorithm to dynamically switch between 32 and 24 kbit/s for speech traffic under control of the DCME.

variable bit rate (VBR)

Rec. P.84

An overload control strategy often used to cope with traffic peaks and hence freezeout problems. Temporary, additional bearer channels (overload channels) are created. Several VBR techniques are available:

i) Graceful overload is one technique to reduce the bit rate. For example, a 4-bit sample 32 kbit/s ADPCM channel can be reduced on demand to a minimum of a 3-bit sample 24 kbit/s, and the VBR will average across the DCMS somewhere between 3 and 4 bits. The dynamic load control (DLC) will operate when the predicted traffic loading rises above a preset VBR.

ii) Permanent 3-bit allocation set on block of channels. These channels operate solely in a 3-bit mode.

variable definition

Rec. Z.100

A *variable definition* is the indication that the *variable names* listed will be *visible* in the *process, procedure* or *service* containing the definition.

variable spacing

Rec. T.411

The characteristic of a font wherein the distance between the position point and the escapement point for different character images may be different.

variable text

Rec. Z.341

A string of *information units* which contains information unique to the event caused the *output.*

variance (of a random variable)

Suppl. No. 6 (II.3)

The *expectation* of the square of the difference between a *random variable* and the *expectation* of this variable.

variate

See:
random variable; variate.

verdict

Rec. X.290

Statement of "pass", "fail" or "inconclusive" concerning conformance of an IUT with respect to a test case that has been executed and which is specified in the abstract test suite.

verification

Rec. V.110

Establishment of the validity of a piece of data according to the specified error handling procedures.

VERIFY

Rec. Z.333

Perform the enforcement of a consistency rule on a specified set of data.

vertical plane

Rec. P.51

A plane containing the reference axis that divides the mouth into symmetrical halves. It shall be vertically oriented in order to reproduce the acoustic field generated by a person in the upright position.

VF signalling

See:
voice-frequency (VF signalling); VF signalling.

video

Rec. I.140

Digital representation of video image information, the encoding rule being specified.

video attributes

Rec. Z.341

Attributes to distinguish certain important information (e.g., a title, a message, a chosen item) in order to attract the attention of the *user.* They work on the characters of the information shown within an entire *window,* a part of a *window area,* an entire *field* or within a part of a *field.*

Video conference service

Rec. F.710

A type of TCS in which both voice and moving picture video information can be exchanged together with optional non-moving visual information, telematic information and signalling (speaker identification, floor request, etc.).

videography

Suppl. No. 1

A form of telecommunication in which information generally in the form of digital data is transmitted in order to permit the selection and display of textual or pictorial information to a user on a visual display unit, for instance on the screen of a television receiver.

Note – Teletex and other forms of telegraphy are not forms of videography.

videomessaging

Rec. I.113

A **messaging service** for the transfer for moving pictures.

Videophone service

Rec. F.721

A symmetrical, bidirectional, real-time, audiovisual teleservice in which speech and moving pictures are communicated; the picture information transmitted is sufficient for the adequate representation of fluid movements of persons.

videotex; interactive videography

Suppl. No. 1 (II.4)

Videographic service in which telecommunication networks are used for transmission of the user's requirements as well as the answers to his requests.

videotex

Rec. I.240

The Videotex service in the ISDN is an enhancement of the existing Videotex service with retrieval and mailbox functions for text (alpha) and graphic information.

videotex access point

Rec. F.300

A function of a computer providing access to videotex host computers, protocol conversion for layers 1-3 management facilities such as billing, statistics gathering and dialogue handling capabilities.

videotex application

Rec. F.300

Part of a Videotex service which is under the responsibility of only one application provider. The Videotex service provider may also act as an application provider.

videotex application provider

Rec. F.300

A party responsible by agreement with a Videotex service provider for providing information or transaction facilities to Videotex service users. The information provider may or may not operate the host computer on which the application is implemented.

videotex closed user group

Rec. F.300

A group of users who are permitted access to applications or other Videotex service facilities that are not available to other users.

videotex communications network provider

Rec. F.300

A party responsible by agreement with a Videotex service provider for providing telecommunication services for interconnecting user terminals, application provider equipment and/or Videotex host computers.

videotex conferencing

Suppl. No. 1 (II.4)

A videotex service facility which, by providing routing and switching functions, enables users or terminals to send and receive messages in a conversational manner. This does not preclude direct terminal-to-terminal messaging using existing networks.

videotex conferencing

Rec. F.300

A Videotex service facility which, by providing routing and switching functions, enables users to send and receive messages in a conversational manner. This does not preclude direct terminal-to-terminal messaging using existing networks.

videotex data base

Rec. F.300

A set of information and/or transaction facilities that can be accessed by, or made available to, users.

videotex data processing

Suppl. No. 1 (II.4)

A videotex service facility which allows the user to employ processing and storage capacity either at the host computer or by downloading a program or other data into suitable videotex terminal equipment.

videotex data processing

Rec. F.300

A Videotex service facility which allows the user to employ processing and storage capacity at the host computer.

videotex form

Rec. F.300

A form is a frame where one or several fields are defined for the collection of user data.

videotex frame

Rec. F.300, Suppl. No. 1 (II.4)

The information that is retrieved by a single user function from a terminal and presented as a complete entity (full screen contents or parts of the screen, e.g. areas on the screen) by the terminal, but may include information that requires scrolling before it is displayed and may include dynamic effects such as overwriting. Local user action may take place within a frame.

videotex gateway

Suppl. No. 1 (II.4)

A videotex gateway is a function of a computer providing access to data base(s) of other host computer(s). This may include selection and/or protocol conversion and/or dialogue handling functions.

videotex host computer

Suppl. No. 1 (II.4)

A videotex host computer is a computer (or network of computers provided by a single party) on which one or more data bases are stored and/or one or more other videotex service facilities are provided.

videotex host computer

Rec. F.300

The computer (or network of computers provided by a single party) on which one or more applications are implemented and/or one or more other Videotex service facilities are provided.

videotex information provider

Suppl. No. 1 (II.4)

A videotex information provider is a party responsible by agreement with a videotex service provider for providing information or transaction facilities to videotex service users. The information provider may or may not operate the host computer on which the data base is stored.

videotex information retrieval

Rec. F.300, Suppl. No. 1 (II.4)

A Videotex service facility in which a user obtains information by means of a dialogue with a data base.

videotex interface unit

Rec. F.300

A function of a computer providing protocol conversion for layers 4-7 (of OSI Reference Model) and/or data syntax conversion and optionally protocol conversion for layers 1-3 (PAD). It may also handle some administrative tasks such as billing for the conversion charges and optionally the communication network charges. A videotex interface unit is typically used between a terminal and a foreign Videotex Service Centre.

videotex interworking

Rec. T.564

Allows a videotex terminal pertaining to a given videotex service of a given country to interact in real time with a videotex host computer located in a different country. This videotex host may be either a videotex center or an external computer.

videotex message handling (deprecated)

See:
videotex messaging.

videotex messaging

Rec. F.300, Suppl. No. 1 (II.4)

A Videotex service facility which allows users to communicate with each other by storing messages in a commonly accessible data base. These stored messages may either be retrieved by the user or delivered automatically.

videotex page

Rec. F.300, Suppl. No. 1 (II.4)

An organised set of one or more frames.

Videotex service

Suppl. No. 1 (II.4)

A Videotex service is an interactive service which provides, through appropriate access by standardized procedures, for users of videotex terminals to communicate with data bases via telecommunication networks.

Note – The Videotex service includes the following set of characteristics:

1) information is generally in an alphanumeric and/or pictorial form;
2) information is stored in a data base;
3) information is transmitted between the data base and users by telecommunication networks;
4) displayable information is presented on a suitably modified television receiver or other visual display device;
5) access is under the user's direct or indirect control;
6) the service is easily operated by the general public as well as specialist users, i.e. the service is user-friendly;
7) the service provides facilities for users to create and modify information in the data bases;
8) the service provides data base management facilities which allow information providers to create, maintain and manage data bases and to manage closed user group facilities.

Videotex service

Rec. F.300

A Videotex service is an interactive service which provides, through appropriate access by standardized procedures, for users of videotex terminals to communicate with data bases and other computer based applications via telecommunications networks.

The Videotex service includes the following set of characteristics:

1) information is generally in an alphanumeric and/or pictorial form and may be supplemented by audio;
2) information is stored in a data base;
3) information is transmitted between the data base and users by telecommunication networks;
4) displayable information is presented on a suitably modified television receiver or other visual display device;
5) access is under the user's direct or indirect control;
6) the service is easily operated by the general public as well as specialist users, i.e. the service is user-friendly;
7) the service provides facilities for users to create and modify information in the data bases;
8) the service provides data base management facilities which allow information providers to create, maintain and manage data bases and to manage closed user group facilities;
9) the service provides computer based applications, e.g., data processing, computer games.

videotex service centre

Suppl. No. 1 (II.4)

A videotex service centre is a computer used by the videotex service provider to authorize access to a videotex service. Other functions of the service centre may include assistance to users in selecting the particular data base required (either provided by the service centre or by other host computers), as well as management facilities such as billing, statistics gathering, etc. The same computer may also be a host computer and/or provide a gateway function.

Videotex service centre

Rec. F.300

A computer system used by the Videotex service provider to authorize access to a Videotex service. Other functions of the service centre may include assistance to users in selecting the particular application required (either provided by the service centre or by other host computers), as well as management facilities such as billing, statistics gathering, etc. The same computer may also be a host computer and/or provide a gateway function.

Videotex service facility

Rec. F.300, Suppl. No. 1 (II.4)

A Videotex service facility is an application layer implementation in a Videotex service, providing a specific, clearly defined facility to videotex users. Videotex service provides users with a number of such service facilities.

videotex service profile

Suppl. No. 1 (II.4)

A videotex service profile is the set of functionalities required by videotex service.

videotex service profile

Rec. F.300

The set of functionalities required by a Videotex service. It includes the service, application and presentation functionalities.

Videotex service provider

Rec. F.300, Suppl. No. 1 (II.4)

A party responsible to the user for the provision and operation of a Videotex service.

Videotex service unit

Rec. F.300

It is a videotex interface unit with the additional functions of handling application charges and accounting, and may also provide user authorization and/or identification.

videotex system field

Rec. F.300

A data collection field in which a predetermined type of data is filled in by the videotex service or by the user.

videotex systems

Rec. F.300

A Videotex system is the hardware and software used to implement a Videotex service.

videotex telesoftware

Rec. F.300

A Videotex service facility which allows a host computer to deliver a program and/or data to a Videotex terminal in order to have it processed in this equipment.

videotex terminal

Suppl. No. 1 (II.4)

A videotex terminal is the equipment by means of which the user interacts with the Videotex service. The terminal may also provide a direct terminal-to-terminal capability, and may include other components, such as a hard copy output unit, magnetic or optical storage devices, and additional processing and/or storage devices.

videotex terminal

Rec. F.300

The equipment by means of which the user interacts with the Videotex service. A typical Videotex terminal includes:

1) a numeric keypad and/or alphanumeric keyboard and/or other graphical input devices;
2) a visual display unit or a suitably modified television receiver;
3) electronic processing and storage devices required to interface these components to the telecommunications network and to generate the display.

The terminal may also provide a direct terminal-to-terminal capability, and may include other components, such as a hard copy output unit, magnetic or optical storage devices, and additional processing and/or storage devices.

videotex terminal identification facility

See:

videotex user/terminal identification facility.

videotex terminal-to terminal messaging (deprecated)

See:

videotex conferencing.

videotex transaction

Rec. F.300, Suppl. No. 1 (II.4)

A Videotex service facility which allows users to create and/or modify information stored in a data base. Access to these facilities will generally require special functions and procedures to authenticate the authority to access. This service facility includes, but is not limited to, transactions leading to or influencing a commercial relationship between users and application providers.

videotex user

Rec. F.300

A person who, by means of a Videotex terminal, uses the Videotex service.

videotex user number

Rec. F.500

An attribute type which specifies a videotex user number associated with an object.

videotex user/terminal identification facility

Rec. F.300

A facility which allows the Videotex system to distinguish between authorised and non authorised access to a Videotex service or centain applications of a service, eg. messaging, closed user groups and billing, there are three types of identification.

a) Identification of the terminal.
b) Identification of the user.
c) Identification of the line.

view definition

Rec. Z.100

A *view definition* defines a *variable identifier* in another *process* where it has the *revealed attribute.* This allows the viewing *process* to *access* the *value* of that *variable.*

view expression

Rec. Z.100

A *view expression* is used within an *expression* to yield the current *value* of a *viewed variable.*

virtual analogue switching points (VASP)

Rec. Q.45 bis

The virtual analogue switching points are theoretical points. They are fixed by convention as points where two circuits are considered to be directly connected without any additional loss or gain [4, 5]. Depending on the transmission loss T of the circuits to be connected the relative levels at the virtual analogue switching point can be different for the incoming and outgoing direction respectively. The relative levels agreed upon by CCITT are shown in a hypothetical arrangement in Figure 2a/Q.45 *bis.* The corresponding relative levels at actual switching points may differ in values, as for example indicated in Figure 2b/Q.45 *bis.*

virtual call; switched virtual connection

*Rec. D.11, Series X**

One service of the packet switched data transmission services in which a call set-up procedure and a call clearing procedure will determine a period of communication between two DTEs in which users' data will be transferred in the network in the packet mode of operation. All the users' data are delivered from the network in the same order in which they are received by the network.

virtual call and permanent virtual circuit bearer service category

Rec. I.230

This bearer service category provides the unrestricted transfer of user information in a packetized manner over a virtual circuit within a B- or D-channel at the S/T reference point. Signalling information for virtual call and/or possibly OAM information for permanent virtual circuit services are transferred via a D- or B-channel as described in Recommendation I.462 (X.31).

virtual circuit

Rec. I.113

A type of asynchronous transfer mode (ATM) connection involving establishment and release procedures such that the label associated with each cell need not contain complete routing information.

virtual circuit

Rec. Q.9

A capability in the network between two users that is available to them for exchanging packets of data.

virtual circuit

See:
permanent virtual circuit.

virtual decision value

Rec. G.701

Each of the two defined values, that provide conventional bounds for the working range in quantizing. (See Figure 2/G.701.)

Note – These values are taken to represent hypothetical outer bounds for the two extreme quantizing intervals of the quantizing law.

virtual source function

Rec. P.10

The change in virtual source position as a function of some other parameter, e.g. frequency, proximity of obstacles.

virtual source position

Rec. P.10

That position within a human or artificial mouth at which emitted sounds appear to have their source.

visibility

Rec. Z.100

The *visibility* of an *identifier* is the *scope units* in which it may be used. No two definitions in the same *scope unit* and belonging to the same *entity class* may have the same *name.*

visible display

Rec. Z.341

The entire physical screen of a visual display terminal.

visited MSC

Rec. Q.1001

The term visited MSC (VMSC) may be used in cases where the visitor location register is implemented in a MSC.

visited public land mobile network (VPLMN)

Recs. Q.9, Q.1001

The PLMN, other than the home PLMN, in which a roaming subscriber is currently located.

visitor location register

Recs. Q.1002, Q.1003

Register where all relevant parameters concerning a mobile station are stored so long as the station is within the area controlled by that visitor location register.

visitor location register (VLR)

Rec. Q.1003

Contains all subscriber data required for call handling and other purposes for MSS currently located in the area controlled by the VLR.

visitor location register (VLR)

Recs. Q.9, Q.1001

The location register, other than the home location register used by an mobile service switching centre (MSC) to retrieve, for instance, information for handling of calls to or from a roaming mobile station, currently located in its area.

visual telephone service

Rec. H.100

Generally a two-way telecommunication service which uses a switched network of broadband analogue and/or digital circuits to establish connections among subscriber terminals, primarily for the purpose of transmitting live or static pictures.

Special application one-way systems, e.g. surveillance and some information retrieval systems, or a non-switched videoconference service, can be regarded as degenerate cases of the visual telephone service.

The visual telephone service also includes the associated speech.

VLR address

Rec. Q.1003

A PSTN/ISDN number with variable length which complies with the requirements of the PSTN/ISDN in each country.

The VLR address is temporary subscriber data.

voice activity ratio

Rec. G.763

The ratio of the number of non-preassigned TCs which are classified as voice-active to the total number of non-preassigned TCs. The ratio is expressed as a percentage, to the nearest integer.

$$\text{Voice activity ratio} = \frac{\sum_{N} \text{No. of non-preassigned voice-active TCs}}{\text{No. of non-preassigned TCs} \times N} \times 100$$

The voice activity ratio includes hangover time.

voice band data ratio

Rec. G.763

The radio of the number of trunk channels carrying voice-band data signals to the total number of trunk channels averaged over a fixed interval of time.

voice dialling service

Suppl. No. 1 (II.2)

Verbal indication of a telephone number or name activates call set-up without the dialling operation.

This service could be implemented in the exchange or in subscriber terminal equipment.

voice freezeout excess

Rec. G.763

Percentage of time voice FOF exceeds 0.5% when averaged over 1 minute. The percentage should be calculated to two decimal places. [For statistic time interval (STI) see § 8.2.1 of Rec. G.763]

$$\text{Voice FOF excess} = \frac{\text{No. of 1 min. periods in STI in which voice FOF} > 0.5\%}{\text{No. of 1 min. periods in STI}} \times 100$$

voice-frequency multiplex aggregate

Rec. R.140

The set of voice-frequency multiplex telegraph circuits simultaneously accommodated in a telephone type channel.

voice-frequency (VF) signalling; VF signalling

Rec. Q.9

A signalling method in which the signalling information is based on the use of currents which have frequencies within the telephone speech band.

voice-frequency telegraphy (VFT)

Rec. R.140

Carrier telegraphy in which the frequency band of the modulated alternating current lies in the telephone frequency band.

voice queue freezeout fraction (Voice FOF)

Rec. G.763

The ratio of competitive clip duration to voice spurt duration. The fraction may be determined as the ratio of the number of non-preassigned TCs classified as voice-active but not connected, to the total number of non-preassigned TCs classified as voice-active connected plus not connected. The ratio should be expressed as a percentage to three decimal places.

$$\text{Voice FOF} = \frac{\sum_N \text{No. of non-preassigned TCs classified as voice-active but not connected}}{\sum_N \text{Total No. of non-preassigned TCs classified as voice-active (i.e. not connected + connected)}} \times 100$$

The number of TCs classified as voice-active and connected includes those within the hangover time. The voice spurt duration is taken to include hangover.

volatile fault

See:
intermittent fault.

volume; speech volume

Rec. P.10

A quantity which is related to speech power and is measured at a stated point in a telephone circuit by means of a specified instrument, suitable for rapid real-time control or adjustment of level by a human observer (e.g. vu meter, ARAEN volume meter, peak programme meter).

W

waiting time; queuing time

Rec. E.600

In delay mode of operation, the time interval between the bid for a resource and its seizure.

waiting time, T_2

Rec. M.495

Time interval after the recognition of a potential failure and its confirmation as a fault requiring restoration.

wander

Rec. G.810

The long term variations of the significant instances of a digital signal from their ideal positions in time (where long term implies that these variations are of frequency less than 10 Hz).

Note – For the purposes of Recommendation G.810 and the following related Recommendations, this definition of wander does not include integrated frequency departure.

wander

Rec. G.701

Long term non-cumulative variations of the significant instants of a digital signal from their ideal positions in time.

warning signal

Rec. S.140

A *function signal* which operates an audible or visual calling device with a view to attracting attention.

warning tone

Rec. E.182

A tone warning participants in a call that privacy of a conversation cannot be ensured where a recording machine is being used.

(inherent) weakness failure

Suppl. No. 6 (II.3)

A *failure* due to a weakness inherent in the *item* itself when subjected to stresses within the stated capabilities of the *item.*

(inherent) weakness fault

Suppl. No. 6 (II.3)

A *fault* due to a weakness inherent in the *item* itself when subjected to stresses within the stated capabilities of the *item.*

wear-out failure period

Suppl. No. 6 (II.3)

That possible later period in the life of an *item* during which the *instantaneous failure intensity* for a *repaired item* or the *instantaneous failure rate* for a *non-repaired item* increases rapidly.

Note – In any particular case it is necessary to explain what is meant by "increases rapidly".

wearout failure
See:
ageing failure; wearout failure.

wearout fault
See:
ageing fault; wearout fault.

well-formedness rules

Rec. Z.100

Well-formedness rules are constraints on a *concrete syntax* enforcing static conditions not directly expressed by the syntax rules.

white pages
See:
classified information.

"Who are you" signal (function); WRU signal

Rec. S.140

Signal corresponding to a *code combination* which, when received by a *telegraph terminal* or *data station* causes an call-sign device to transmit an *call-sign.*

wide area telephone service

Suppl. No. 1 (II.2)

For a flat rate charge, a subscriber may make an unlimited number of calls within a prescribed area from a particular telephone termination without the registration of call charges.

wideband (deprecated)

See:
broadband.

widow

Rec. T.411

One or more lines of text associated with preceding text but isolated from it by a page or column boundary.

widow size

Rec. T.416

This attribute only applies when the content layout process would result in the basic logical object being laid out in two or more basic layout objects; for example, at a page or frame boundary.

wildcard

Rec. F.500

In the context of directory services, a way to replace unknown parts of attributes for a request to the directory.

window

Rec. Z.341

A *window* is a collection of one or more *window areas.* Collection depends on the *application.* A *window* is dedicated to an application.

window area

Rec. Z.341

A *window area* is a named part of a *window* (sometimes the entire window) that is dedicated for a specific purpose depending upon the *application.*

window information

Rec. X.224

Information contained in a TPDU relating to the upper and the lower window edges.

work station function (WSF) block

Rec. M.30

The WSF block provides means for communications among function blocks (OSF, MF, DCF, NEF) and the user. Details of the WSF are given in Recommendation M.30, § 5.6.

work window area

Rec. Z.341

This *window area* should be used for *information entry through form filling* and *information entry through menu-item selection.* The *window area* may also be used as a graphic display and screen editor area, and should support scrolling.

working range

Rec. G.701

The range of values of an input signal over which an equipment is designed to operate with a specified performance. (See Figure 2/G.701.)

workstation (WS)

Rec. M.30

The WS is the stand alone system which performs WSFs.

WRU signal

See:
"Who are you" signal (function); WRU signal.

X

X.121 address

Rec. F.500

An attribute type which specifies a number from the X.121 numbering plan associated with an object.

X interface

Rec. M.30

The X interface is applied at the x reference point.

X.410-1984 mode

Rec. X.216

A restricted mode of operation of the Presentation Layer, which is used to allow interworking with a system that conforms to Recommendation X.410 (1984).

X.410-1984 mode

Rec. X.217

The mode of ACSE operation which allows ACSE service-users to interwork using the protocol specified in Recommendation X.410-1984. The use of this mode results in no transfer of ACSE semantics.

X.410-1984 mode

Rec. X.218

A restricted mode of operation of the reliable transfer service element to allow interworking with application-entities based on Recommendation X.410-1984.

x reference points

Rec. M.30

The x reference points connect a TMN to other management type networks including other TMNs.

Y

Y-ratio

Rec. P.10

The ratio between the sending and receiving efficiencies of a passive *telephone set* circuit.

yearly continuous measurement

Rec. E.500

In the yearly continuous measurement days are post-selected from a base period with a length of the whole year. The post-selected days include the peak intensity values measured during the base period.

yearly non-continuous measurement

Rec. E.500

In the yearly non-continuous measurement days are scheduled (pre-selected) from a base period of a few months. The pre-selected days include the high load days of expectation or of earlier observations.

yellow pages
See:
classified information.

yes or no test
See:
test; yes or no test.

Z

Z condition
See:
A condition; Z condition.

Z element
See:
A element; Z element.

z-operation

Rec. G.802

Conversion of the μ-law character signal "00000000" (all-zero octet) into the μ-law character signal "00000010", where "1" is the bit numbered seven in the octet (see Recommendation G.711).

Note – Bit number indicates the chronological order of transmission of bits in serial processing.

zero-dispersion slope

Rec. G.652

The slope of the chromatic dispersion coefficient versus wavelength curve at the zero-dispersion wavelength.

zero-dispersion wavelength

Rec. G.652

That wavelength at which the chromatic dispersion vanishes.

zero sidetone line impedance (Z_{S0})

Rec. P.10

That circuit impedance which, when connected across the terminals of a telephone set, causes the sidetone to be reduced to zero.

PART II

FIGURES AND TABLES

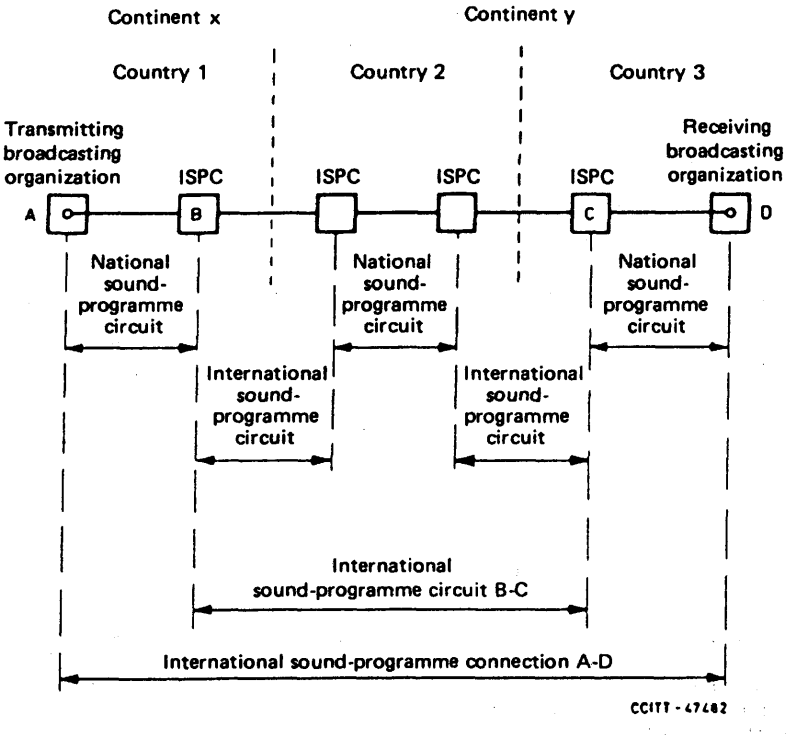


FIGURE 1/D.180

Example of an international sound-programme connection

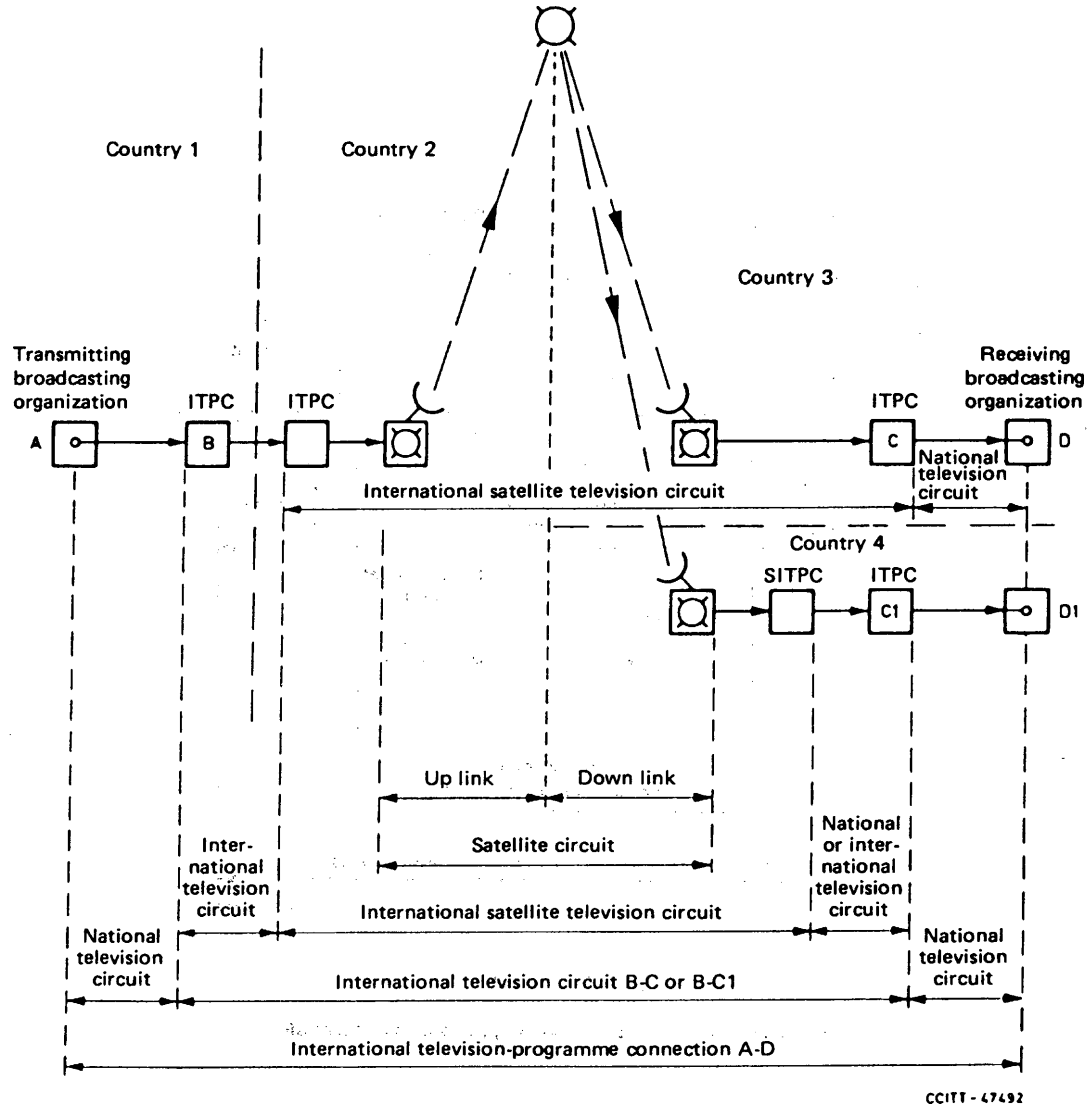


FIGURE 2/D.180

Example of an international television-programme connection involving a satellite circuit

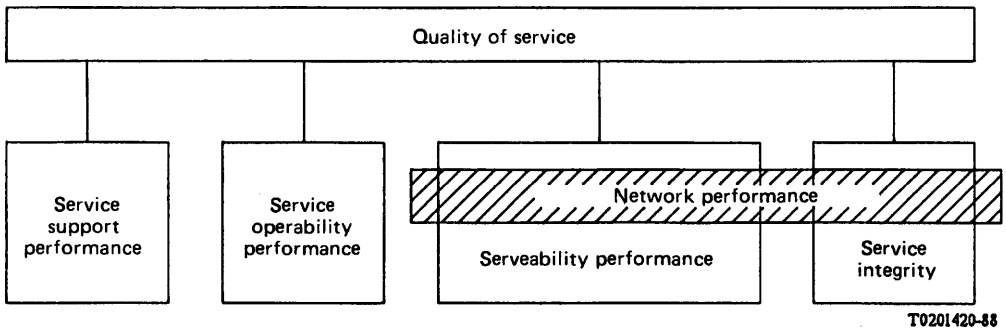


FIGURE 2/E.800

Relationship between quality of service and network performance

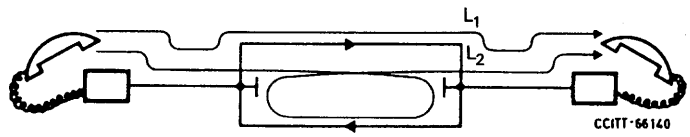


FIGURE 1/G.100

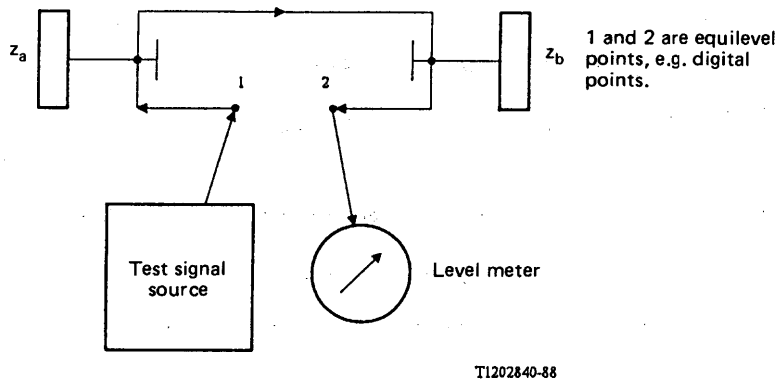


FIGURE 2/G.100

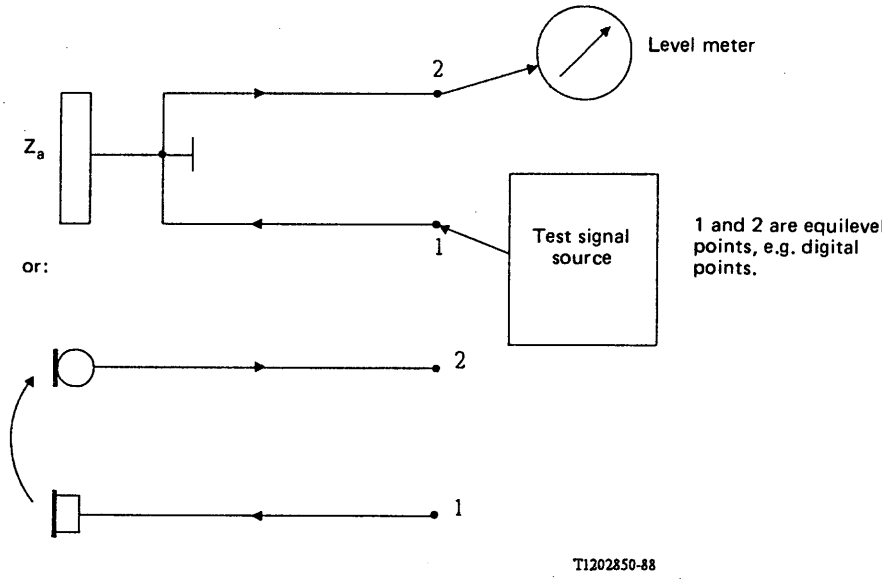


FIGURE 3/G.100

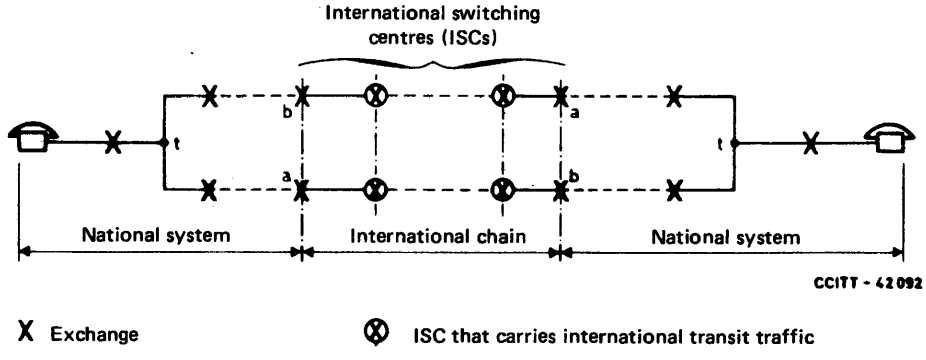
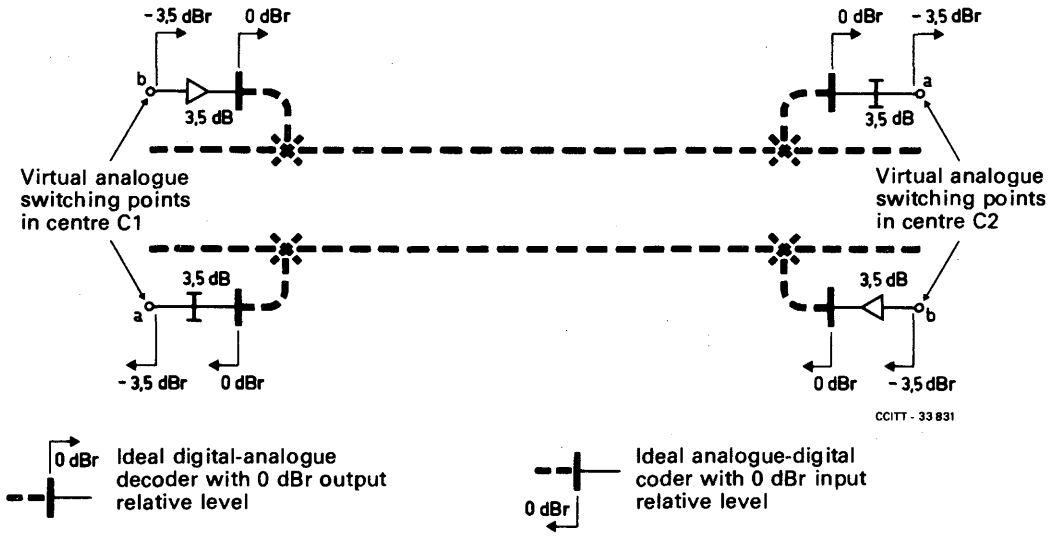


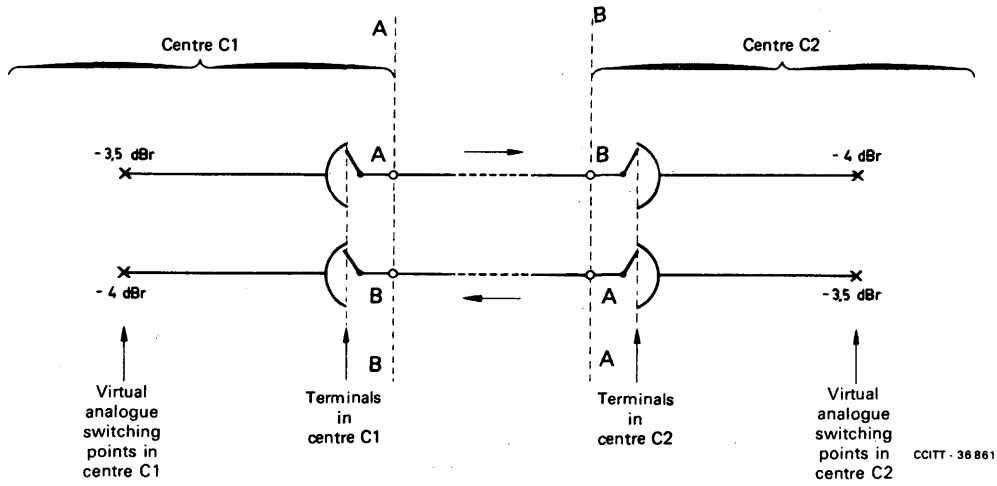
FIGURE 1/G.101

Definition of the constituent parts of an international connection



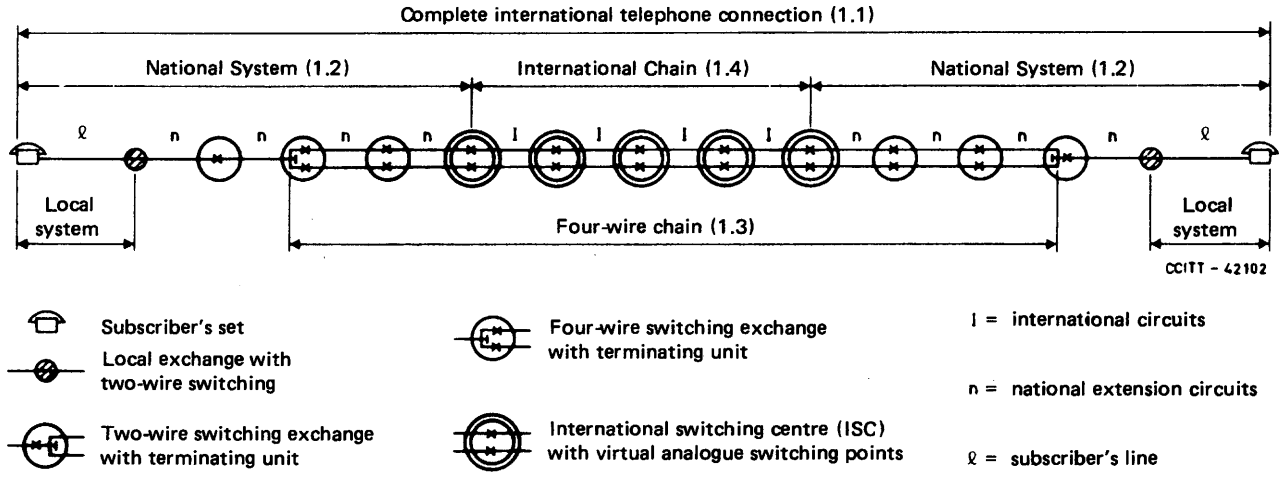
Note – Ideal coders and decoders are assumed to show a relation between analogue and digital signals and vice versa exactly in accordance with the appropriate tables for A-law or μ-law of Recommendation G.711 [2].

a) *Definition of virtual analogue switching points for a digital international circuit between digital international centres*



b) *Definition of virtual analogue switching points for an analogue international circuit between analogue international centres*

FIGURE 2/G.101
Definitions for international circuits



Note – The arrangement shown for the national systems are examples only. The numbers given in brackets refer to the Subsections of Section 1 (Fascicle III.1) in which recommendations may be found relevant to that part of the connection. In addition, the circuits making up this chain must individually meet the requirements of Subsection 1.5.

FIGURE 3/G.101

An international connection to illustrate the nomenclature adopted

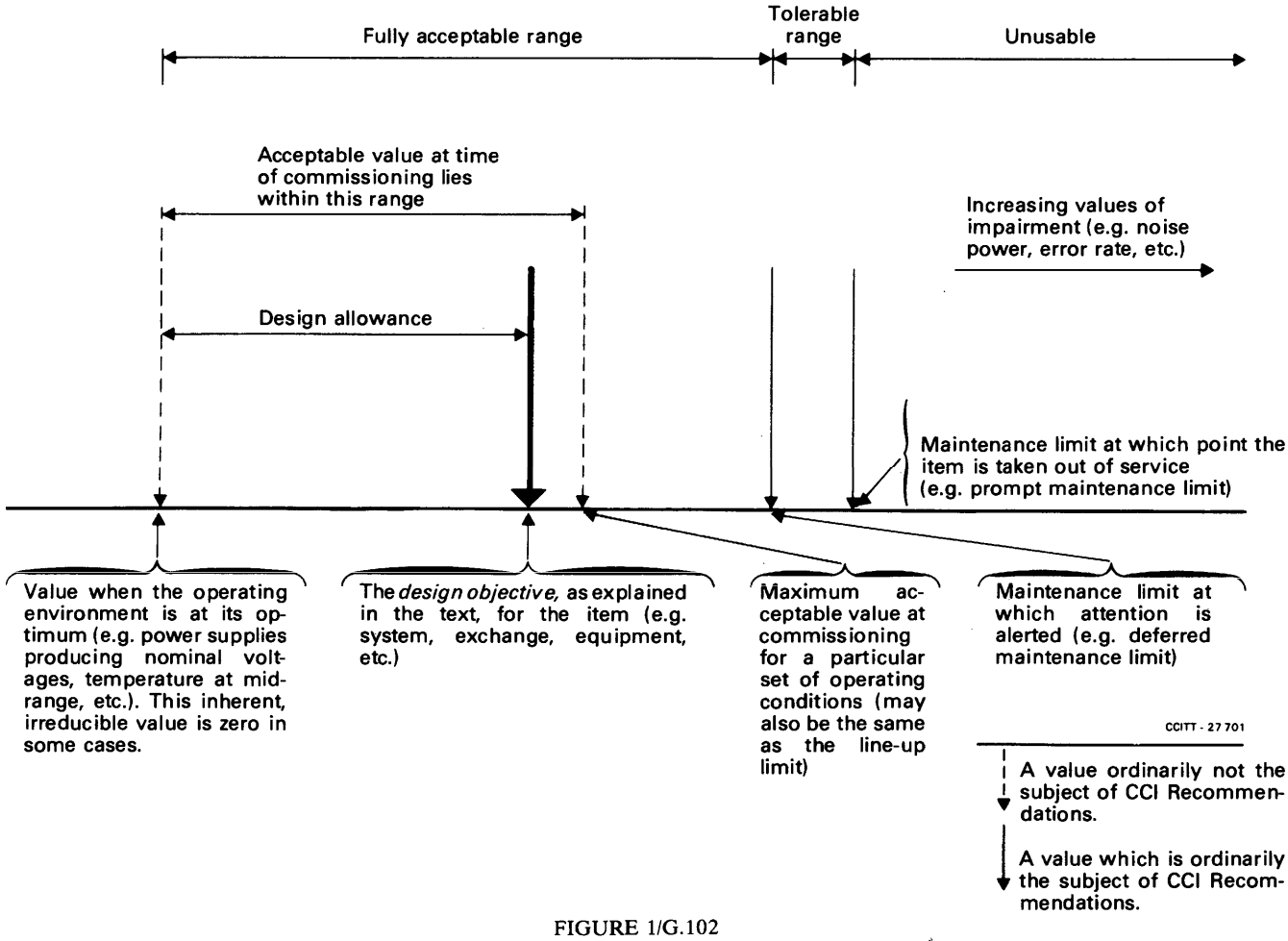
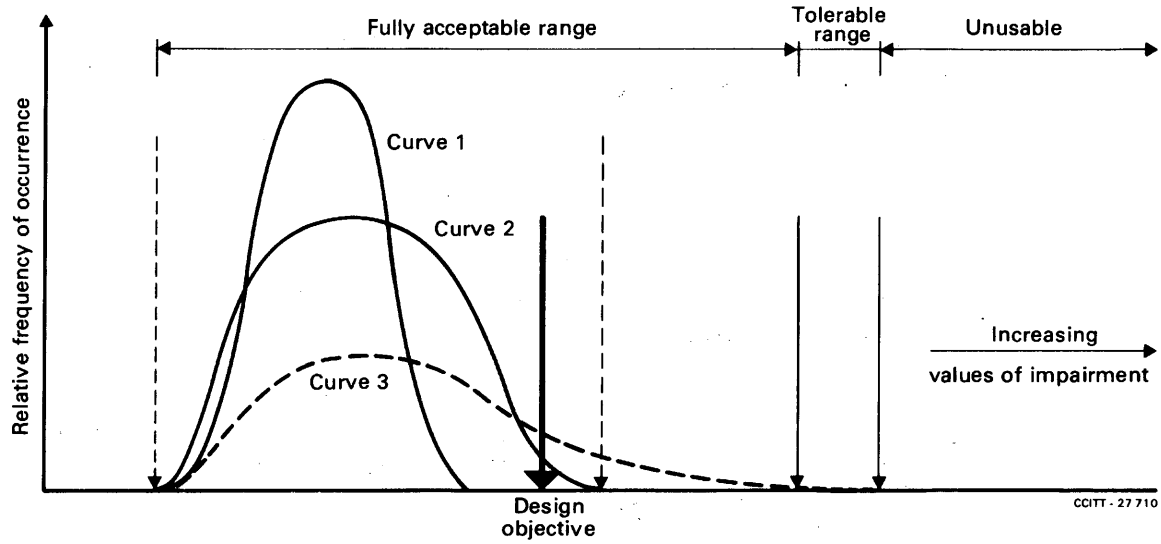


FIGURE 1/G.102

Illustration of the significance of design objective for an item



Such curves may be obtained for ensembles of items of equipment at the time of commissioning.
Alternatively curves may be plotted representing the performance of an item during its lifetime.

Curve 1 – Example of relative frequency of occurrence of impairments at time of commissioning in which the design value is met with some margin. A similar distribution might be achieved in service throughout the lifetime of an item of equipment if the effect of environmental conditions etc. is negligible. An example might be the attenuation distortion of transformers.

Curve 2 – Example of the relative frequency of occurrence of impairments at time of commissioning in which the design value is exceeded with some agreed probability because the item of equipment is used in a way which is more demanding than that in the design objectives. An example might be the effect of a repeater spacing of a radio or line system greater than anticipated.

Curve 3 – Example of the relative frequency of occurrence of impairments in service in which the working environment has parameters more onerous than or additional to those specified. Examples might be the effect of excessive loading, component failure or operational errors.

FIGURE 2/G.102

Examples of the relative frequency of impairment values

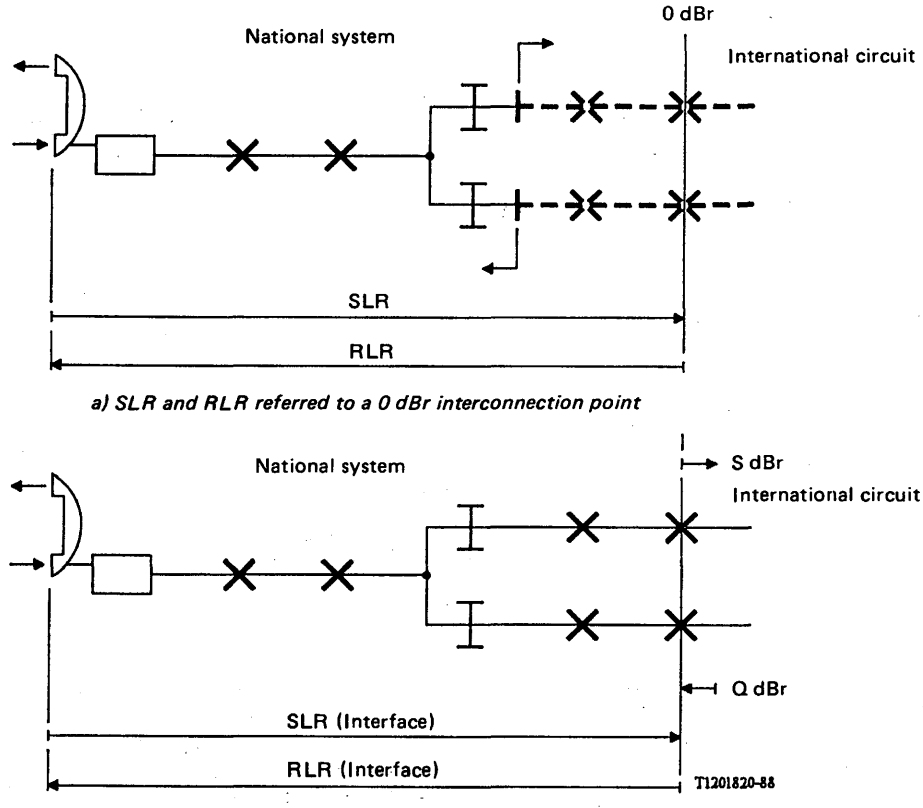
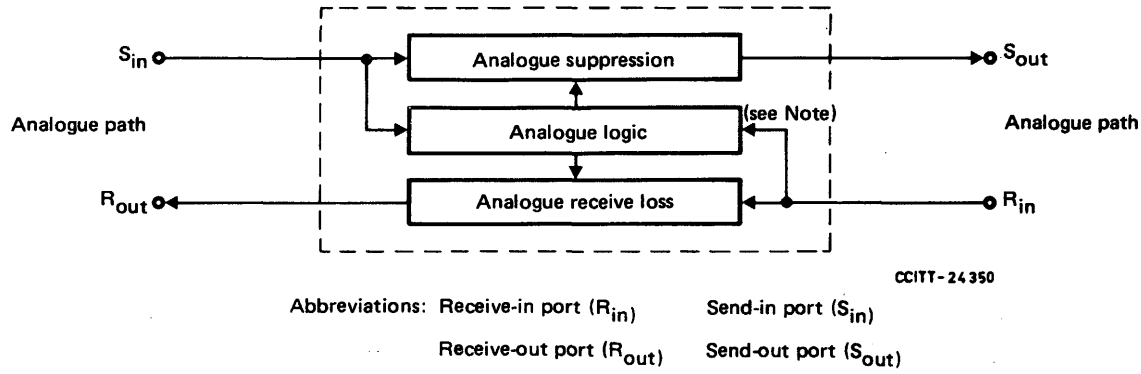


FIGURE 1/G.111

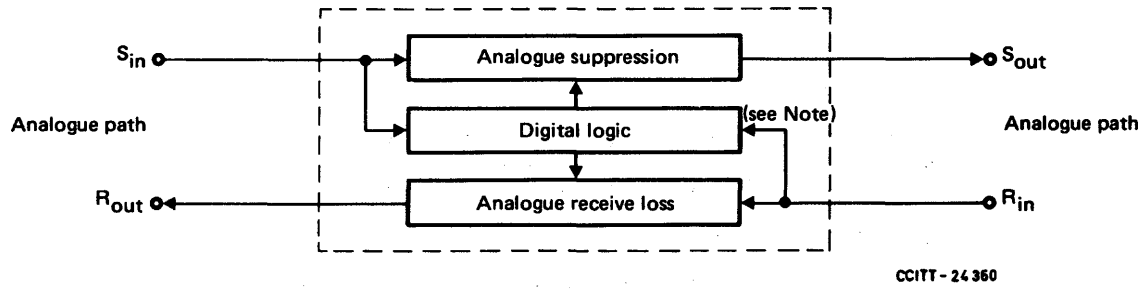
Definition of SLR and RLR reference points for a national system



Note – This input may be connected to either side of the receive loss, depending on the logic circuitry.

FIGURE 1/G.164

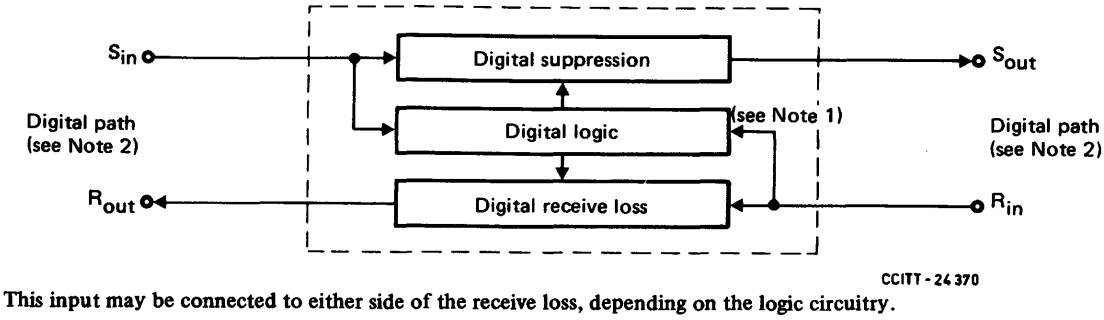
Type A echo suppressor



Note – This input may be connected to either side of the receive loss, depending on the logic circuitry.

FIGURE 2/G.164

Type B echo suppressor

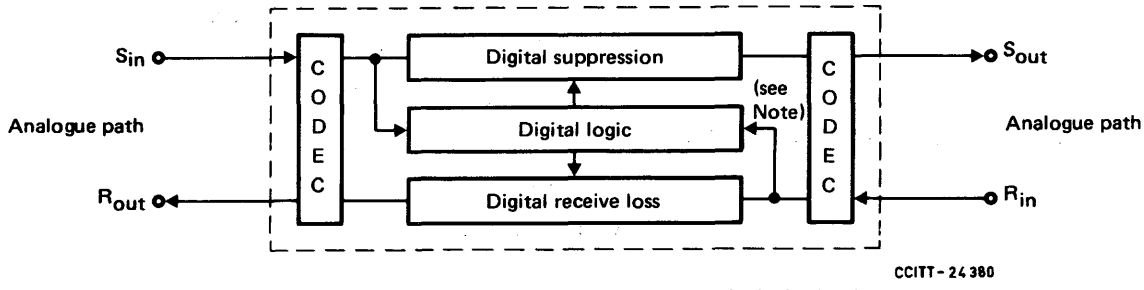


Note 1 – This input may be connected to either side of the receive loss, depending on the logic circuitry.

Note 2 – The digital path may be at any digital interface, i.e. 64 kbit/s, 1544 or 2048 kbit/s or at any higher order interface.

FIGURE 3/G.164

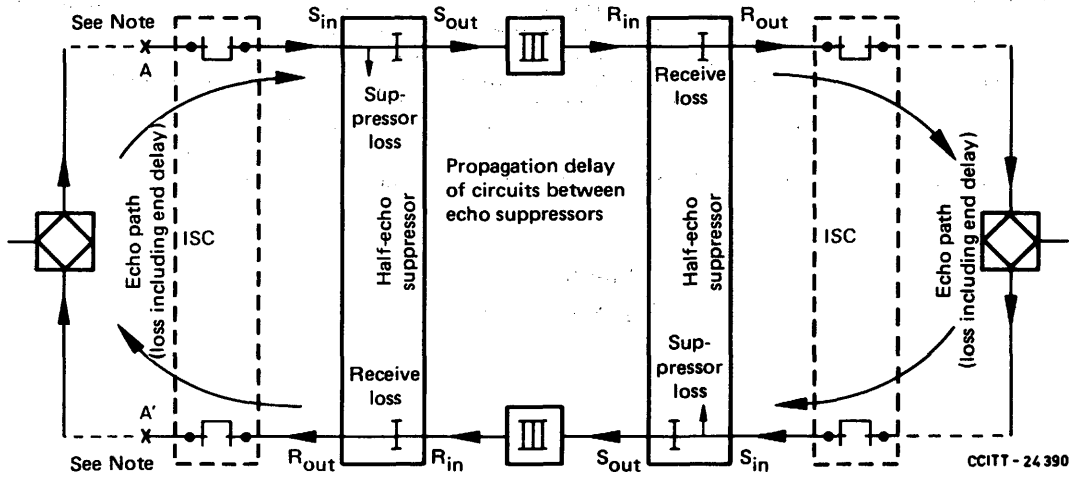
Type C echo suppressor



Note – This input may be connected to either side of the receive loss, depending on the logic circuitry.

FIGURE 4/G.164

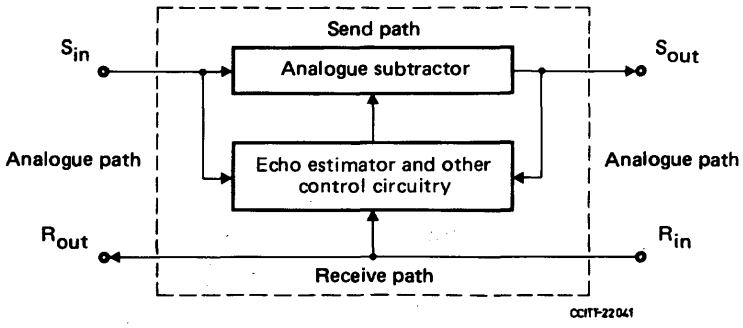
Type D echo suppressor



ISC International switching centre

Note – In some applications the echo suppressor is inserted at point A, A'.

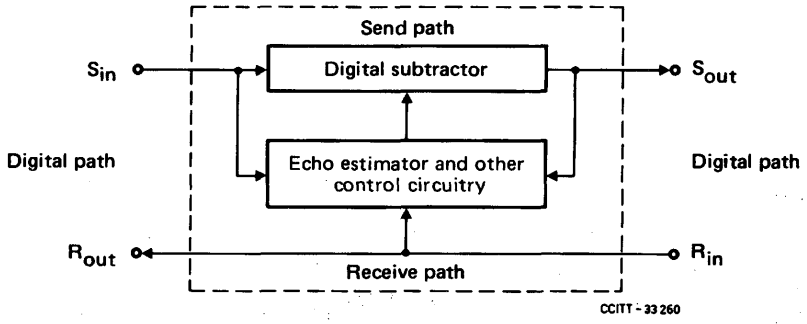
FIGURE 5/G.164



Abbreviations: Receive-in port (R_{in}) Send-in port (S_{in})
Receive-out port (R_{out}) Send-out port (S_{out})

FIGURE 1/G.165

Type A echo canceller



Note – Functionally, a type C digital echo canceller (DEC) interfaces at 64 kbit/s. However, 24 or 30 digital echo cancellers for example may be combined corresponding to the primary digital hierarchy levels of 1544 kbit/s or 2048 kbit/s respectively.

FIGURE 2/G.165

Type C echo canceller

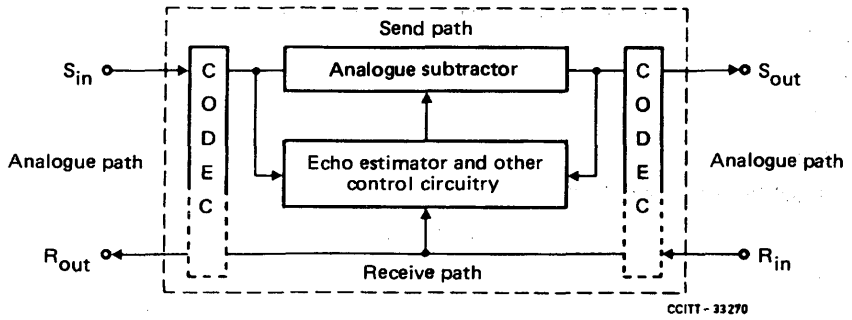


FIGURE 3/G.165

Type D echo canceller

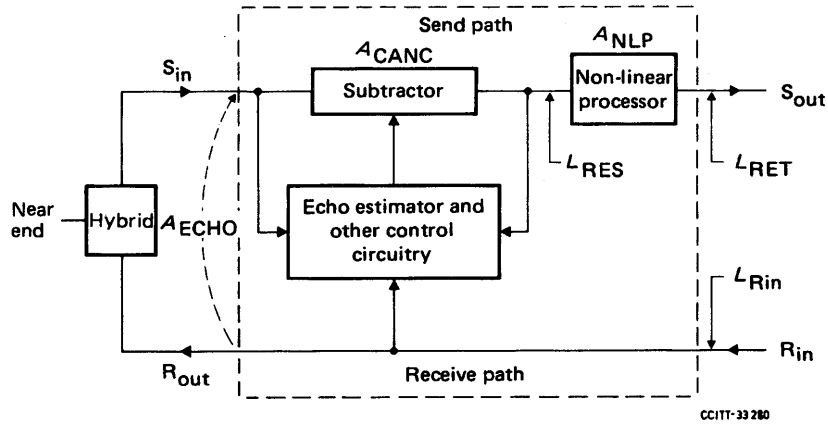
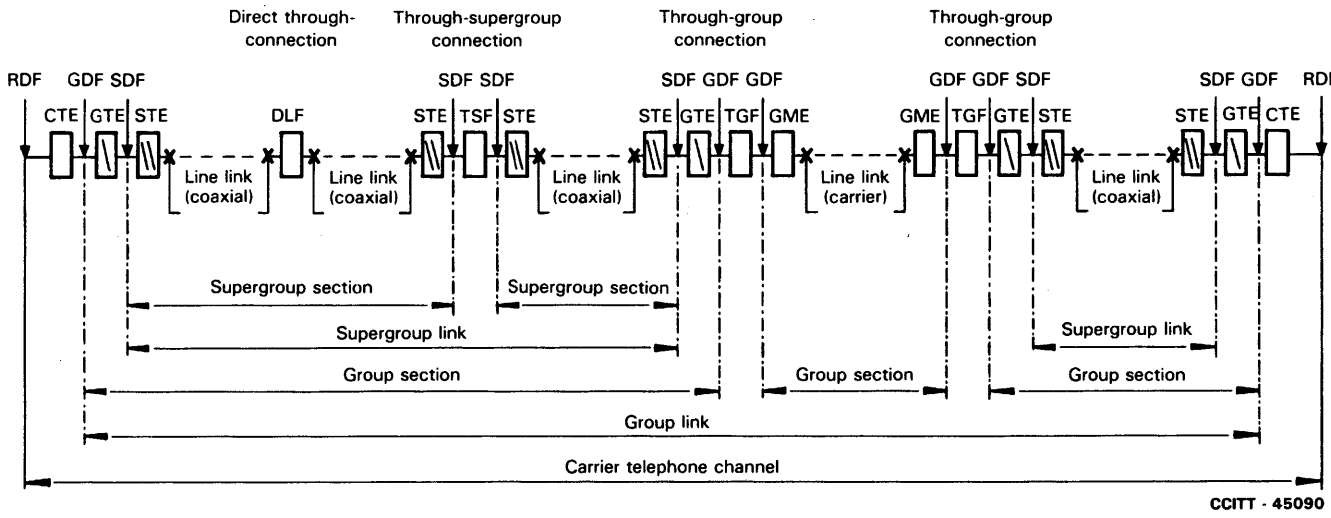


FIGURE 4/G.165

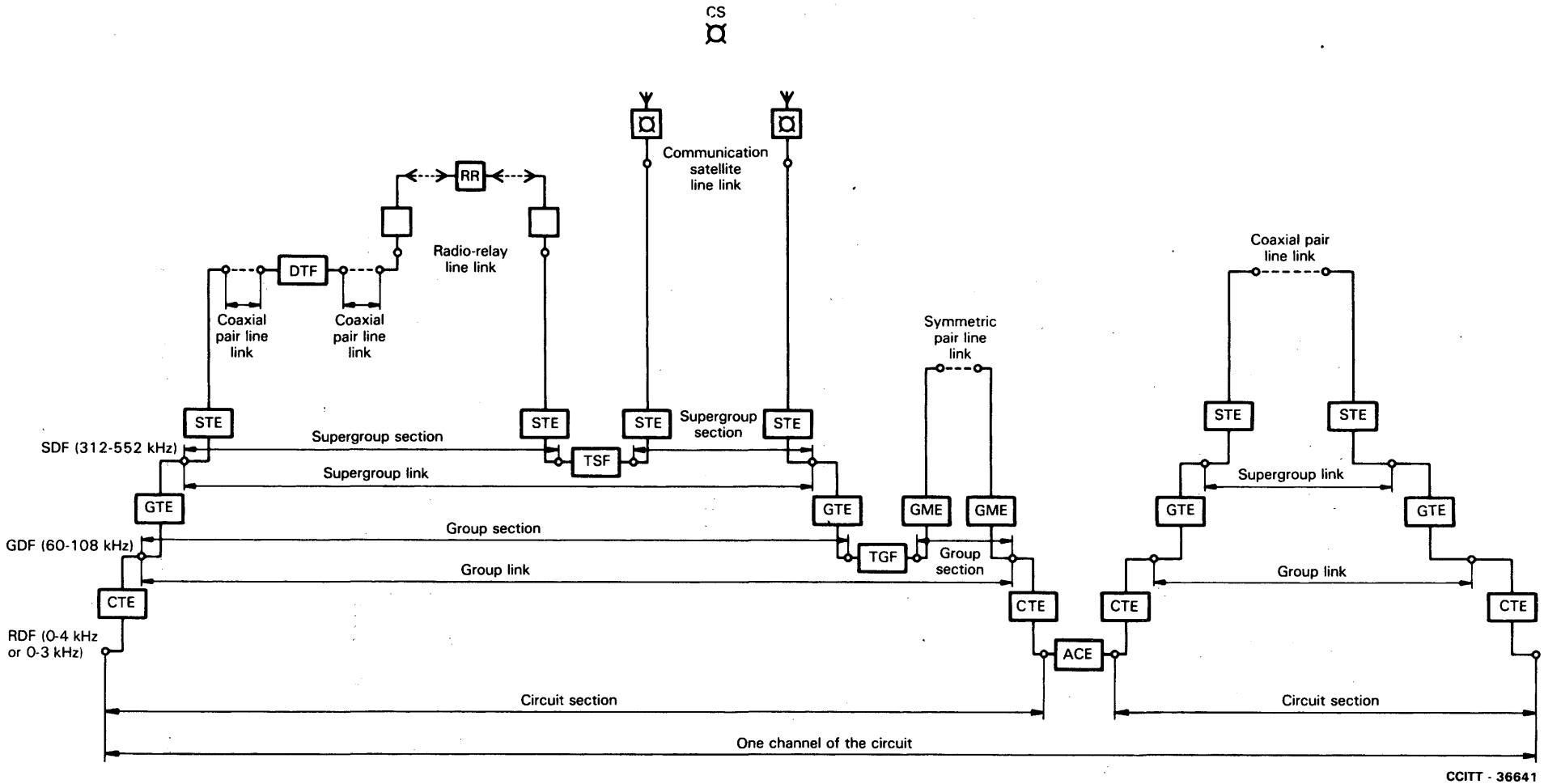
Echo canceller



CTE = channel-translating equipment (translation of the audio band into the basic group and vice versa)
GTE = group-translating equipment (translation of the basic group into the basic supergroup and vice versa)
STE = supergroup-translating equipment (translation of the basic supergroup into the line frequency on coaxial cable, and vice versa)
GME = group-modulating equipment
DLF = direct line filter
TSF = through-supergroup filter
TGF = through-group filter
RDF = repeater distribution frame
GDF = group distribution frame
SDF = supergroup distribution frame

Note — This diagram shows only one direction of transmission.

FIGURE 2/G.211

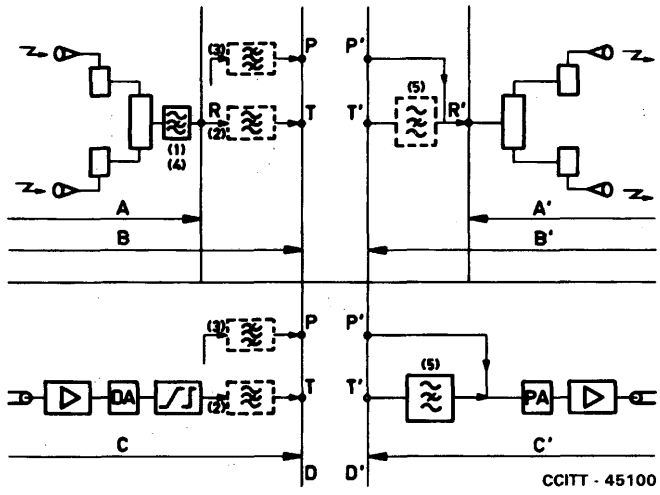


ACE = audio-connecting equipment
CTE = channel-translating equipment (translation of the audio band into the basic group or vice versa)
GTE = group-translating equipment (translation of the basic group into the basic supergroup or vice versa)
STE = supergroup-translating equipment (translation of the basic supergroup into the line frequency on coaxial cable, or radio-relay system or vice versa)
CS = communication satellite

GME = group-modulating equipment
TSF = through-supergroup filter
TGF = through-group filter
RDF = repeater distribution frame
GDF = group distribution frame
SDF = supergroup distribution frame
RR = radio-relay system
DTF = direct transfer filter

FIGURE 3/G.211

Channel of a group set up on several line links in tandem



A, A' = radio-relay system
B, B' = line link by means of radio-relay system
C, C' = line link by means of cable system
D, D' = boundary of the high-frequency line equipment
R = radio-relay system output
R' = radio-relay system input
Point *P'* = provided for possible injection of regulating pilots
Between *T* and *T'* = telephony terminating equipment and/or direct through-connection equipment
DA = de-emphasis network
PA = pre-emphasis network

(1) blocking of continuity pilots and, if necessary, of regulating pilots
(2) blocking, if necessary, of regulating pilots, and pilots that must not go beyond the line link
(3) through-connection filter for regulating pilots, if necessary; through-connection filter for telephone groups can, if necessary, be inserted
(4) blocking of unspecified pilots or supervisory signals
(5) filter for blocking any unwanted frequency before injecting a pilot, ensuring with (2) the requisite protection against a pilot (or other) frequency coming from another regulated-line section (*B* or *C*, as the case may be)

FIGURE 1/G.213

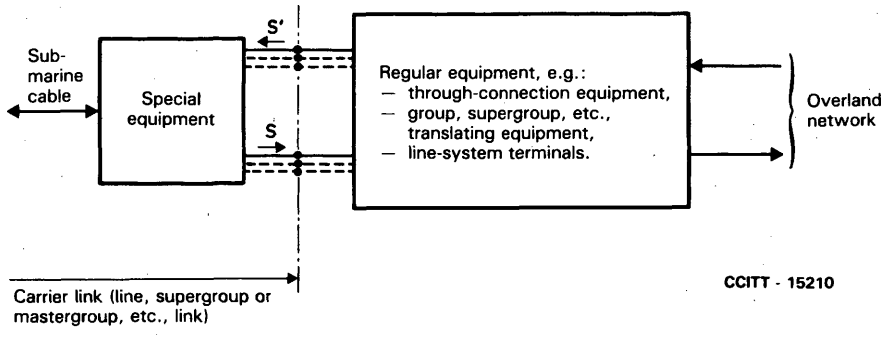
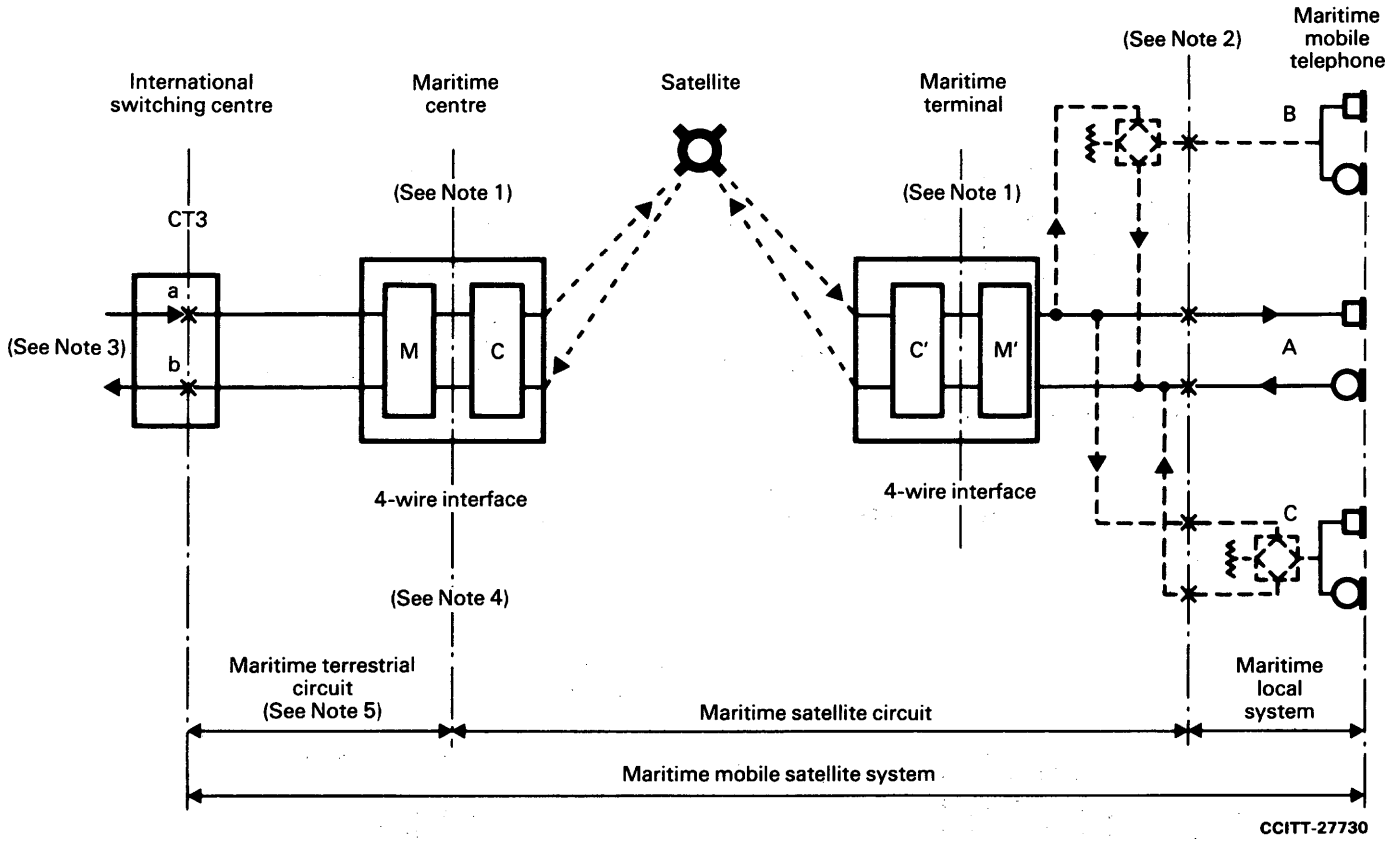


FIGURE 1/G.371

Interconnection of a submarine cable system with the overland network



Note 1 – M,M' are the miscellaneous telephone equipment needed for the maritime satellite circuit; e.g. signalling devices, echo suppressors, etc. C,C' are the channel transmitting and receiving equipments, which may include voice-activated switches, compandors, or other voice-processing devices.

Note 2 – This interface represents the point where different maritime local systems may be switched to the maritime satellite circuit. At a maritime terminal, the local systems will be represented by a choice from:

A. 4-wire switched, 4-wire telephone
B. 2-wire switched, 2-wire telephone
C. 4-wire switched, 2-wire telephone

In Type B, the 4-wire/2-wire terminating set is part of the maritime satellite circuit; in Type C, it is part of the maritime local system. At a given maritime terminal, it would be possible to have local systems of more than one type.

Note 3 – Points a and b are virtual analogue switching points of the international system [14].

Note 4 – This interface may have a switching function; from the point of view of signalling and switching, the maritime centre may undertake some of the functions of a CT (Recommendation Q.13 [15]). It is therefore appropriate to designate the terrestrial and satellite segments as «circuits» interconnected here.

Note 5 – May be of zero length in some countries.

FIGURE 1/G.473
Structure of maritime-mobile satellite system

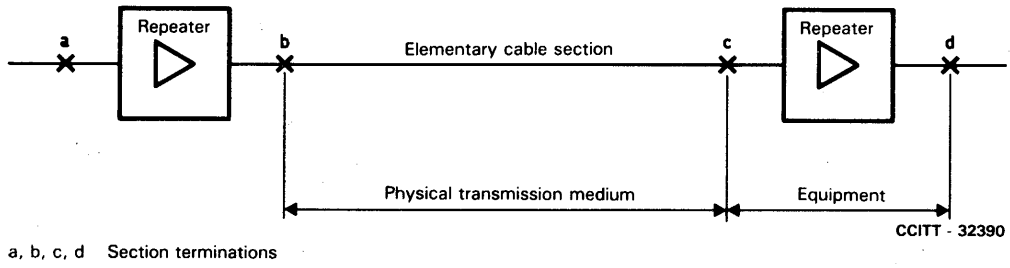


FIGURE 1/G.601

Terminology for generic reference to repeaters and cable sections

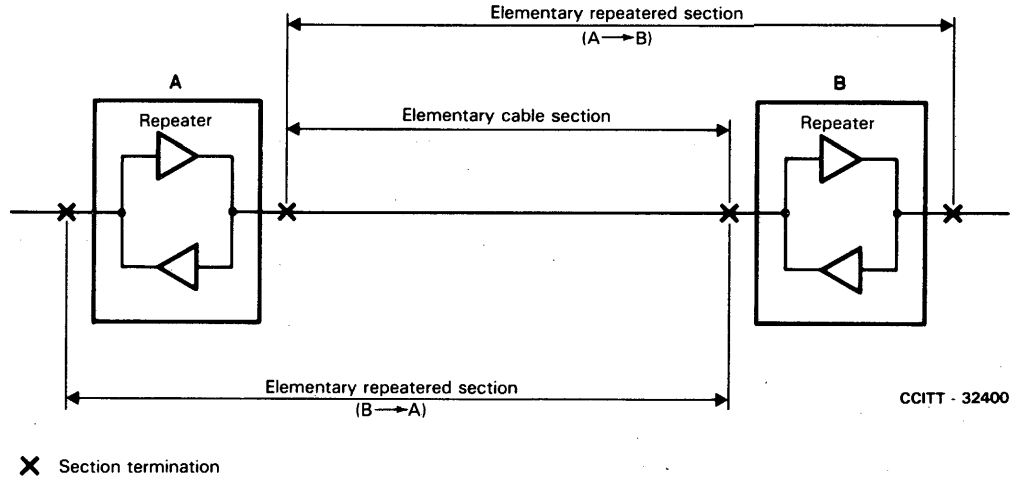


FIGURE 2/G.601

Terminology for elementary repeatered section

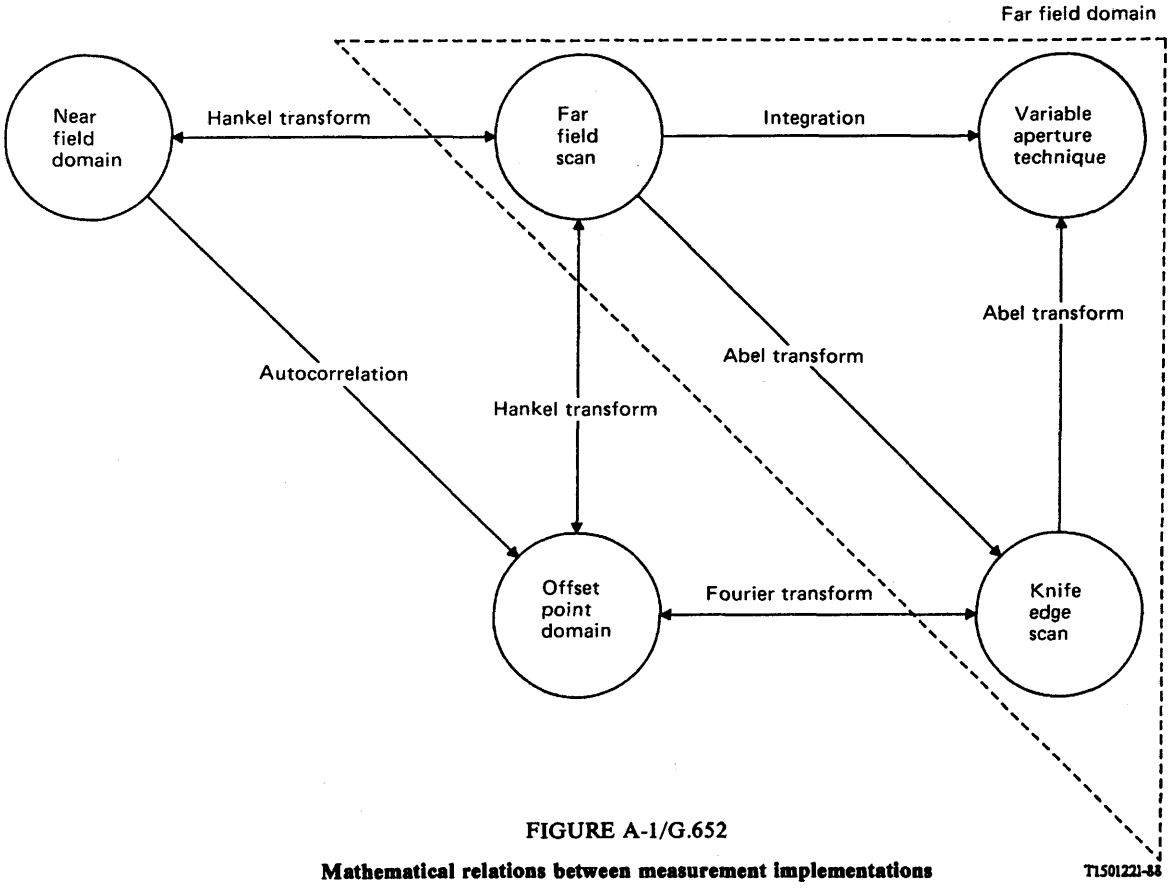
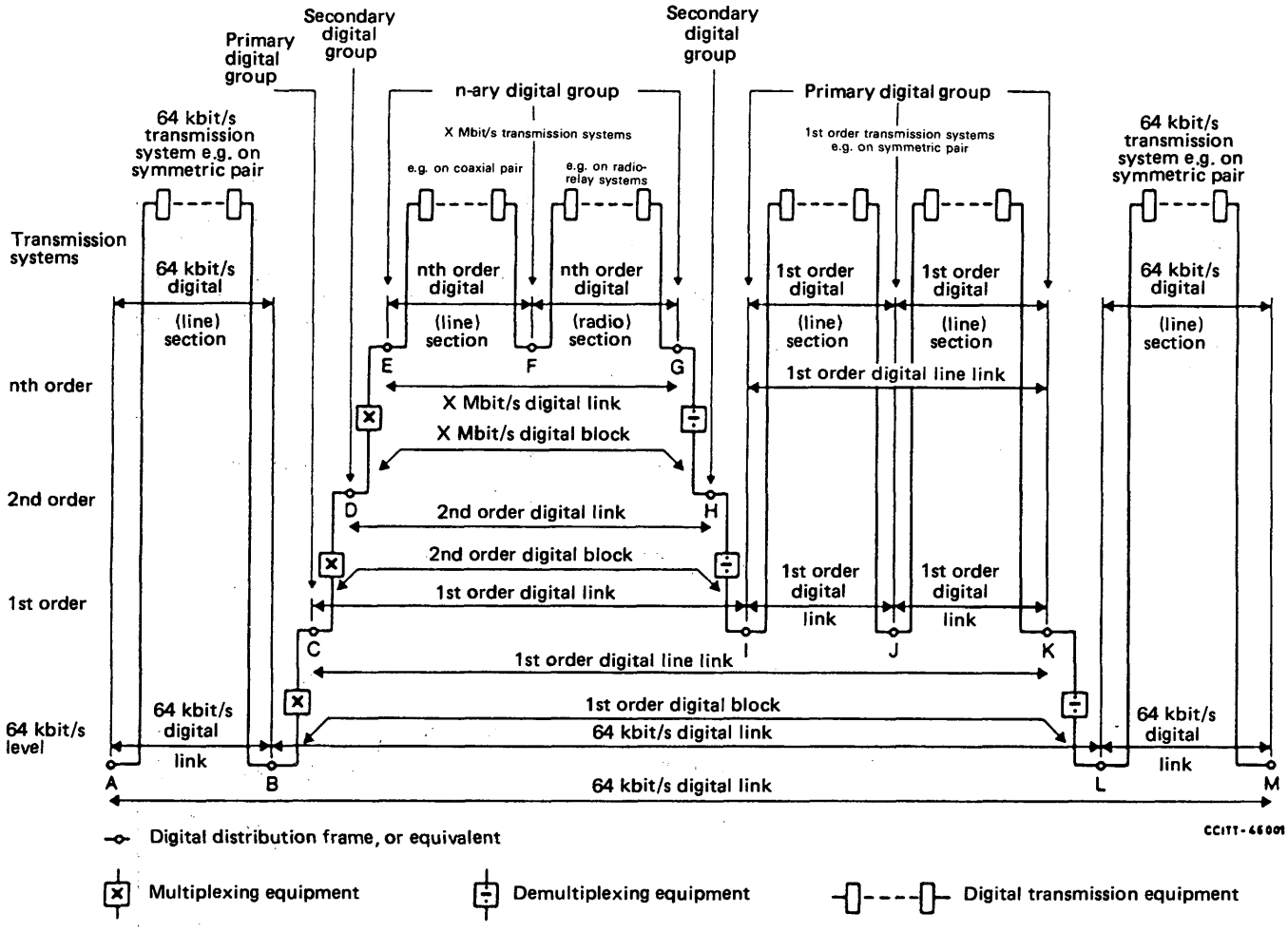


FIGURE A-1/G.652

Mathematical relations between measurement implementations



Note 1 — Digital line and radio sections may be at digit rates which are either hierarchical or non-hierarchical.
Note 2 — A-B is a 64 kbit/s digital link consisting of a single 64 kbit/s digital section.
Note 3 — A-M is a 64 kbit/s digital link which contains six 64 kbit/s digital sections, A-B, E-F, F-G, I-J, J-K and L-M.
Note 4 — F-G is an X Mbit/s digital radio section which forms part of an X Mbit/s digital link E-G.
Note 5 — G-I is a 1st order digital link which contains a 2nd order digital link D-H.
Note 6 — I-K is an example of a digital line link.

FIGURE 1/G.701

Examples of digital link, digital section, digital line section, etc.

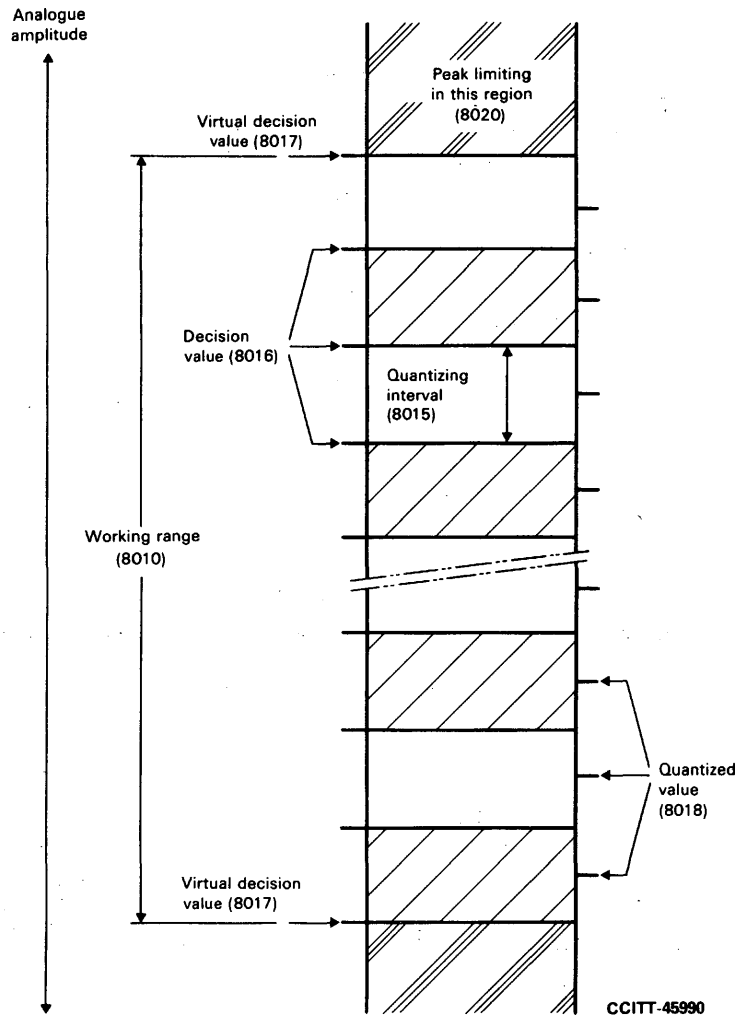
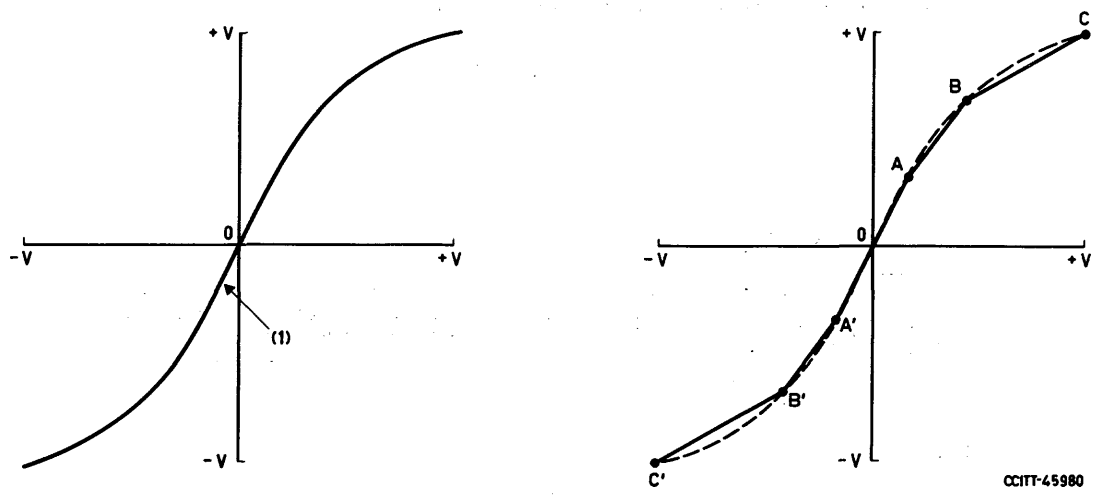


FIGURE 2/G.701

Illustration of terms associated with quantizing (8011)



a) Smooth characteristic

Note – A central linear section (1), if present, must tangentially join on to the curved end-section.

b) Segmented characteristic

Note – This particular characteristic has 5 linear segments: C′B′, B′A′, A′A, AB, BC.

FIGURE 3/G.701

Non-uniform encoding laws

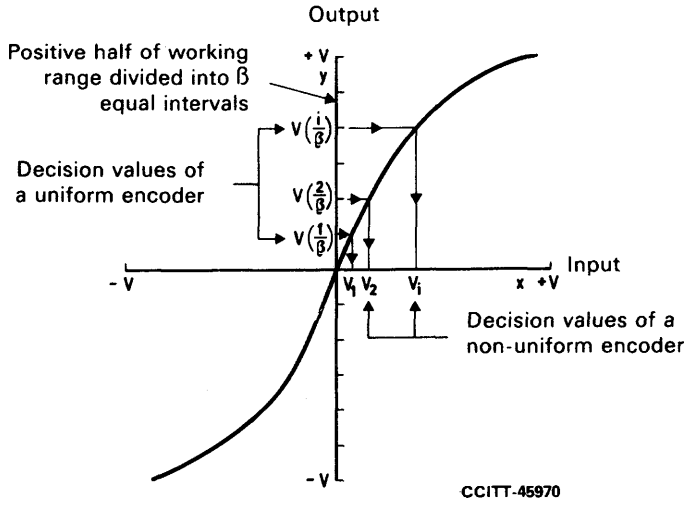
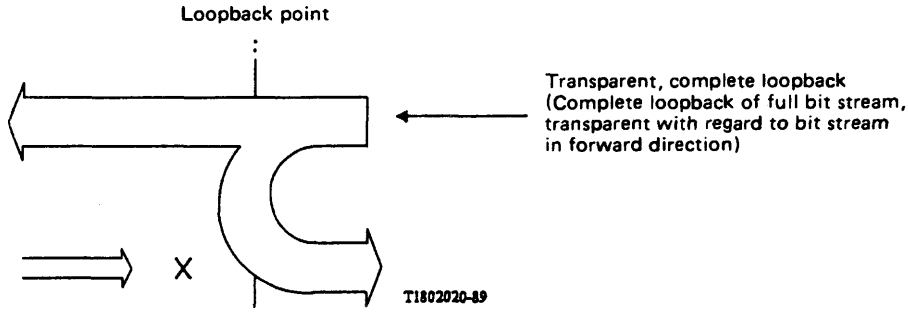


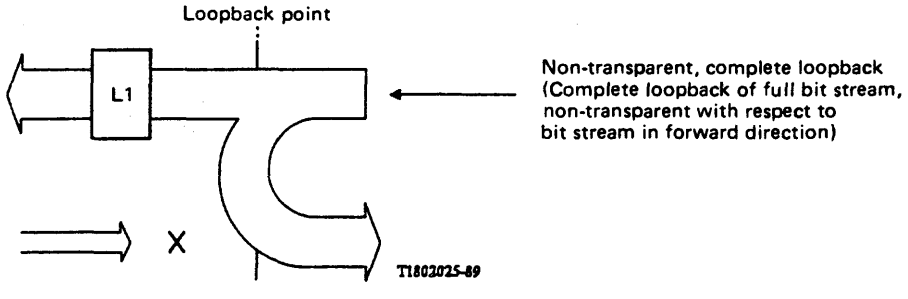
FIGURE 4/G.701

Relationship between the decision values of a uniform and a non-uniform encoding law



X Signal inhibited in order to avoid interference with looped signal

FIGURE B-1/G.960



X Signal inhibited in order to avoid interference with looped signal

L1 Device which changes or inhibits the transferred signal

FIGURE B-2/G.960

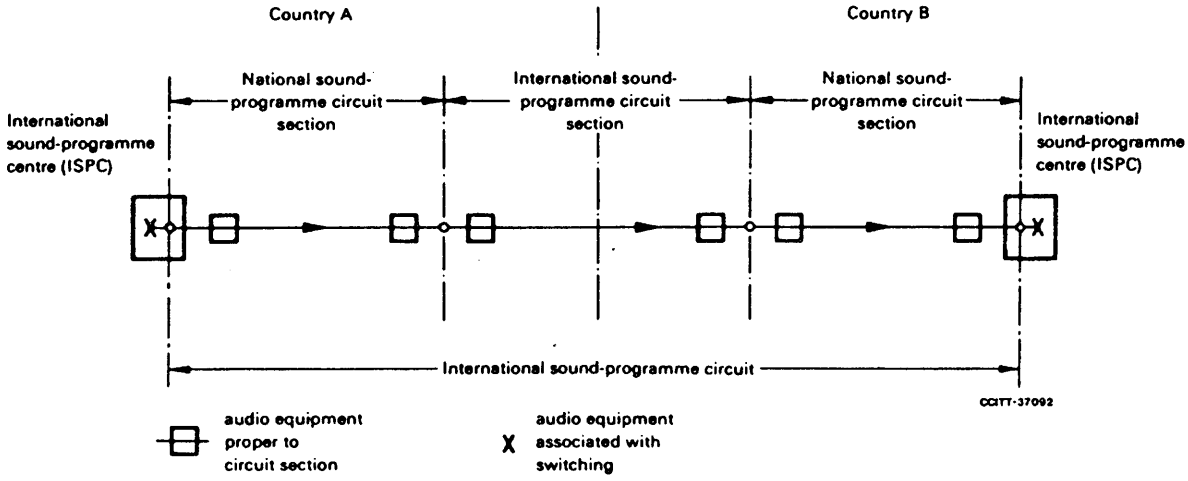


FIGURE 1/J.13

An international sound-programme circuit composed of two national and one international sound-programme circuit-section

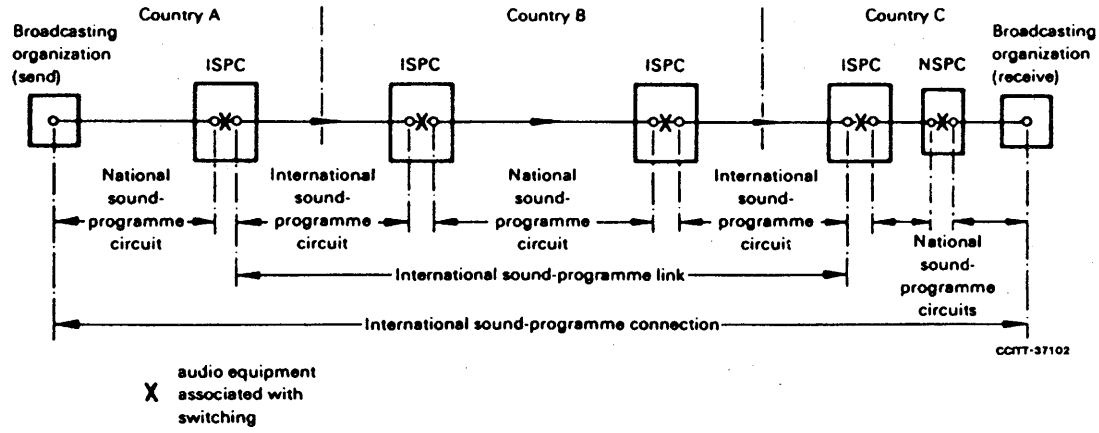
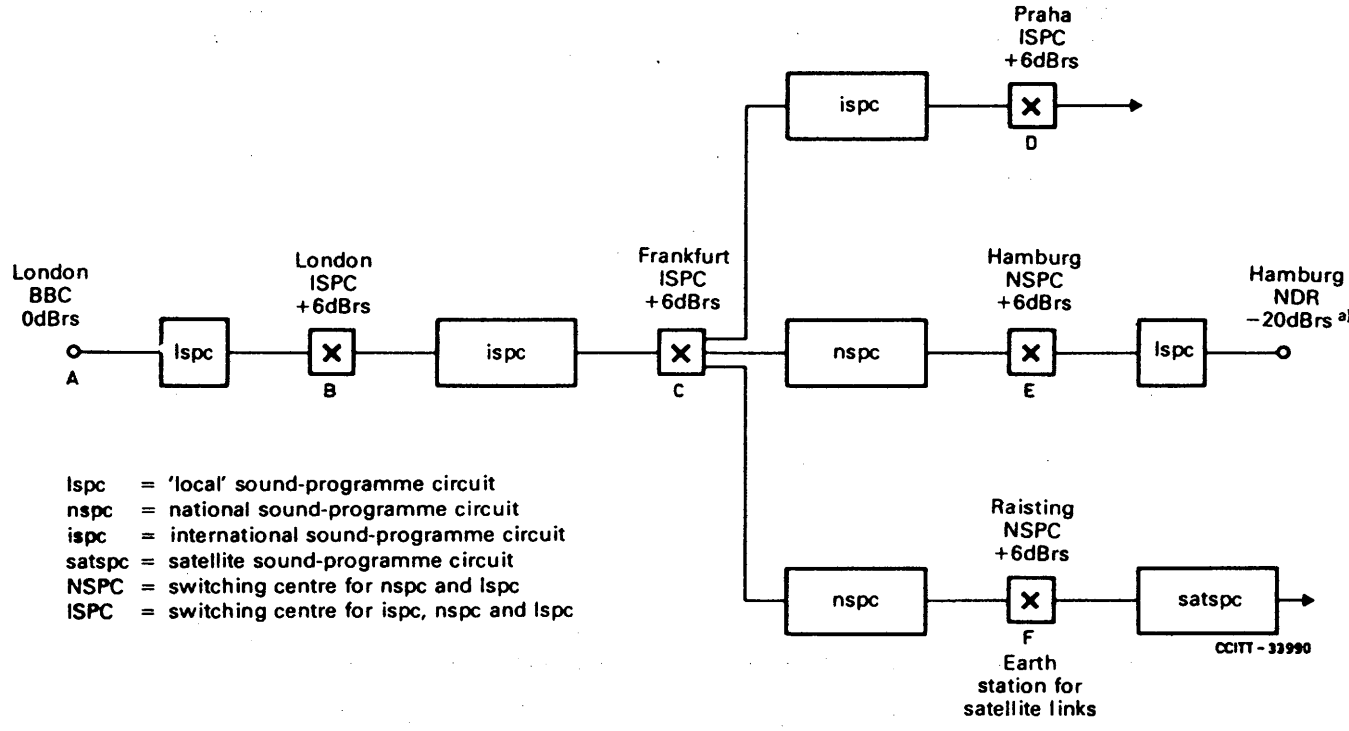


FIGURE 2/J.13

An international sound-programme link composed of international and national sound-programme circuits and extended on a national sound-programme circuit at each end to form an international sound-programme connection



Note – Maximum level of sound programme signals: +9dBm0s (this means +9dBms at a 0dBrs relative level point and +15dBms at a +6dBrs relative level point respectively). The value of +9dBms corresponds to a peak voltage of 3.1 V which is the maximum value of a sine-wave signal of 2.2 V r.m.s.

[a] Other values can be chosen by the relevant Administration on a national basis.

FIGURE 3/J.13

Diagram of an international sound-programme circuit

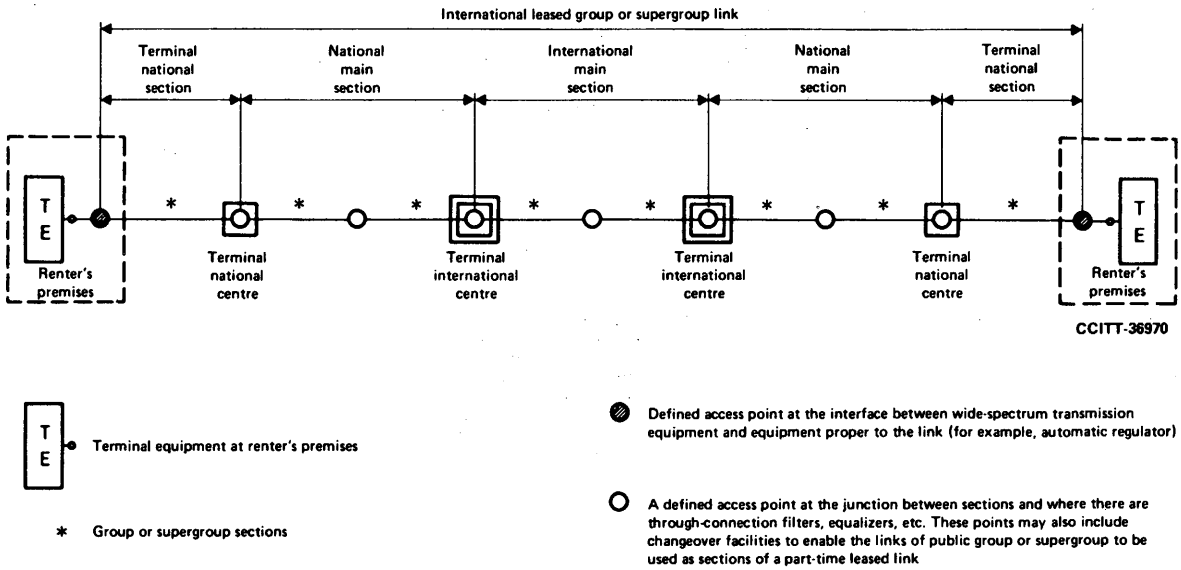


FIGURE 1/M.900

Example of the basic constitution of an international leased group or supergroup link for wide-spectrum signal transmission

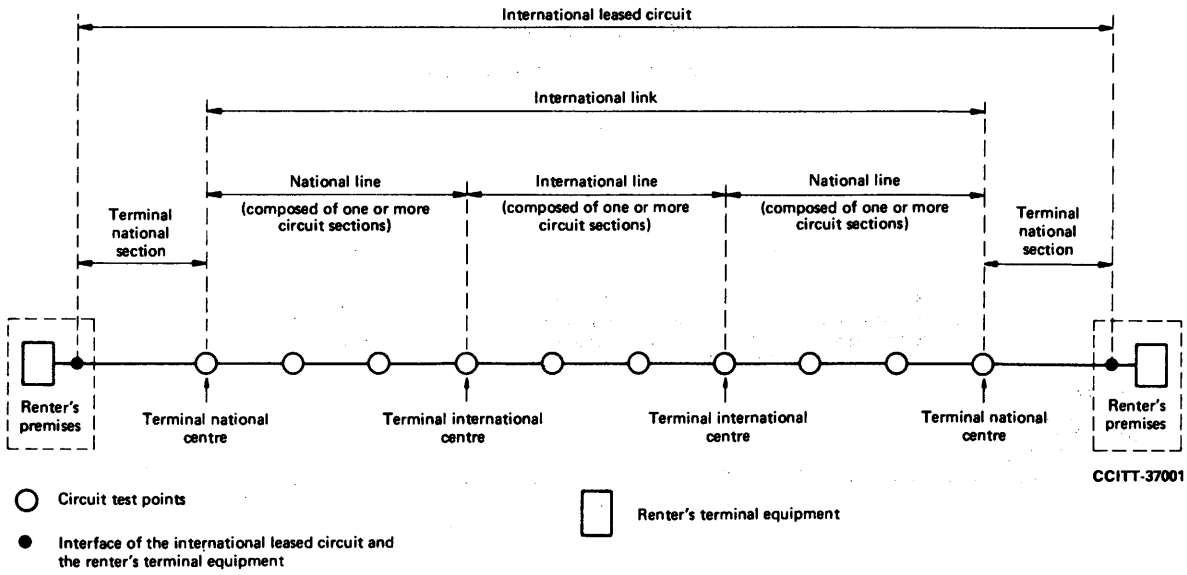
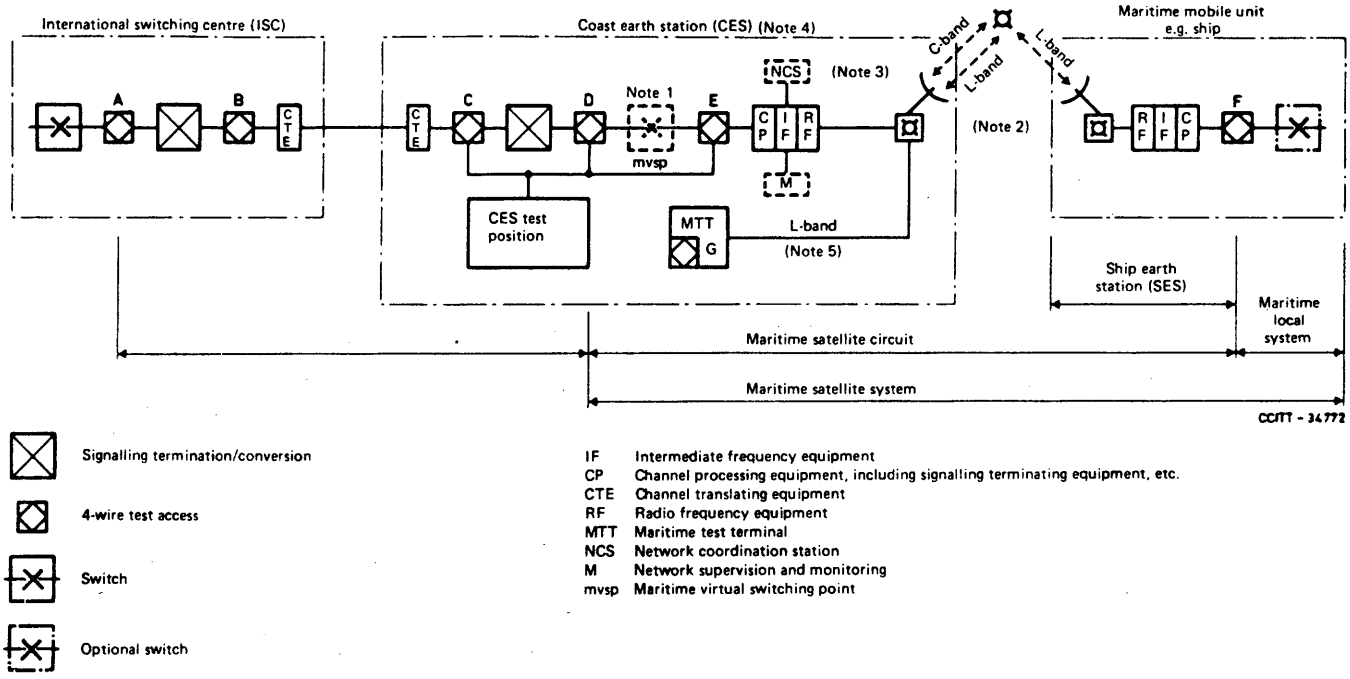


FIGURE 2/M.1010

Basic constitution of a point-to-point international leased circuit



Note 1 — A maritime virtual switching point should always be established for transmission planning purposes. However, a switch at the coast earth station is optional.

Note 2 — The actual frequencies used are 4/6 GHz (C-band) and 1.5/1.6 GHz (L-band).

Note 3 — Certain coast earth stations are also network coordination stations; their functions are described in Recommendation M.1110.

Note 4 — Coast earth station functions are described in Recommendation M.1120.

Note 5 — 4-wire test access point G is equivalent to 4-wire test access point F.

FIGURE 1/M.1100

Constitution of a maritime satellite system

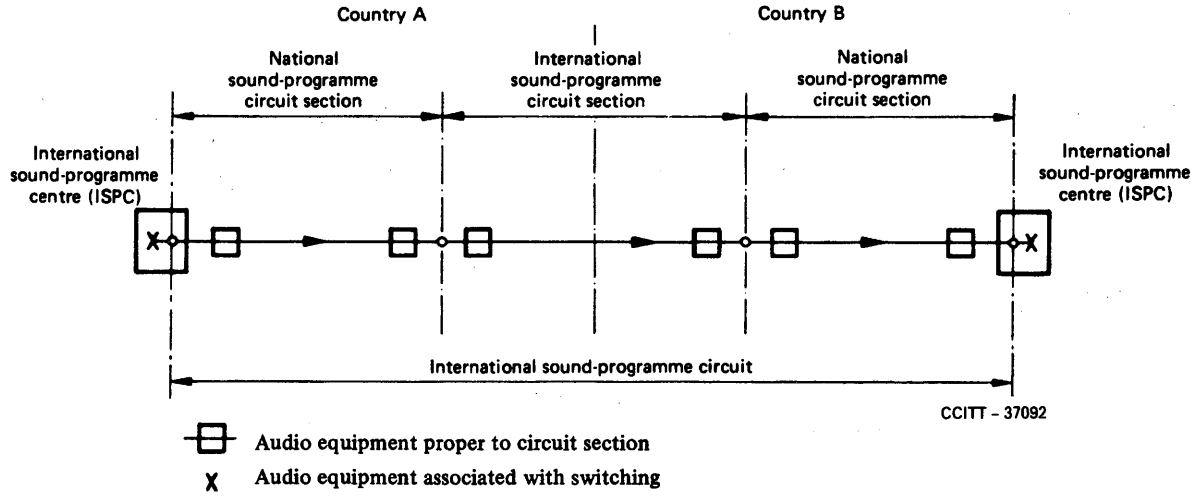
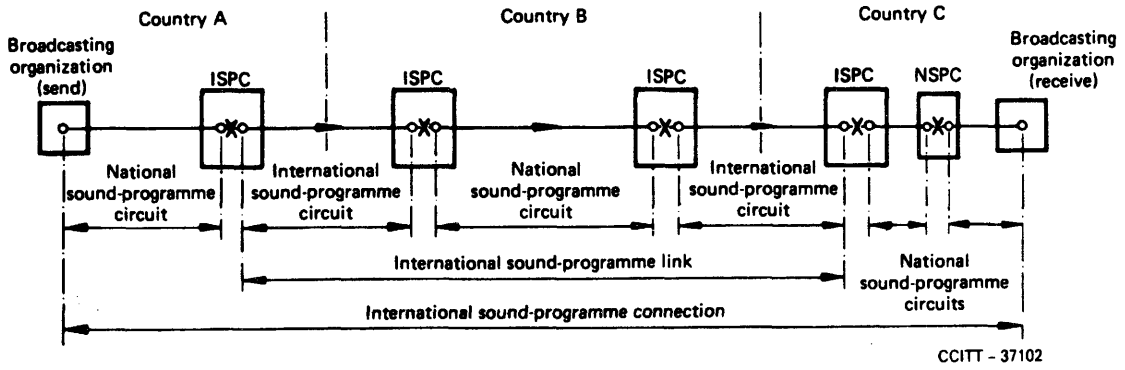


FIGURE 1/N.1

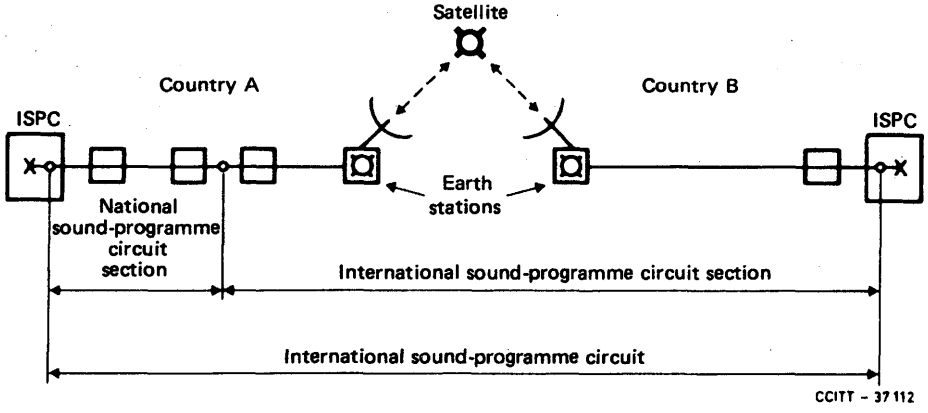
An international sound-programme circuit composed of two national and one international sound-programme circuit-sections



X Audio equipment associated with switching

FIGURE 2/N.1

An international sound-programme link composed of international and national sound-programme circuits and extended on a national sound-programme circuit at each end to form an international sound-programme connection



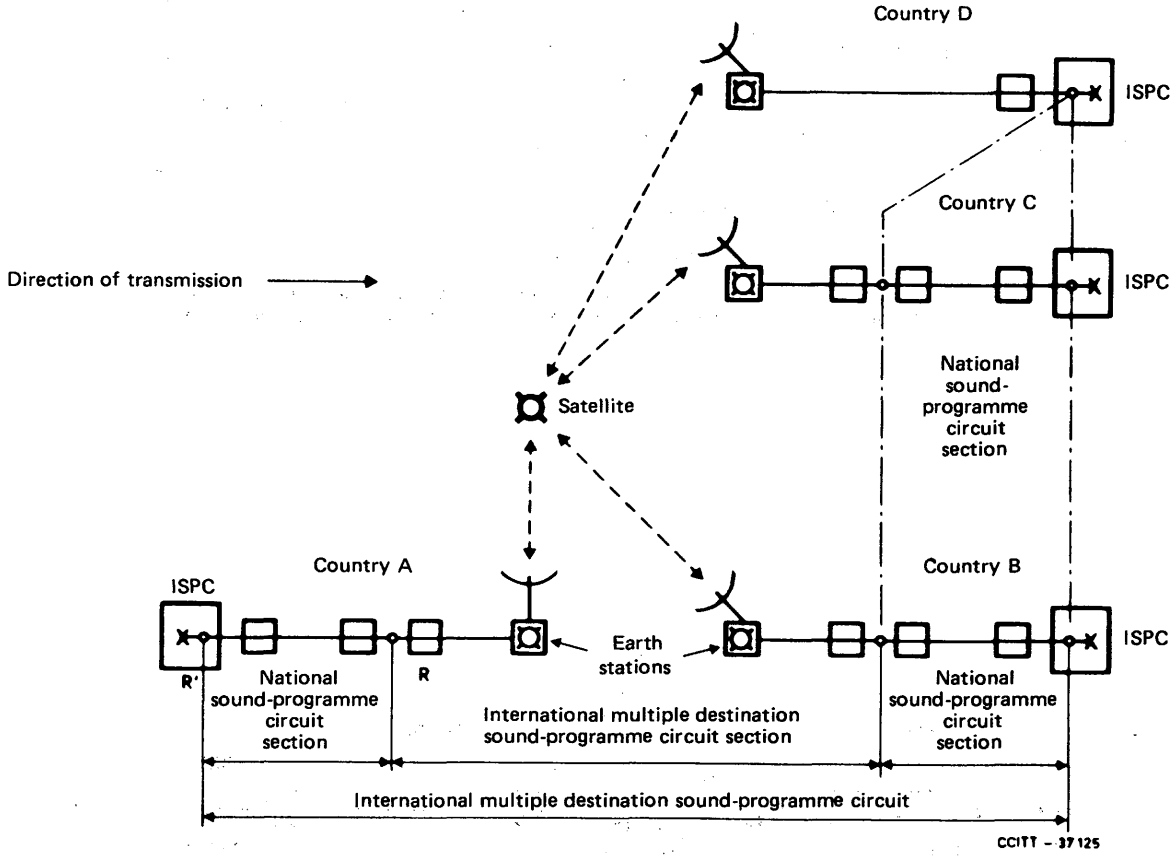
Audio-equipment proper to the circuit section

X Audio equipment associated with switching

ISPC International sound-programme centre

FIGURE 3/N.1

Single-destination international sound-programme circuit routed via a communication satellite system



Audio equipment proper to a circuit section

X Audio equipment associated with switching

ISPC International sound-programme centre

R *Send reference* station for the multiple destination international sound-programme circuit section

R' *Send reference* station for the multiple destination international sound-programme circuit

FIGURE 4/N.1

International multiple destination sound-programme circuit routed via a communication satellite system

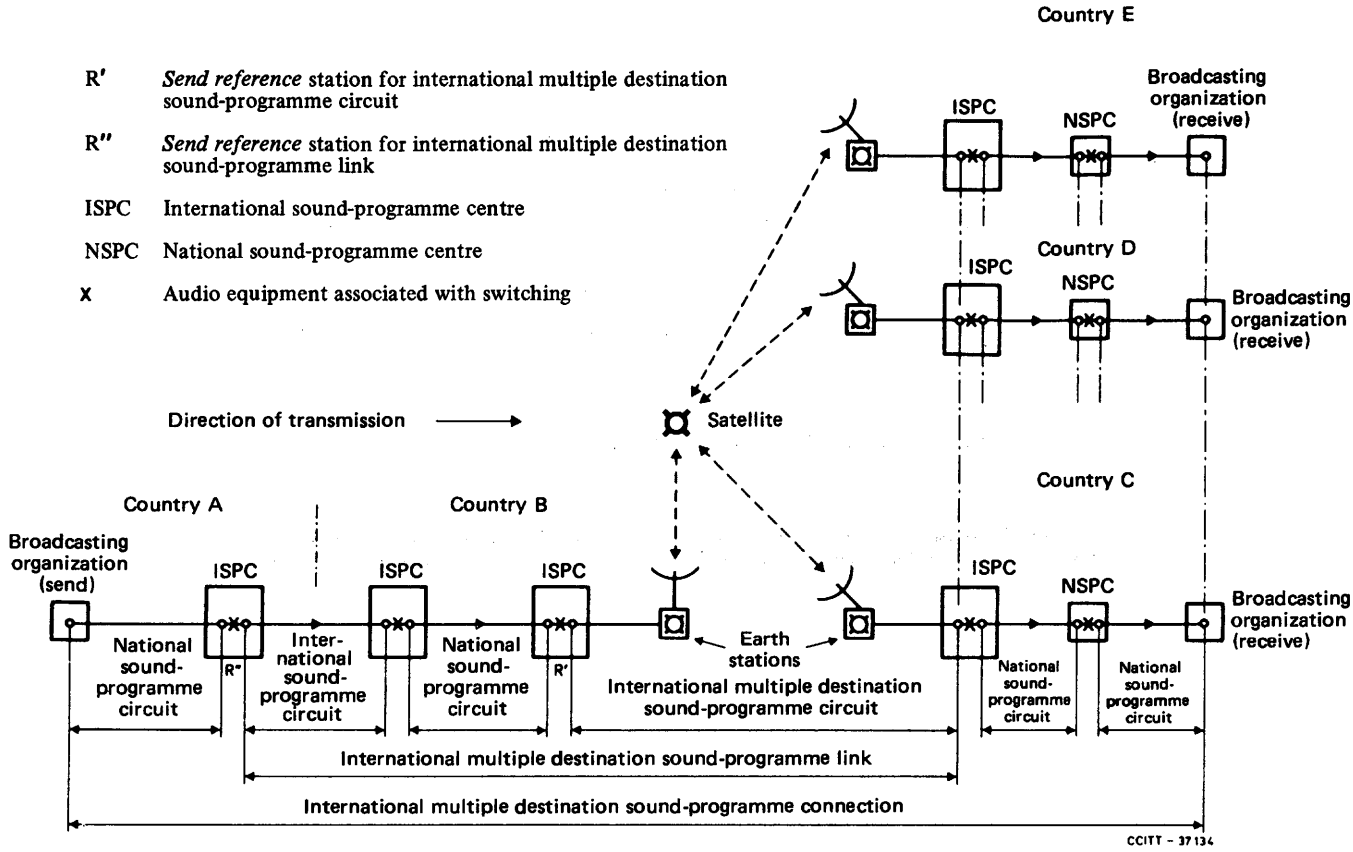


FIGURE 5/N.1

International multiple destination sound-programme link extended to form a connection routed via a communication satellite system

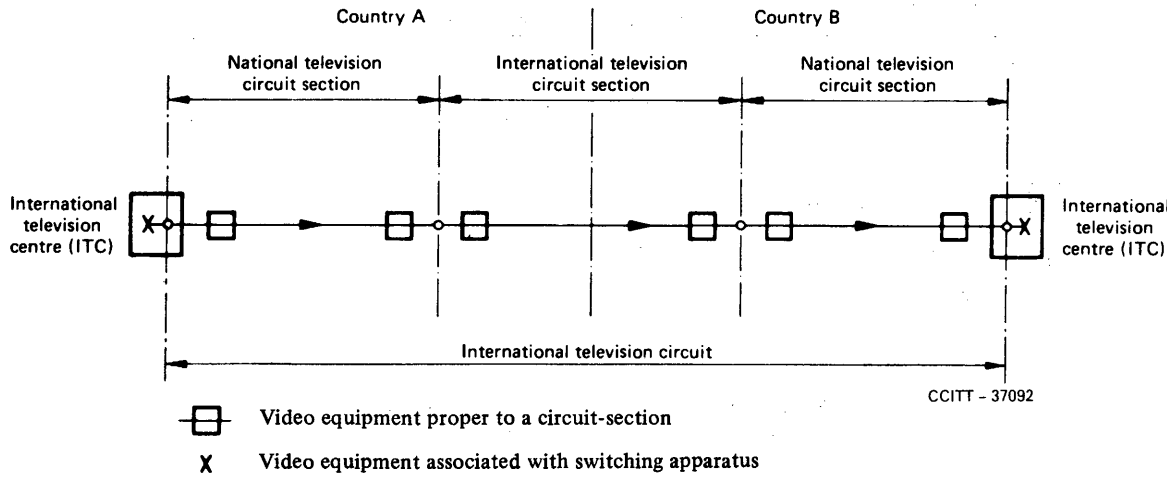
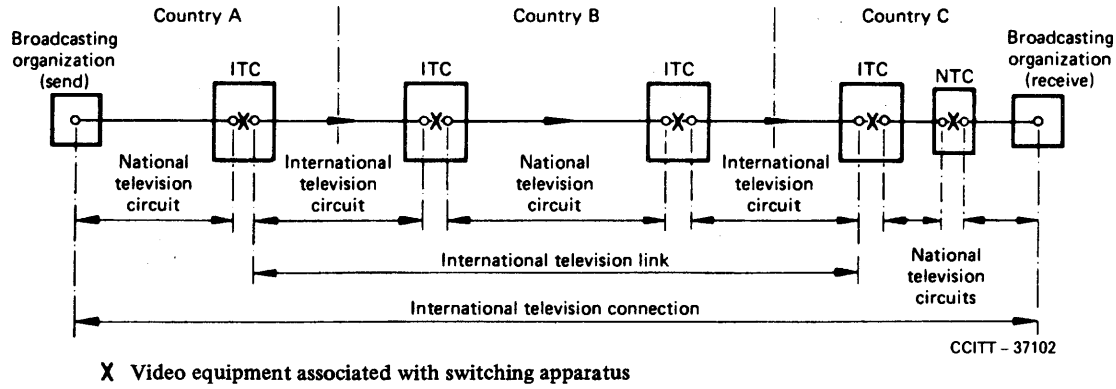


FIGURE 1/N.51

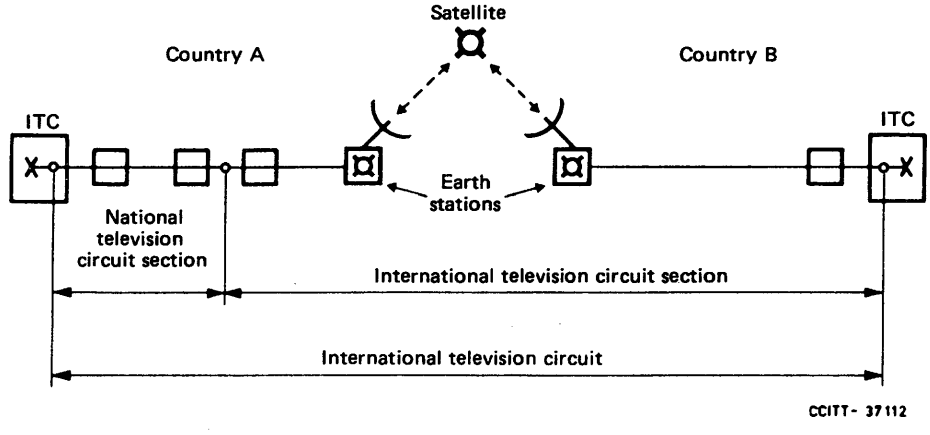
An international television circuit composed of two national and one international television circuit sections



X Video equipment associated with switching apparatus

FIGURE 2/N.51

An international television link composed of international and national television circuits and extended on national television circuits at each end to form an international television connection



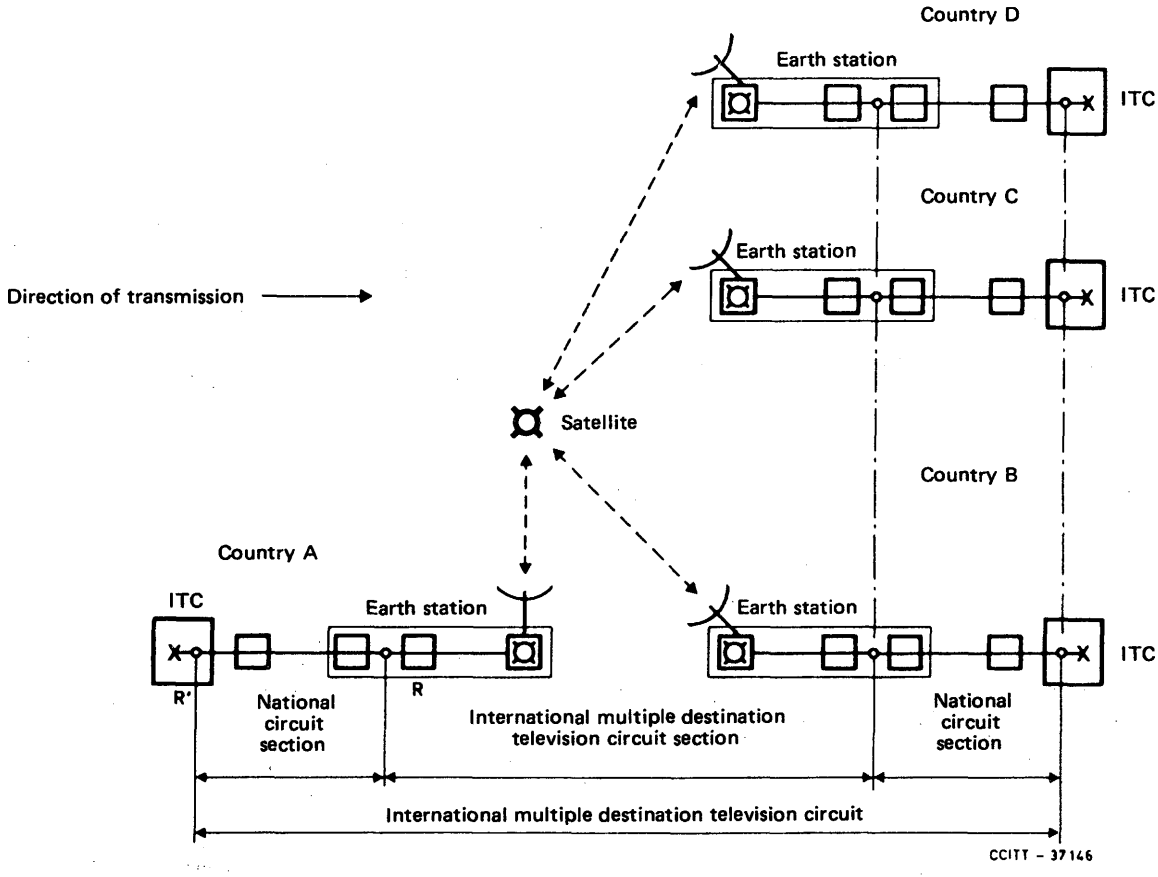
Video equipment proper to a circuit section

X Video equipment associated with switching apparatus

ITC International television centre

FIGURE 3/N.51

Single destination international television circuit routed via a communications satellite



Video equipment proper to a circuit section

X Video equipment associated with switching apparatus

ITC International television centre

R *Send reference* station for international multiple destination circuit section

R' *Send reference* station for international multiple destination circuit

FIGURE 4/N.51

International multiple destination television circuit comprising an international multiple destination satellite circuit section and national terrestrial circuit sections

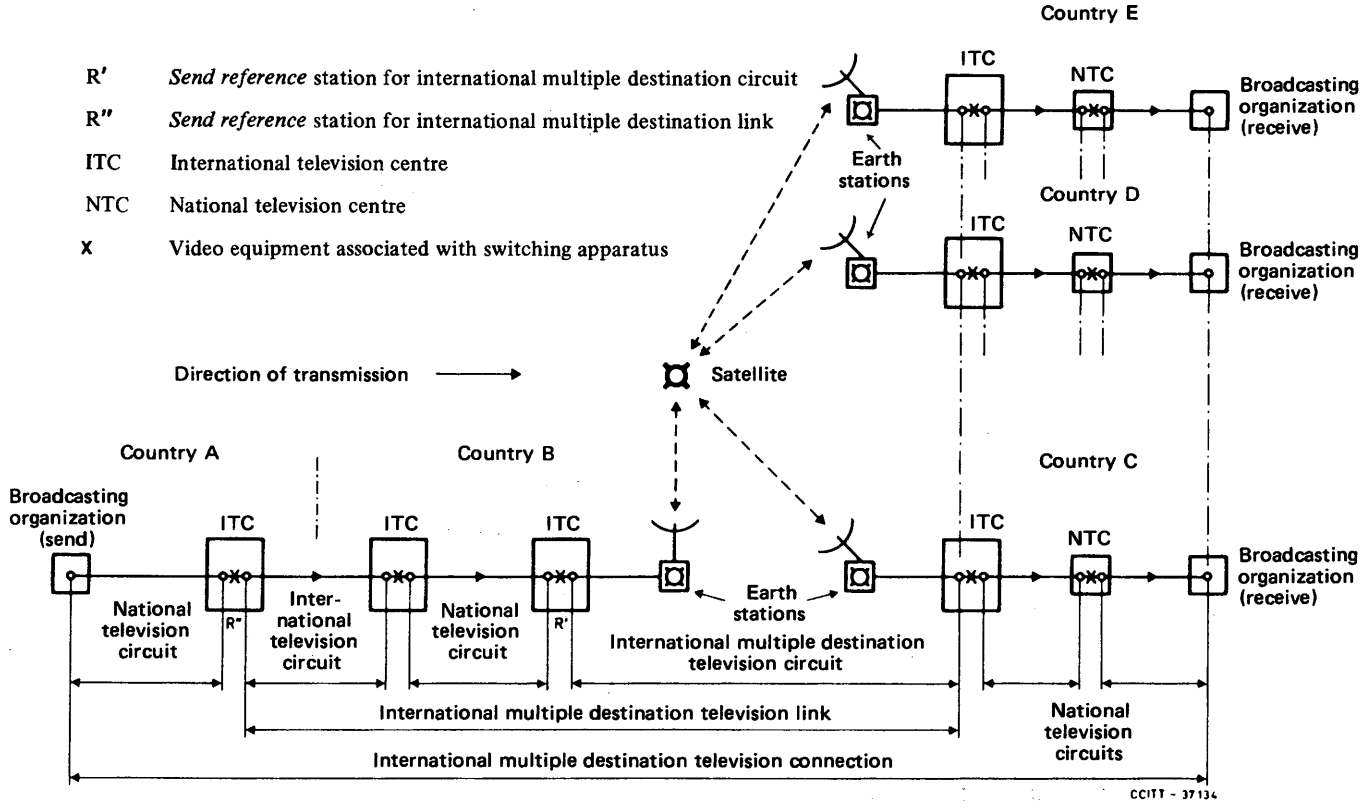
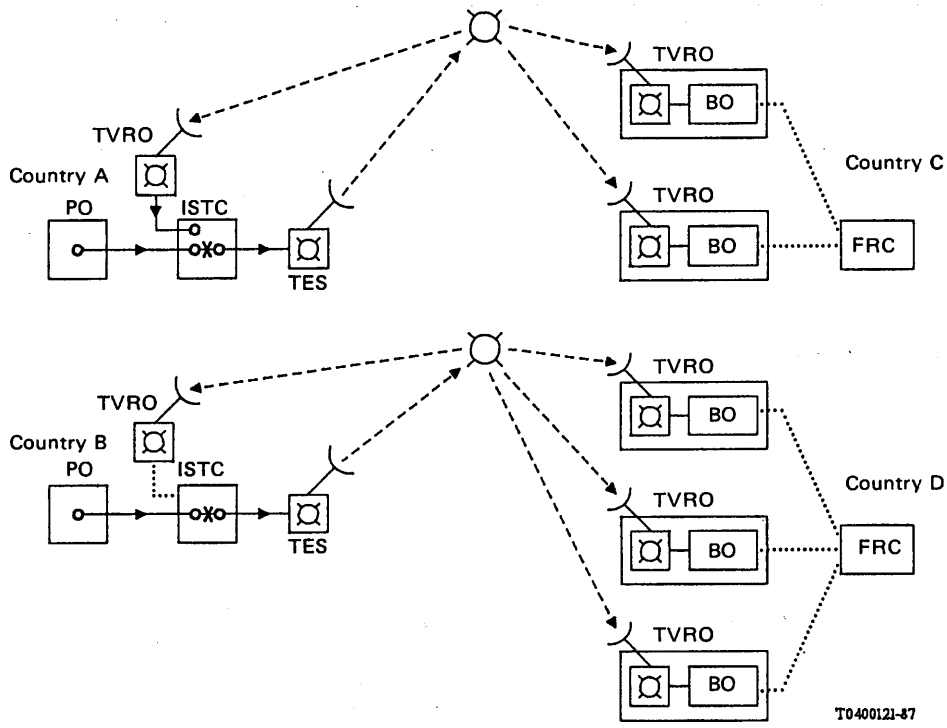


FIGURE 5/N.51

An international multiple destination television link composed of an international multiple destination television circuit and national and international television circuits extended on national circuits at each end to form an international multiple destination television connection



PO Programme originator
ISTC International Satellite Transmission Centre
TES Transmitting earth station
TVRO Television receive only station
BO Broadcasting organization
FRC Fault Reporting Centre
X Video equipment associated with switching apparatus

FIGURE 6/N.51

An international multiple destination television connection for TVROs not related to an ITC

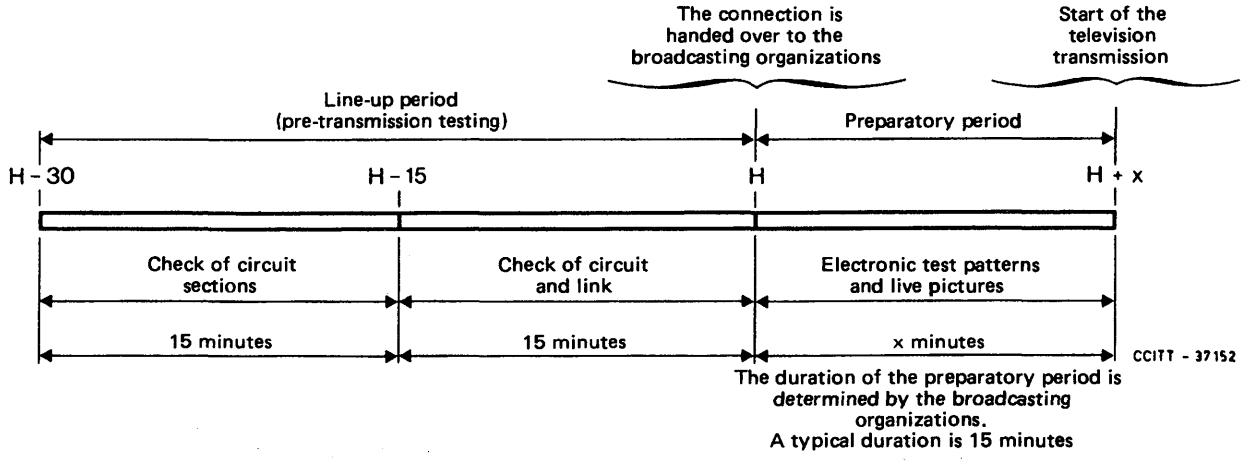
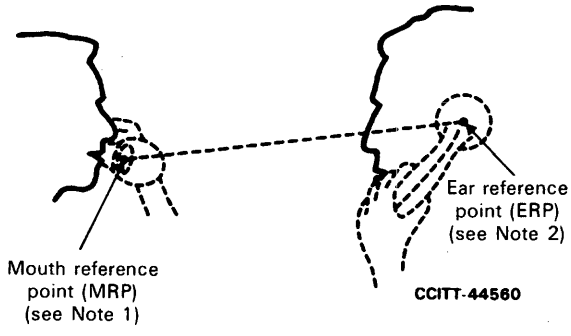


FIGURE 1/N.54

Time allocation in the line-up period and the preparatory period in the case of television transmissions



Note 1 – The mouth reference point is located at a distance of 25 mm in front of the lips on the horizontal axis through the centre of the opening of the mouth. It is defined in the absence of any obstruction.

Note 2 — The ear reference point is located at the entrance to the ear canal of the listener's ear. It is defined as lying at the centre of the front plane of a circular concave earcap when sealed to the ear.

Note 3 — The ERP should not be confused with the earcap reference point (ECRP) which is a point in the earphone reference plane used as a handset reference parameter (see Recommendation P.10).

FIGURE A-1/P.64

Definitions of mouth and ear reference points

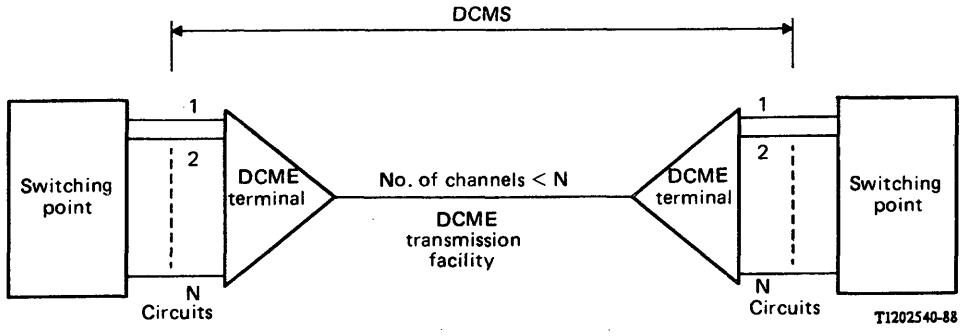


FIGURE 1/P.84

Point-to-point or circuit-based DCMS

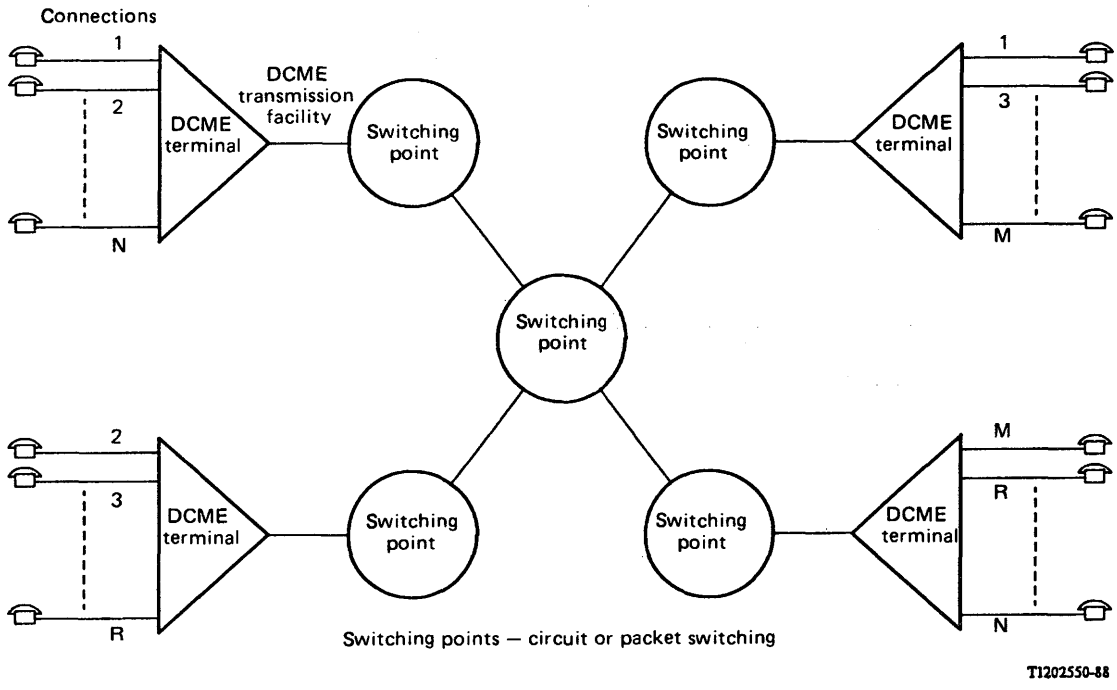
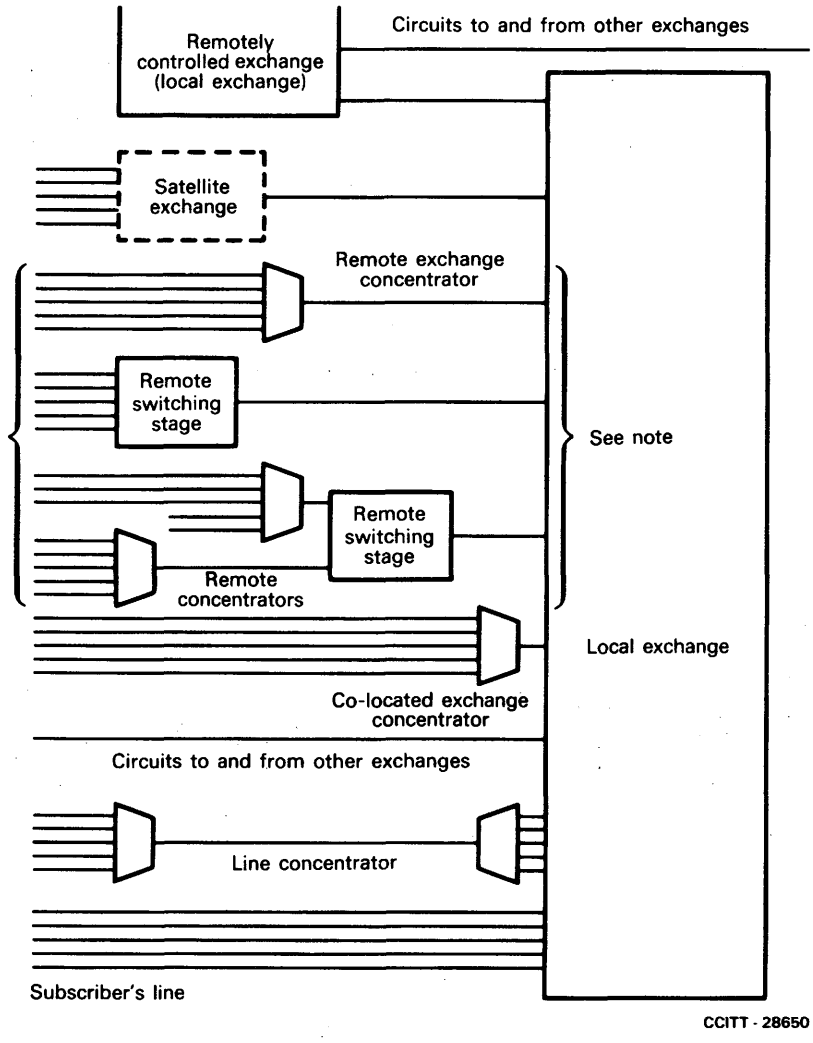


FIGURE 2/P.84

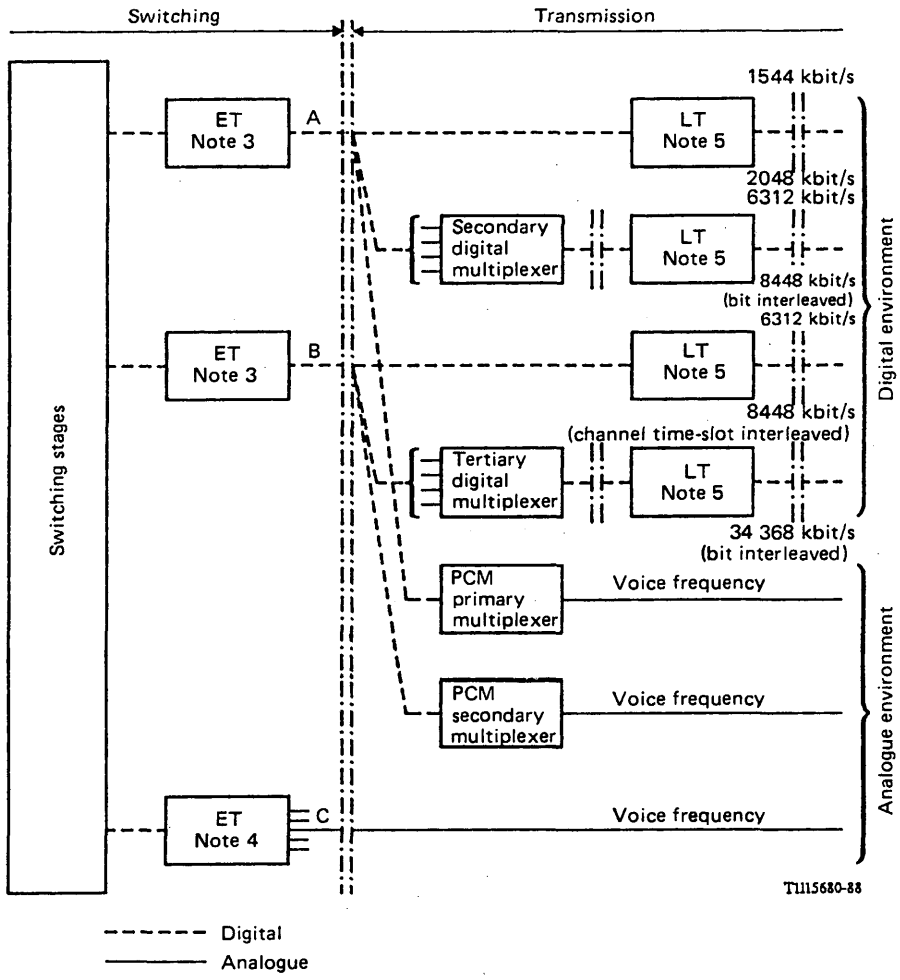
Multi-destination or connection-based DCMS



Note – The brackets comprise the component parts of a geographically distributed exchange.

FIGURE I/Q.9

Exchange and related terms



Note 1 – The G and Q Series CCITT Recommendations applicable to each interface are detailed in the text.

Note 2 – Other configurations, such as series connection of secondary, tertiary or higher order muldex, may be used.

Note 3 – Examples of functions of Exchange Termination (ET) – interfaces A & B:
- Signalling insertion and extraction
- Code conversion
- Frame alignment
- Alarms and fault indication.

Note 4 – Examples of functions of Exchange Termination (ET) – interface C:
- A/D conversion
- Signalling insertion and extraction
- Multiplexing
- 2-wire/4-wire conversion.

Note 5 – Examples of functions of Line Termination (LT):
- Power feed
- Fault location
- Regeneration
- Code conversion.

Note 6 – Not all interfaces will necessarily exist in every implementation.

FIGURE 2/Q.9

Interfaces towards other exchanges (Q.511)

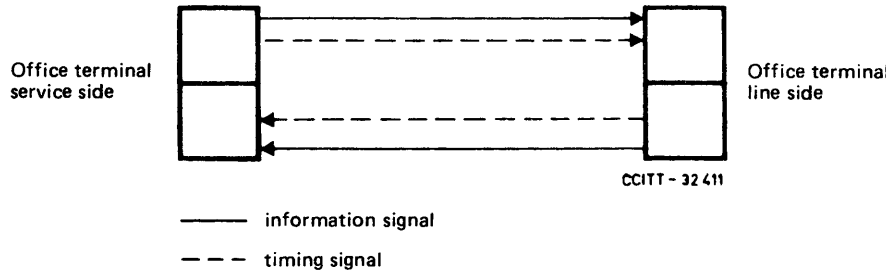


FIGURE 3/Q.9

Codirectional interface (G.703)

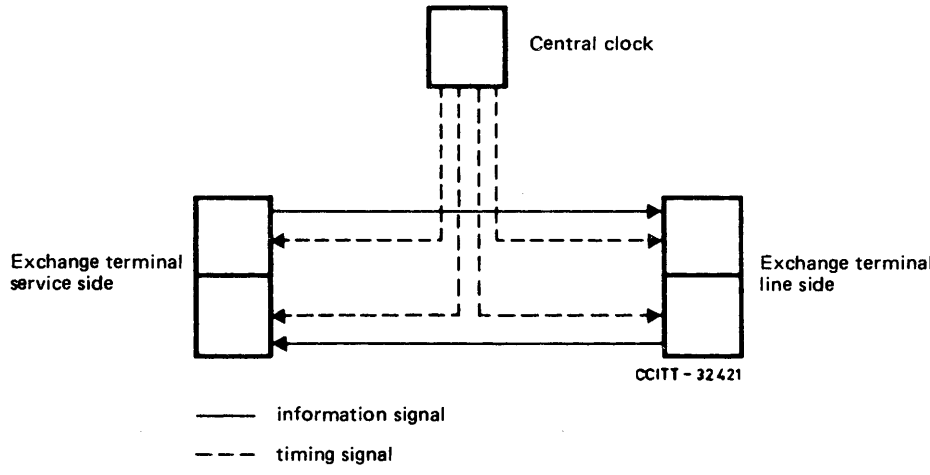


FIGURE 4/Q.9

Centralized clock interface (G.703)

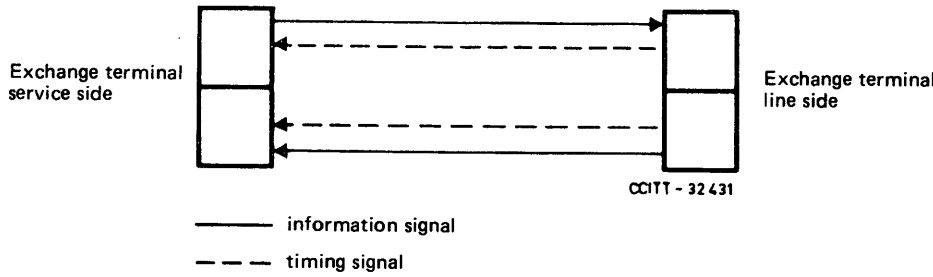


FIGURE 5/Q.9

Contradirectional interface (G.703)

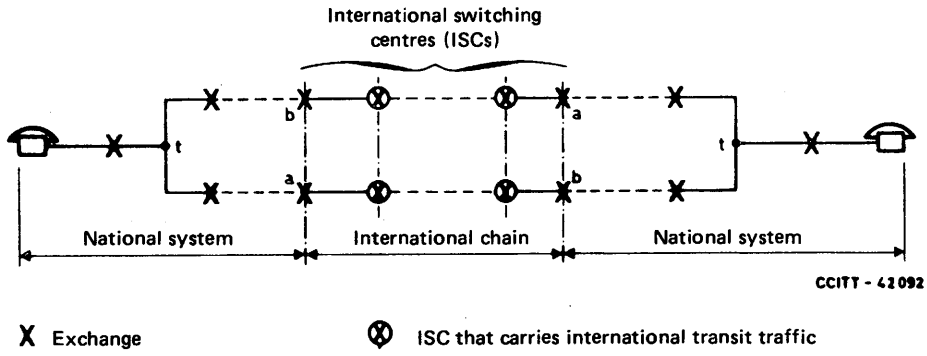
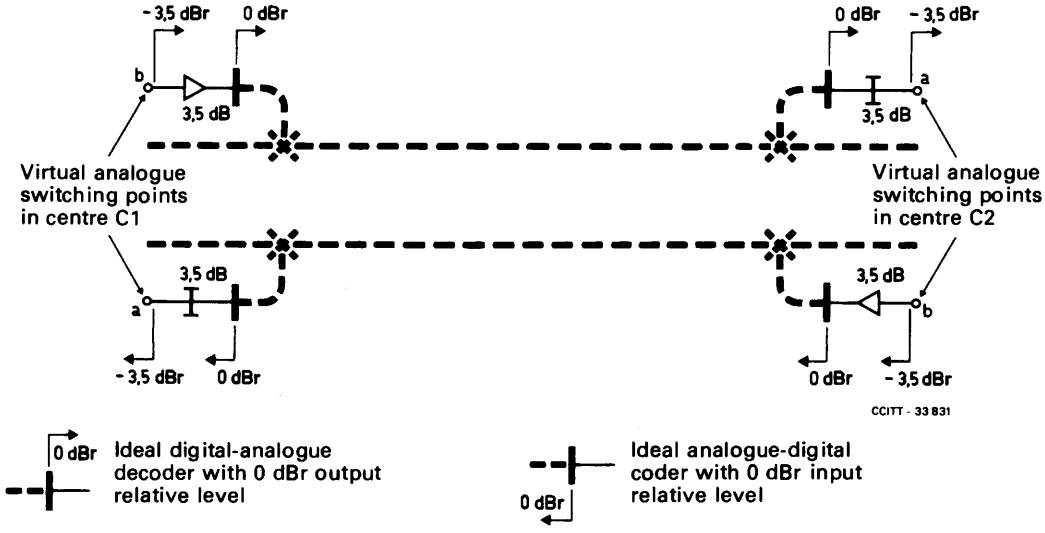


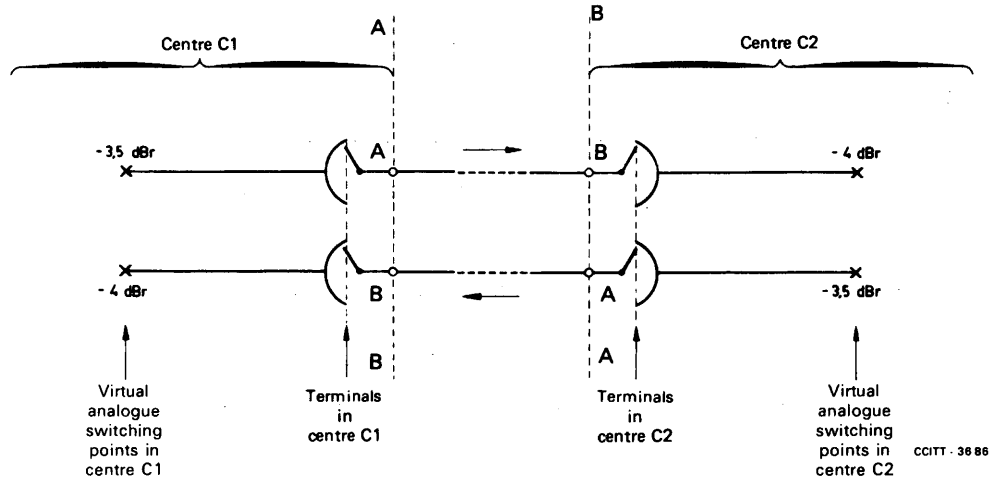
FIGURE 1/Q.40

Definition of the constituent parts of an international connection



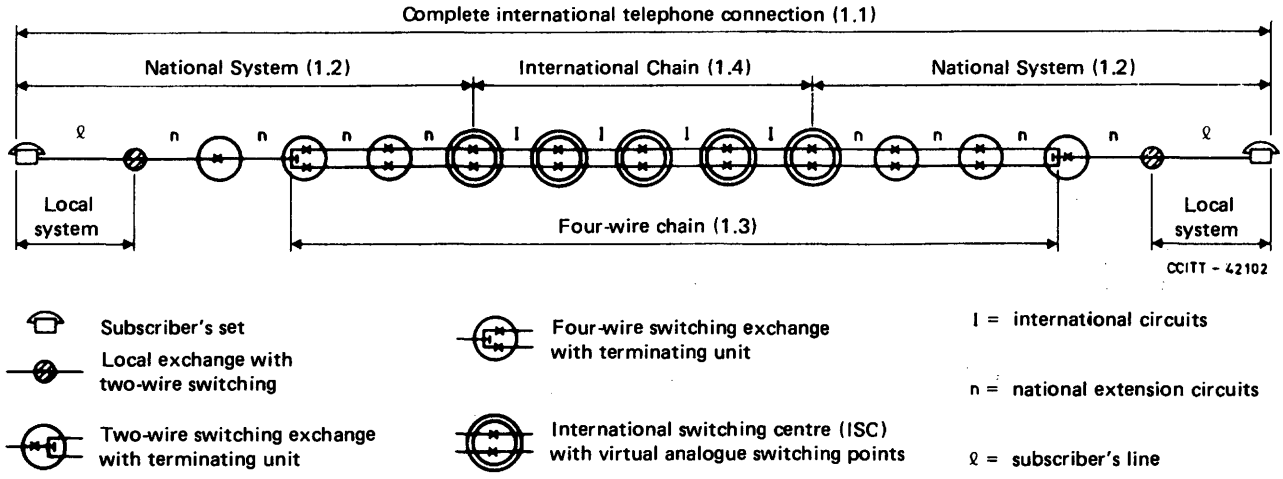
Note – Ideal coders and decoders are assumed to show a relation between analogue and digital signals and vice versa exactly in accordance with the appropriate tables for A-law or μ-law of Recommendation G.711 [8].

a) *Definition of virtual analogue switching points for a digital international circuit between digital international centres*



b) *Definition of virtual analogue switching points for an analogue international circuit between analogue international centres*

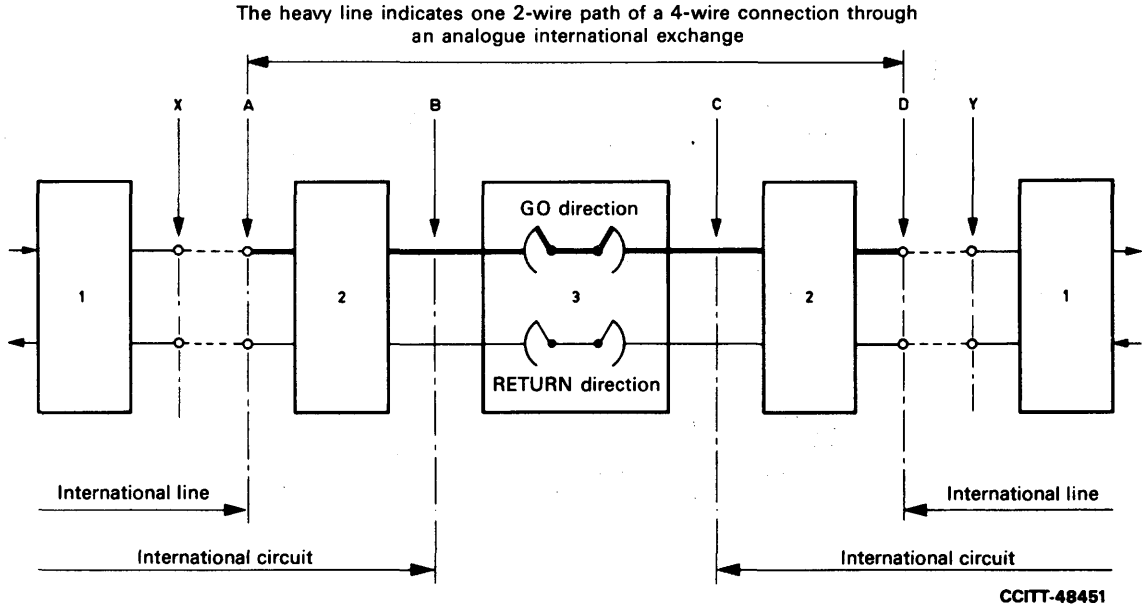
FIGURE 2/Q.40
Definitions for international circuits



Note – The arrangement shown for the national systems are examples only. The numbers given in brackets refer to the Subsections of Section 1 (Fascicle III.1) in which recommendations may be found relevant to that part of the connection. In addition, the circuits making up this chain must individually meet the requirements of Subsection 1.5.

FIGURE 3/Q.40

An international connection to illustrate the nomenclature adopted

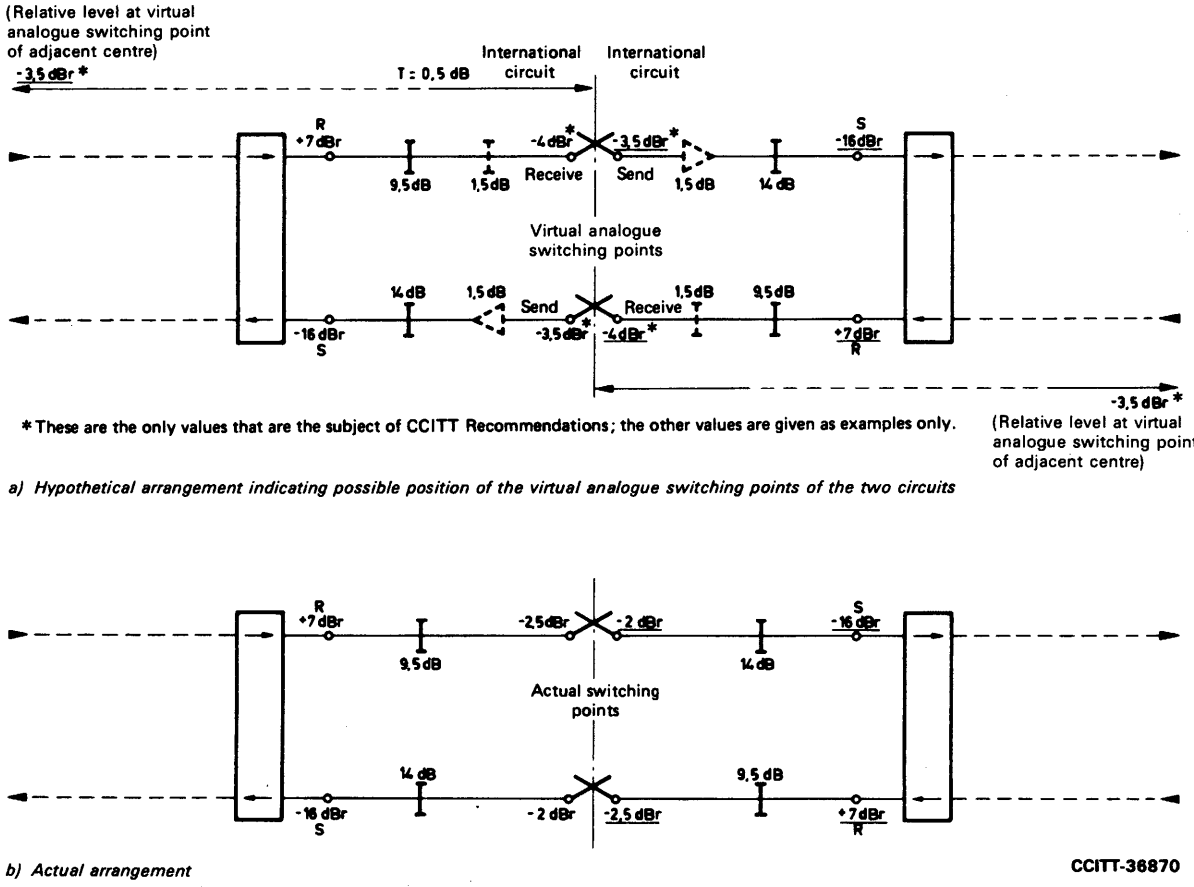


1 = channel translating equipment
2 = incoming and outgoing relay set
3 = automatic switching equipment

Note – Between points X and A and points D and Y, there may be equipment such as echo suppresors, compandors, equalizers, line signal receivers, etc., in addition to the cabling.

FIGURE 1/Q.45 *bis*

Analogue international exchange



Note – Underlined values of relative level refer to the circuit on the right of the point concerned. Values of relative level not underlined refer to the circuit on the left of the point concerned. In an actual switching centre the virtual analogue switching points would not physically exist.

FIGURE 2/Q.45 *bis*

Example showing a simplified representation of a transit connection in an international exchange with actual arrangement and possible location of virtual analogue switching points

(The recommended levels of channel translating equipment are stated according to Table 2/G.232, case 2)

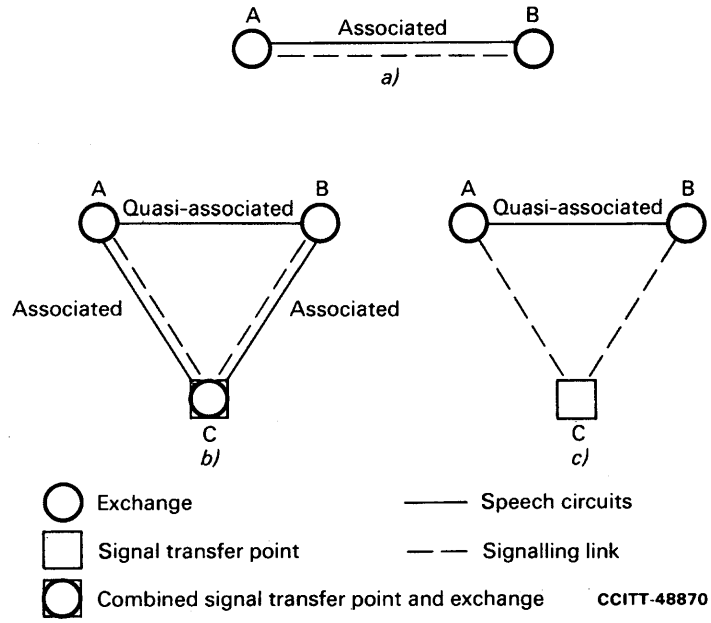
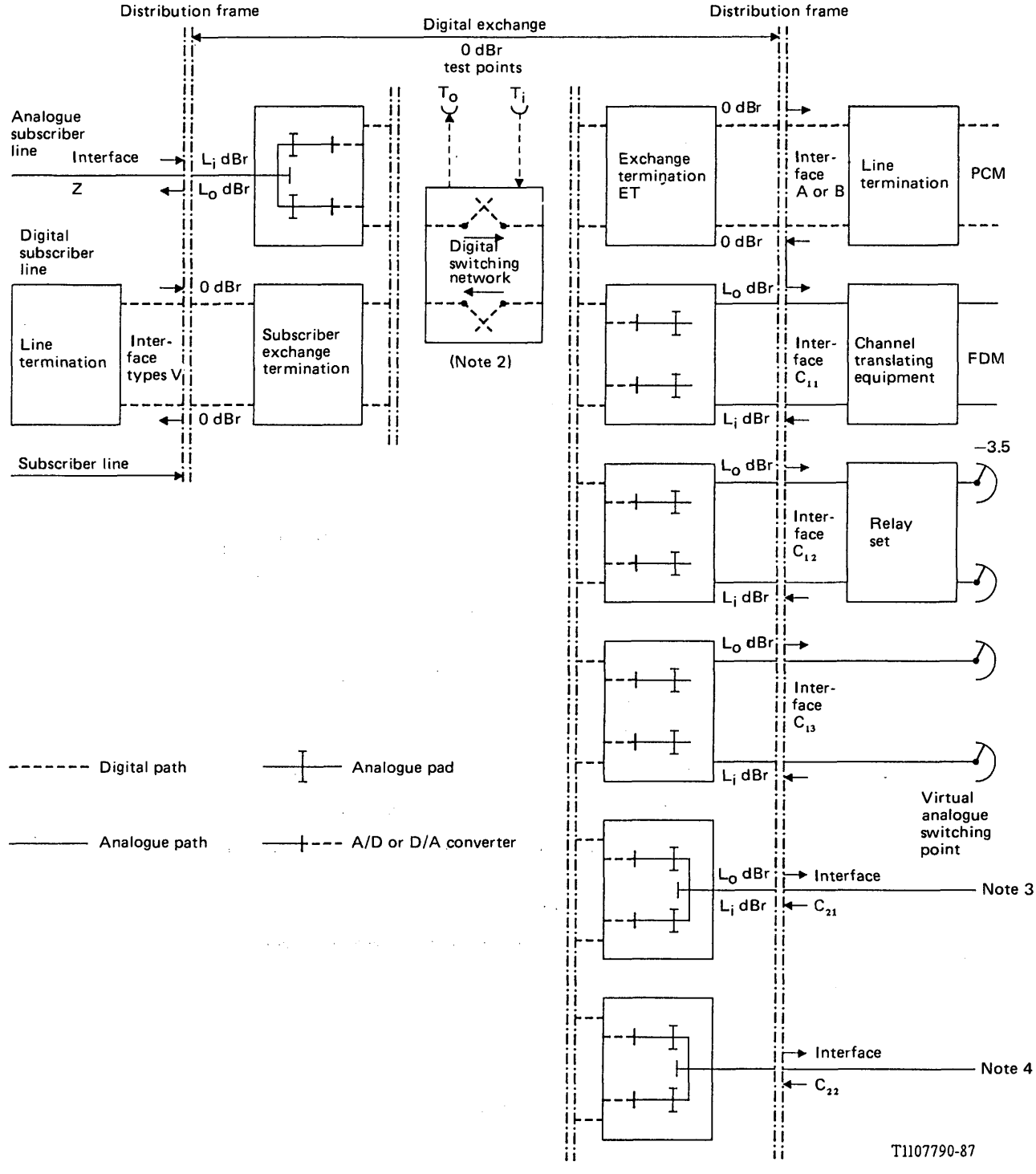


FIGURE 4/Q.253

Example of associated and quasi-associated modes of operation



Note 1 – This figure shows typical examples utilizing the defined interfaces.

Note 2 – Digital loss pads, if required, may be located in the digital switching network or the exchange terminals (see § 1.2.4.1).

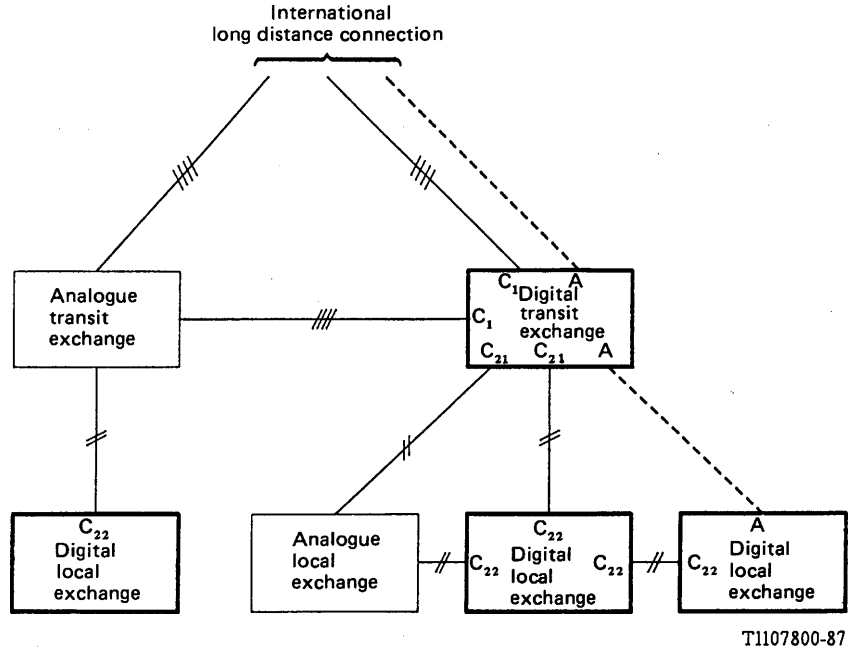
Note 3 – Termination of international long distance switched connections.

Note 4 – Termination of local or 2-wire trunk switched traffic.

Note 5 – The values of L_i and L_o for 2-wire and 4-wire interfaces are, in general, not equal.

FIGURE 1/Q.551

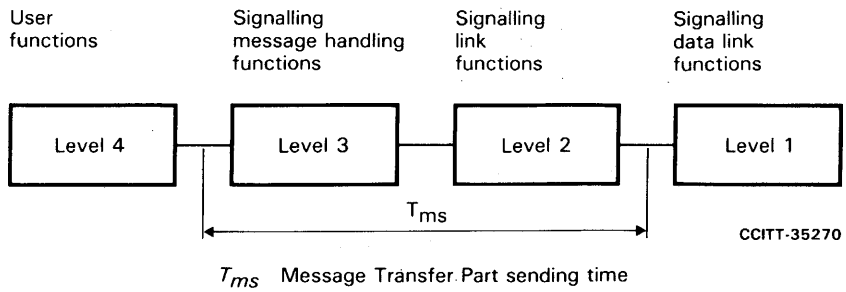
Interfaces, transmission levels and test points at a digital exchange



Note – The trunks between local exchanges carry local traffic only.

FIGURE 2/Q.551

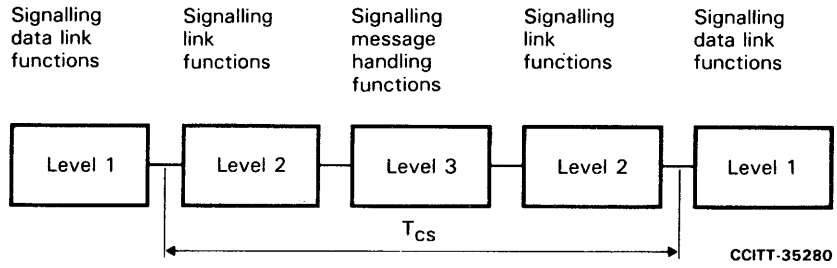
Interfaces in possible network interconnections



T_{ms} Message Transfer Part sending time

FIGURE 8/Q.706

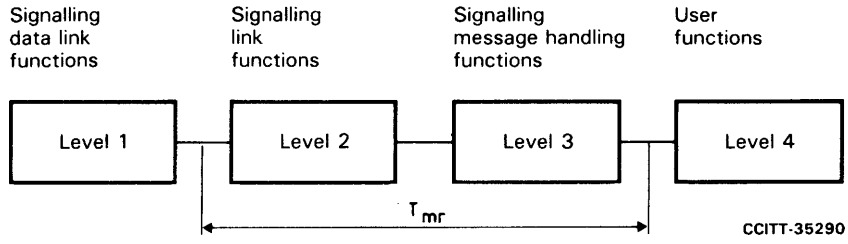
Functional diagram of the Message Transfer Part sending time



T_{cs} Message transfer time at signalling transfer points

FIGURE 9/Q.706

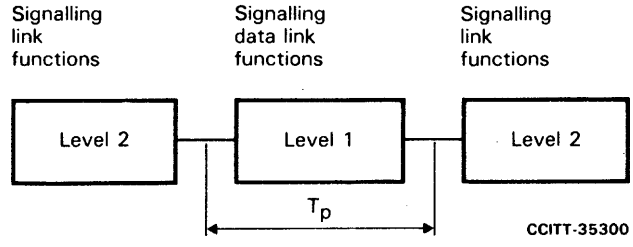
Functional diagram of the message transfer time at signalling transfer points



T_{mr} Message Transfer Part receiving time

FIGURE 10/Q.706

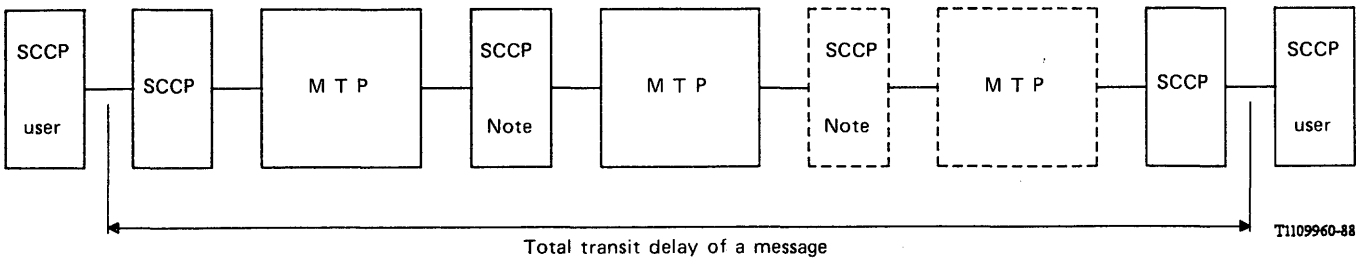
Functional diagram of the Message Transfer Part receiving time



T_p Propagation time of the data channel

FIGURE 11/Q.706

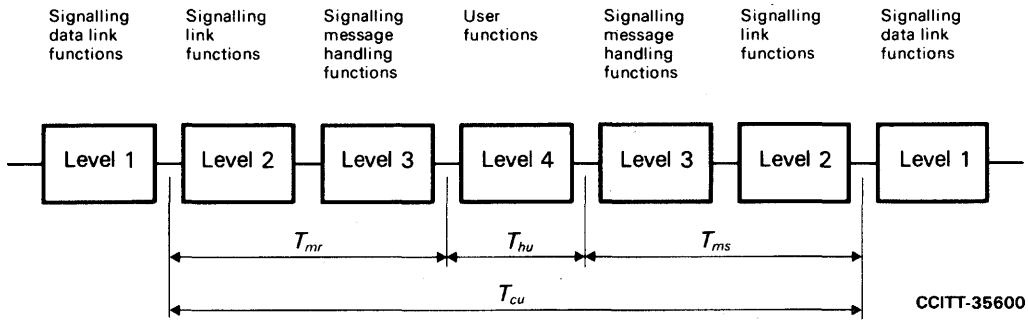
Functional diagram for the propagation time



Note – Zero, one or several relay points can be present depending on the network configuration.

FIGURE 1/Q.716

Functional diagram of the total transit delay of a message



T_{cu} Cross-office transfer time

T_{hu} Telephone User Part handling time

T_{mr} Message Transfer Part receiving time [a]

T_{ms} Message Transfert Part sending time [a]

[a] The definitions of these times are given in Recommendation Q.706.

FIGURE 1/Q.725

Functional diagram of the cross-office transfer time

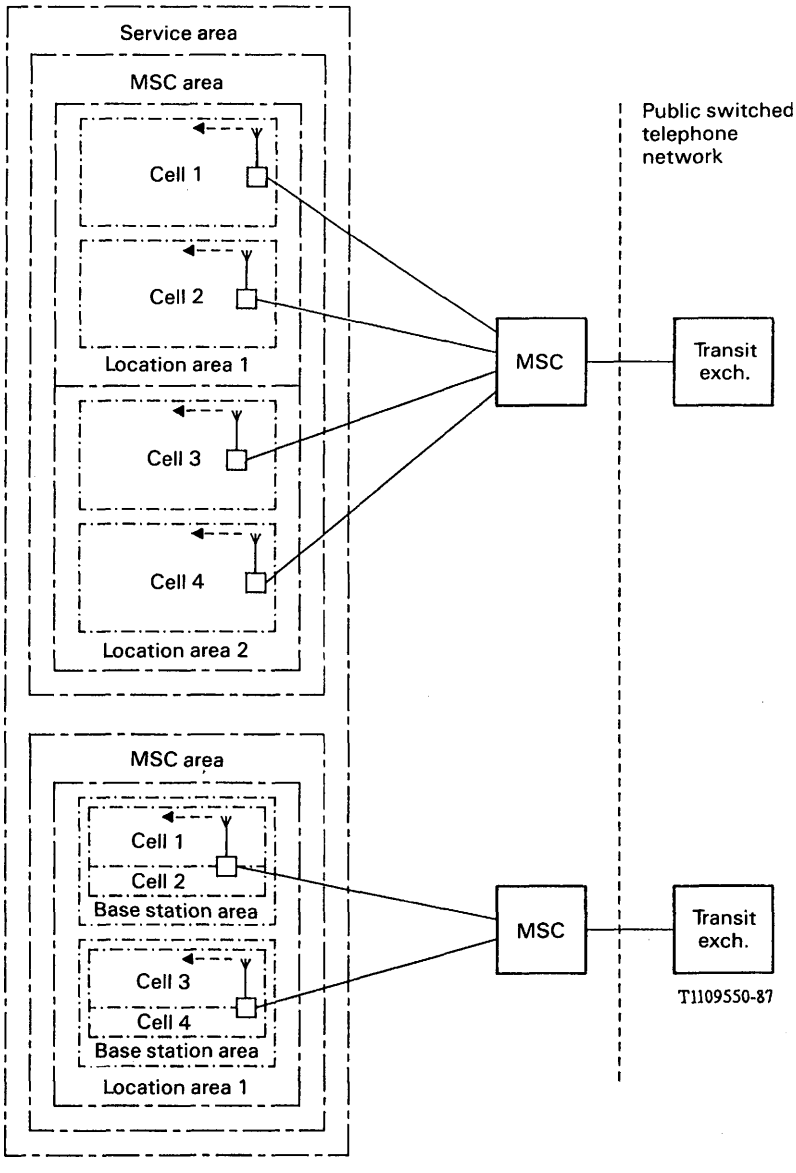


FIGURE 2/Q.1001

Use of the definitions.
In this example the service area consists of one PLMN

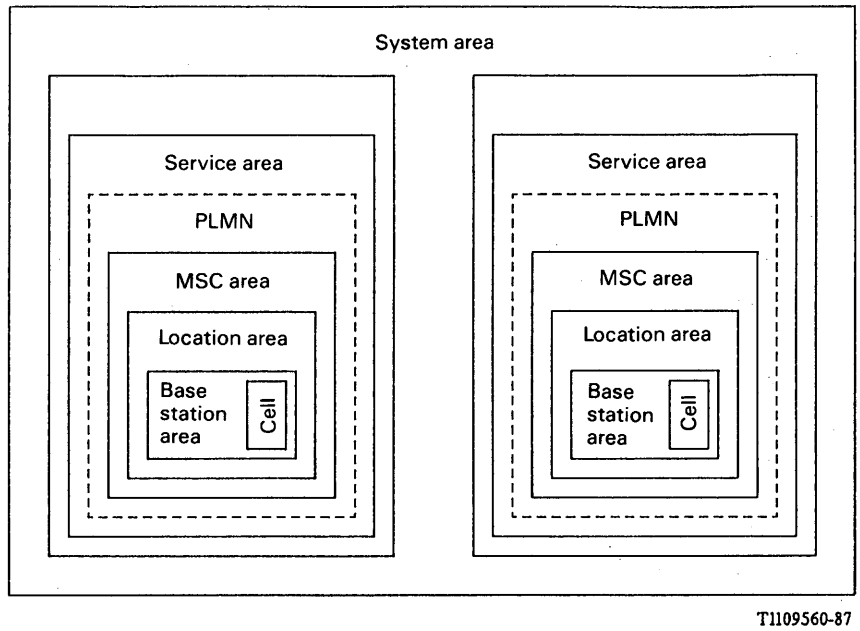


FIGURE 3/Q.1001

Composition of the system area

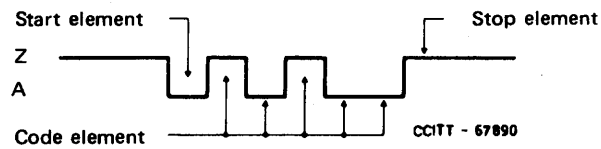
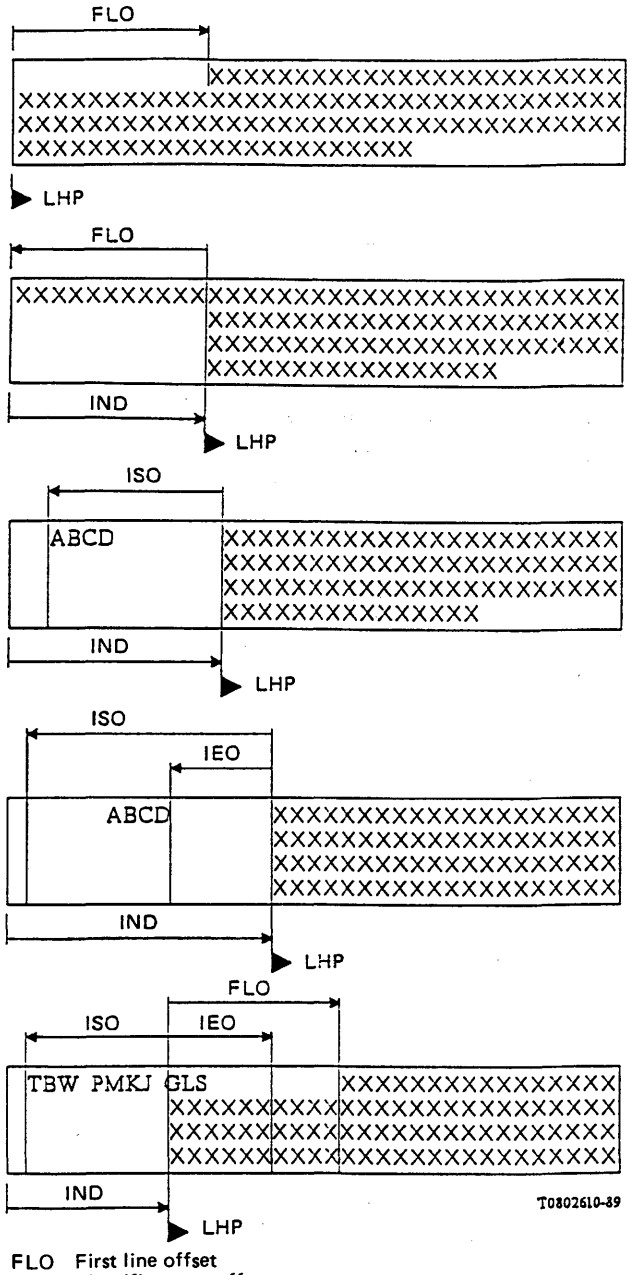


FIGURE 1/R.140

Example of the use of the term code element



Example 10.1

first line offset:	positive
identifier alignment:	no itemisation
identifier start offset:	zero
identifier end offset:	zero
indentation:	zero

Example 10.2

first line offset:	negative
identifier alignment:	no itemisation
identifier start offset:	zero
identifier end offset:	zero
indentation:	positive

Example 10.3

first line offset:	zero
identifier alignment:	start aligned
identifier start offset:	negative
identifier end offset:	zero
indentation:	positive

Example 10.4

first line offset:	zero
identifier alignment:	end aligned
identifier start offset:	negative
identifier end offset:	negative
indentation:	positive

Example 10.5

first line offset:	positive
identifier alignment:	start aligned
identifier start offset:	negative
identifier end offset:	positive
indentation:	positive

FLO First line offset
ISO Identifier start offset
IEO Identifier end offset
LHP Line home position
IND Indentation

FIGURE 10/T.416

Illustration of itemization and first line offset

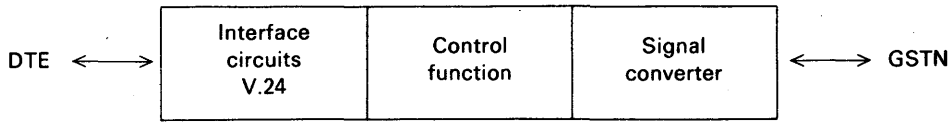


FIGURE 1/V.42

DCE

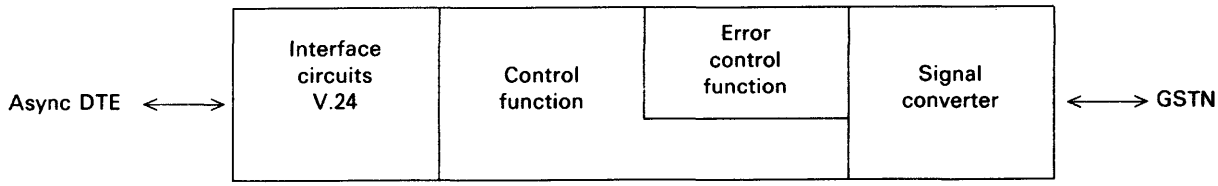


FIGURE 2/V.42

Error-Correcting DCE

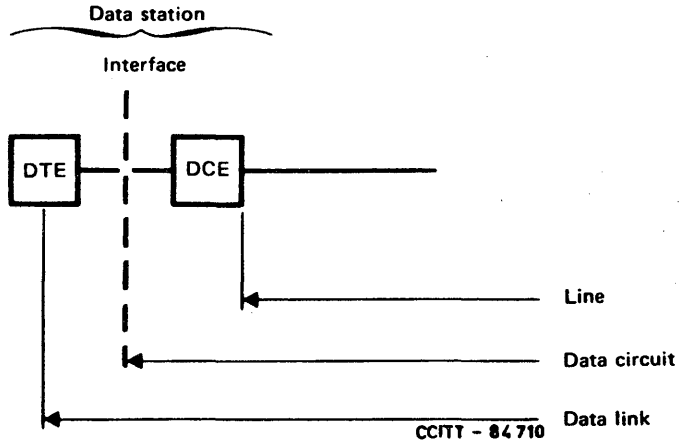
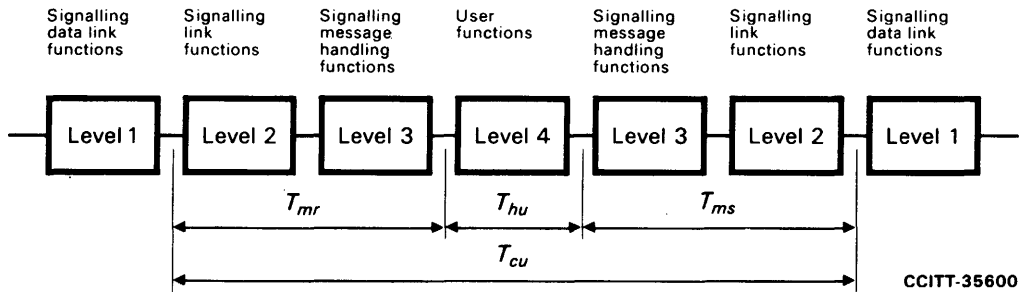


FIGURE 1/X.15 (Red Book)

Components of a data link



T_{cu} Cross-office transfer time
T_{hu} Data User Part handling time
T_{mr} Message Transfer Part receiving time
T_{ms} Message Transfer Part sending time

The definitions of these times are given in Recommendation Q.706.

FIGURE 19/X.61

Functional diagram of the signal transfer time

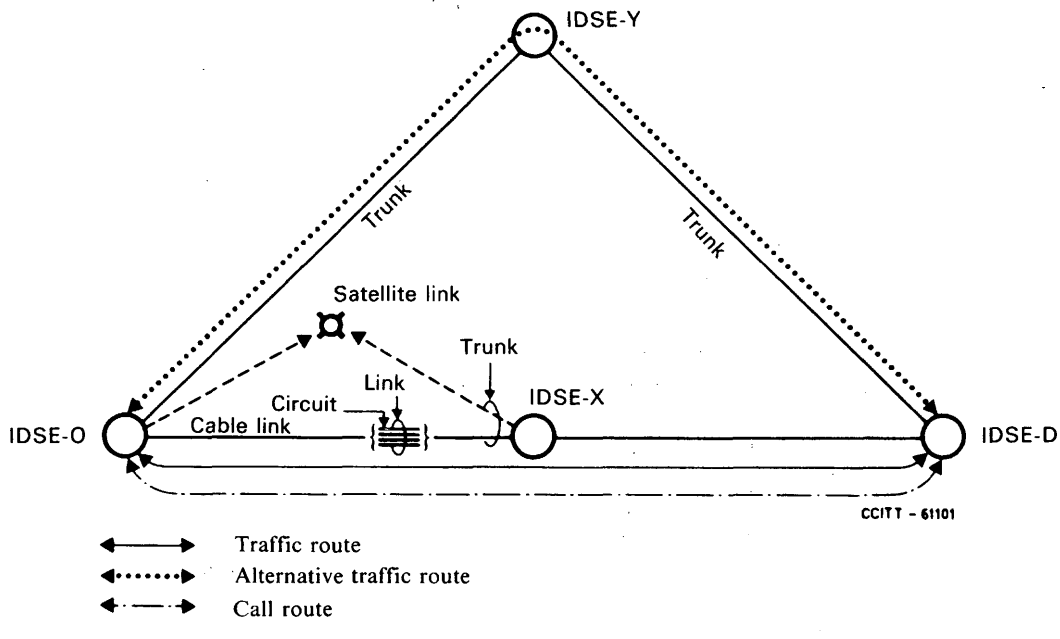


FIGURE A-1/X.110

The network part of the international public data network (IPDN)

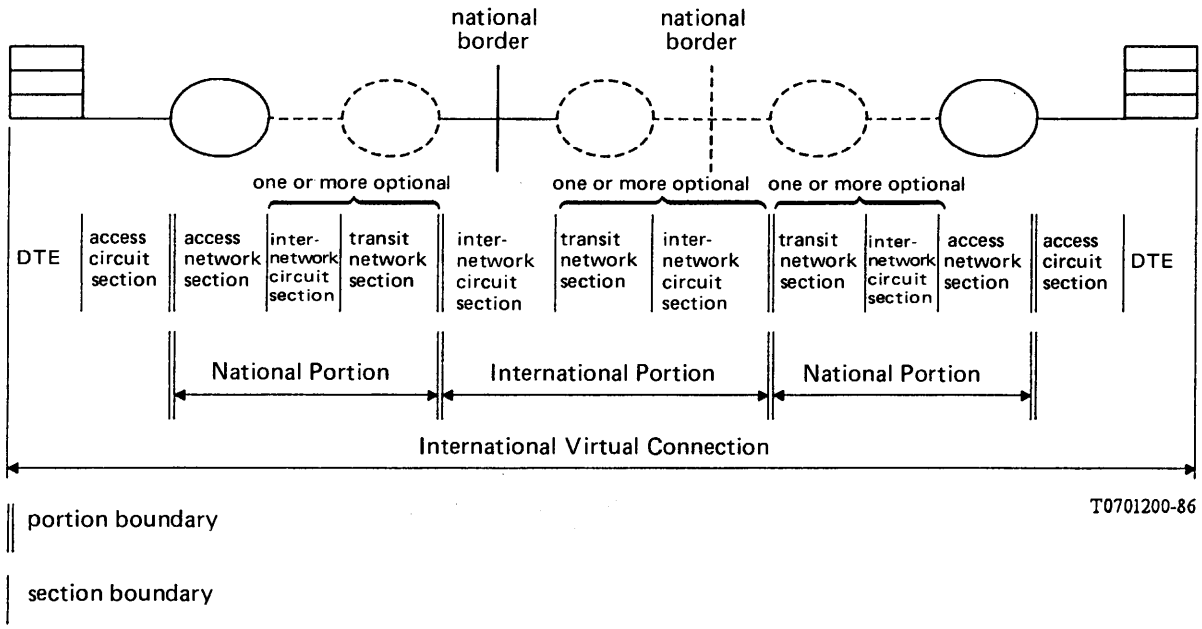
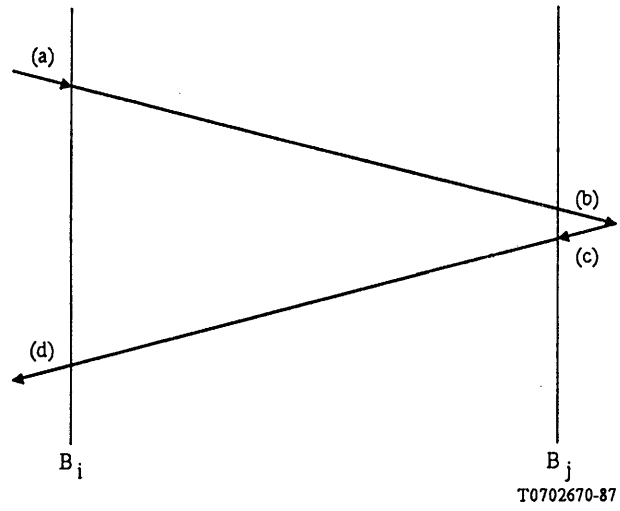


FIGURE 2/X.134

Apportionment of an international virtual connection

Boundary/Event / Interface	B_i		B_j	
	(a)	(d)	(b)	(c)
X.25	2	3	1	4
X.75	1	2	1	2

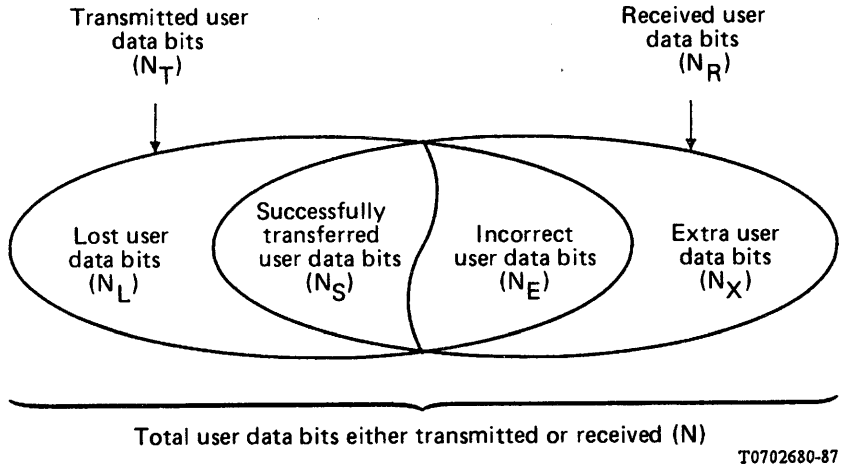
a) Packet layer reference events (PEs)



b) Event sequence

FIGURE 2/X.136

Packet layer reference events occurring during successful call set-up



$$RER = \frac{N_E + N_L + N_X}{N}$$

$$N = N_L + N_S + N_E + N_X$$

FIGURE 3/X.136

Components of residual error rate

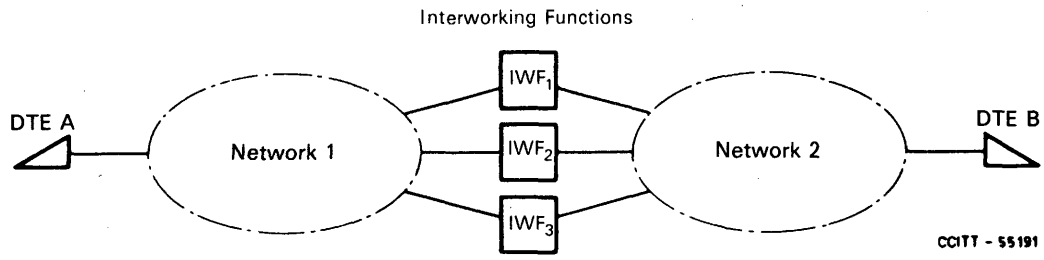
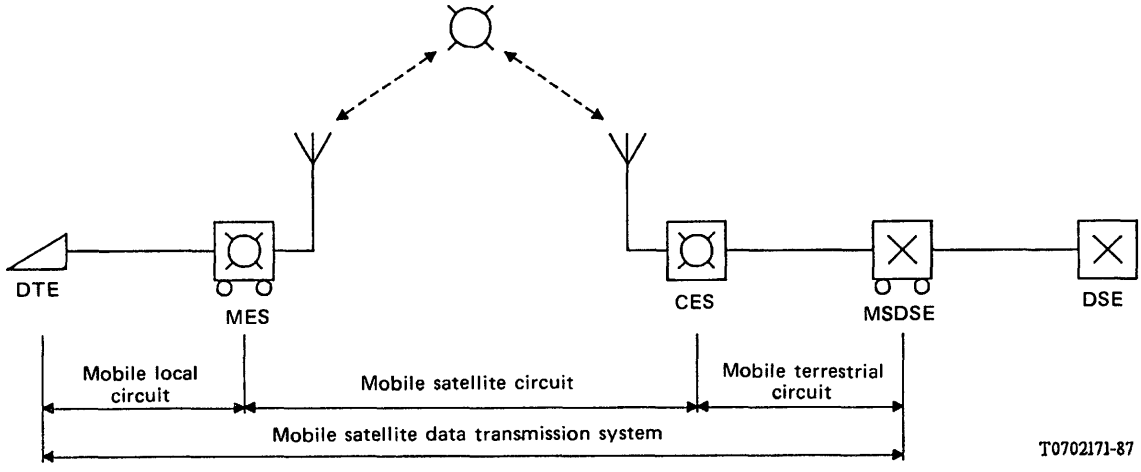


FIGURE 3-4/X.300

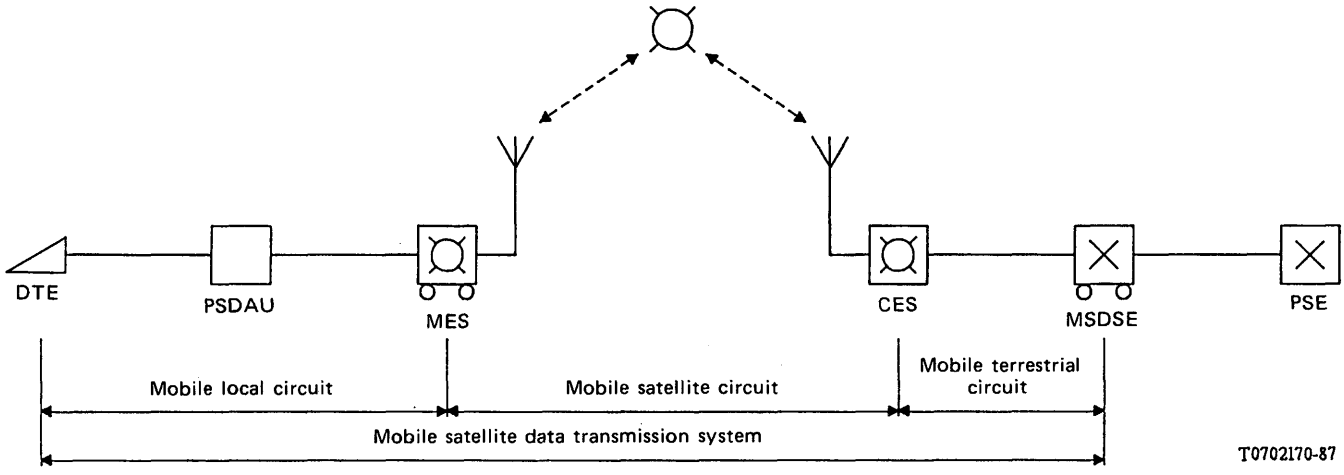
Example of interworking between two networks by means of Interworking Functions



MES = Mobile earth station
CES = Coast earth station
MSDSE = Mobile satellite data switching exchange
DSE = Data switching exchange

FIGURE 1/X.350

Composition of the maritime satellite data transmission system



MES = Mobile earth station
CES = Coast earth station
MSDSE = Mobile satellite data switching exchange
PSDAU = Packet switched data access unit
PSE = Packet switching exchange

Note – See Recommendation X.350 for definitions.

FIGURE 1/X.352

Composition of the public maritime mobile satellite data transmission system for interconnection with a packet switched network

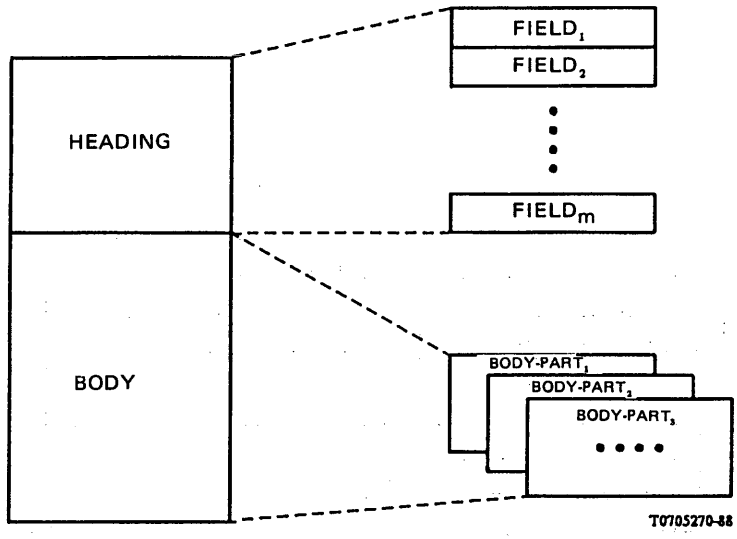
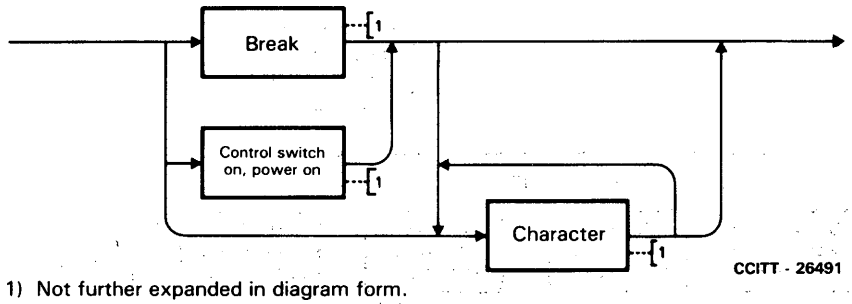
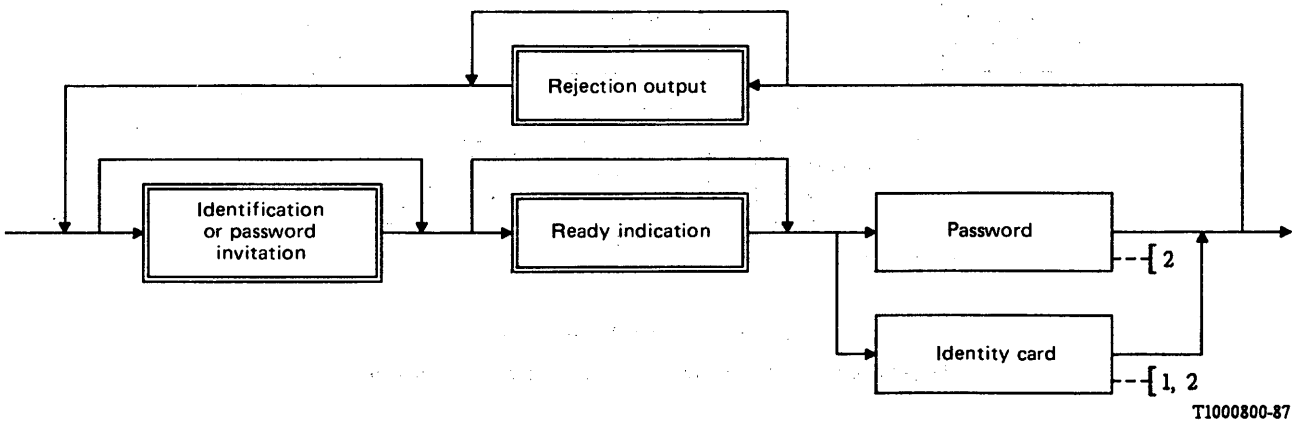


FIGURE 1/X.420

An interpersonal message



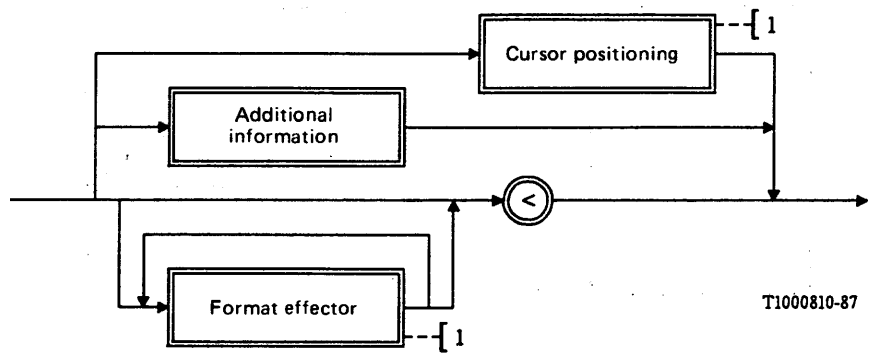
1) Not further expanded in diagram form.



1) Not further expanded in diagram form.

2) If an identity card is used, it should always be preceded or followed by a password.

FIGURE of § 3.2.2/Z.317



1) Not further expanded in diagram form.

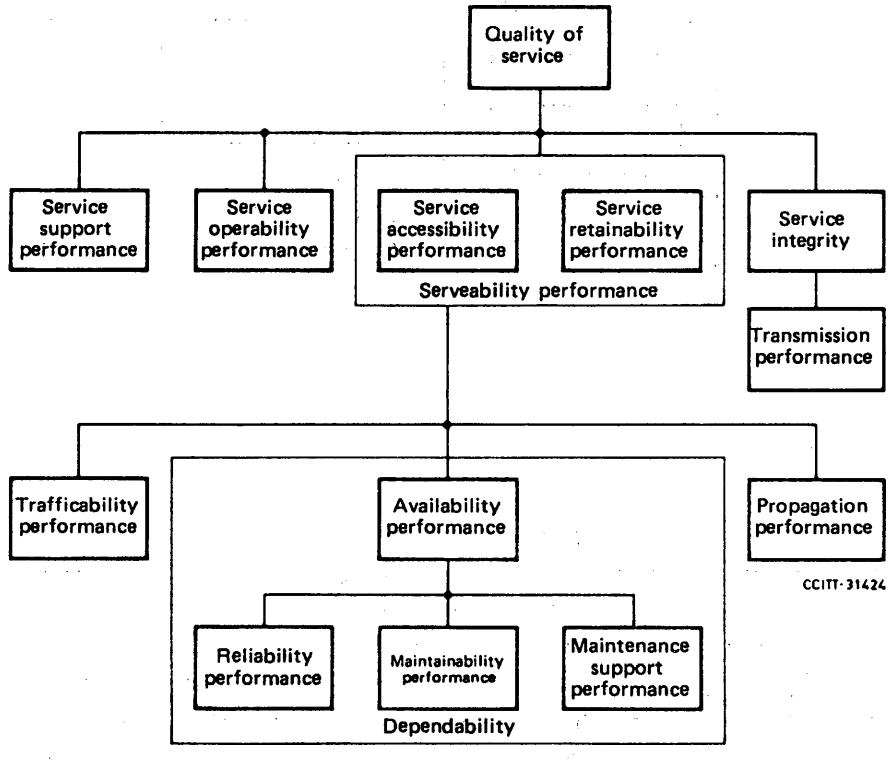


FIGURE 1 [Suppl. No. 6 (II.3)]

Dependability and its relation to other performance concepts

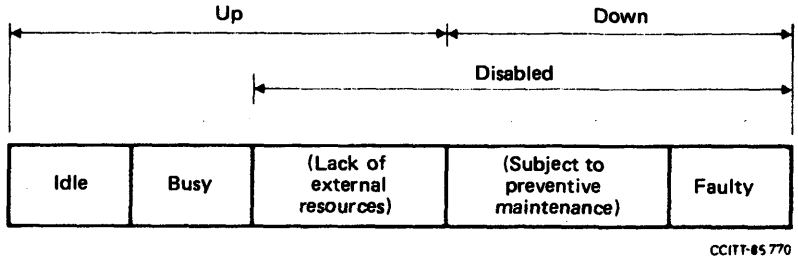


FIGURE 2 [Suppl. No. 6 (II.3)]

Classification of item states

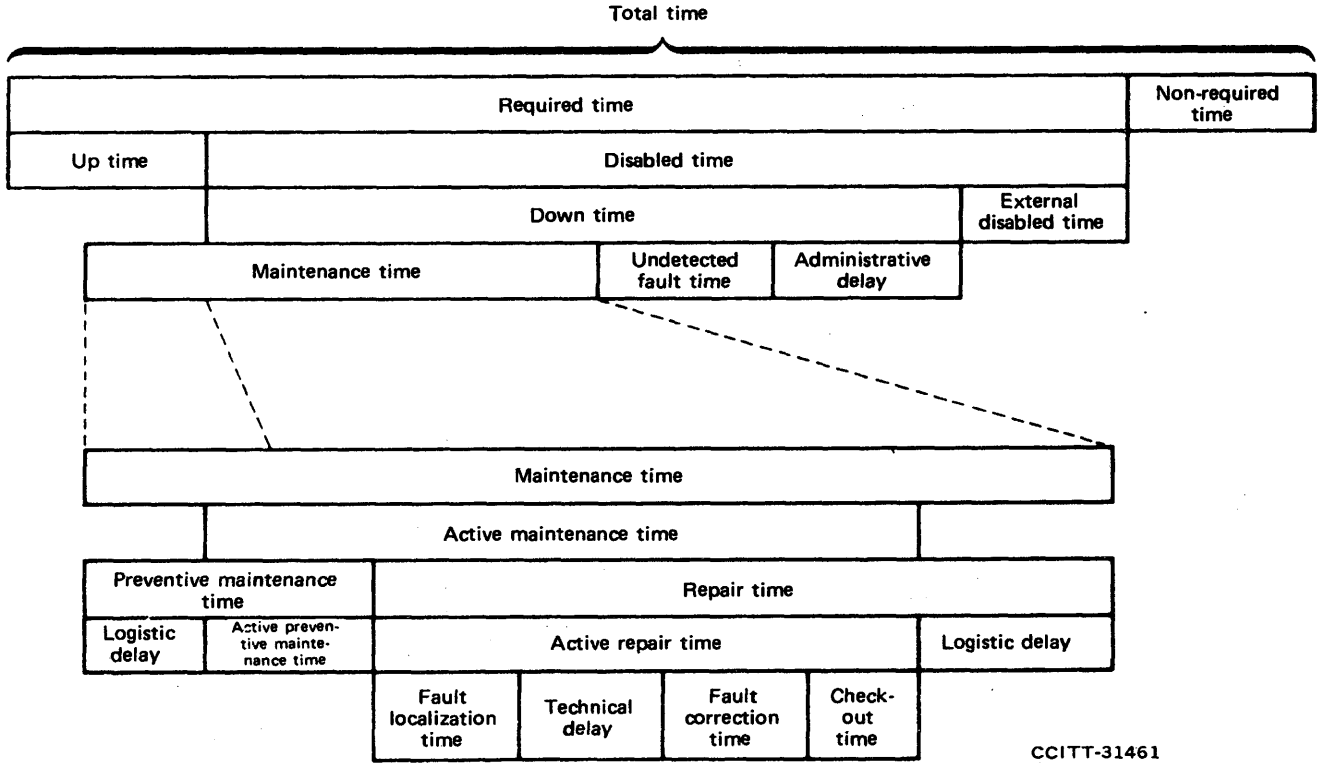
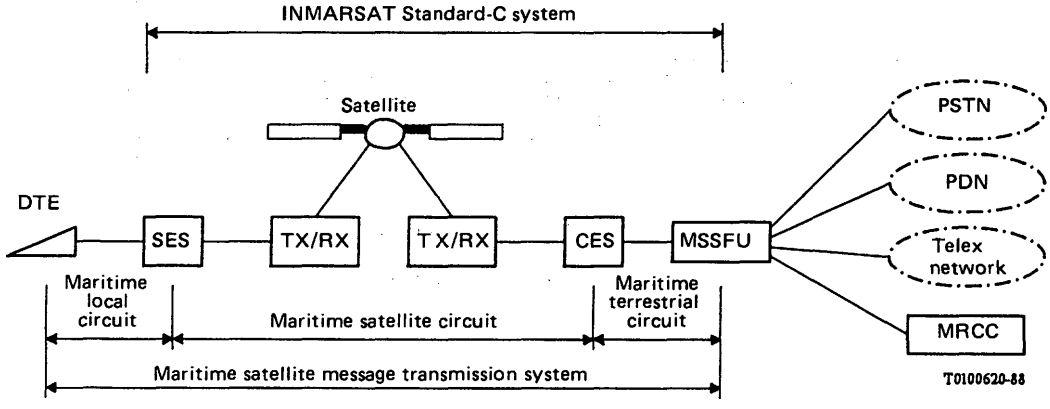


FIGURE 3 [Suppl. No. 6 (II.3)]

Time diagram



DTE	Data Terminal Equipment	TX	Transmit
SES	Ship Earth Station	RX	Receive
CES	Coast Earth Station		
MSSFU	Maritime Satellite Store-and-Forward Unit		
MRCC	Maritime Rescue Coordination Centre		

FIGURE 1 [Suppl. No. 3 (II.4)]

Main elements of the maritime-satellite message system

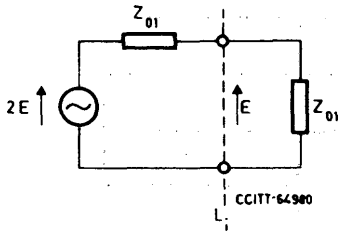


FIGURE 1 [Suppl. No. 1 (VI.5)]

Power reference circuit

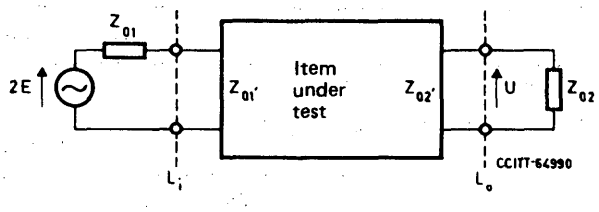


FIGURE 2 [Suppl. No. 1 (VI.5)]

Test circuit

TABLE 1/E.167

Format of the interim INIC

I is the initial digit, C is a digit of the country code
and X is an additional digit

Country code	INIC Format
One digit	ICXX
Two digits	ICCX
Three digits	ICCC

TABLE 1/G.821

Error performance objectives for international ISDN connections

Performance classification	Objective (Notes 3, 5)
(a) (Degraded minutes) (Notes 1, 2)	Fewer than 10% of one-minute intervals to have a bit error ratio worse than $1 \cdot 10^{-6}$ (Note 4)
(b) (Severely errored seconds) (Note 1)	Fewer than 0.2% of one-second intervals to have a bit error ratio worse than $1 \cdot 10^{-3}$
(c) (Errored seconds) (Note 1)	Fewer than 8% of one-second intervals to have any errors (equivalent to 92% error-free seconds)

Note 1 – The terms "degraded minutes", "severely errored seconds" and "errored seconds" are used as a convenient and concise performance objective "identifier". Their usage is not intended to imply the acceptability, or otherwise, of this level of performance.

Note 2 – The one-minute intervals mentioned in Table 1/G.821 and in the notes (i.e. the periods for $M > 4$ in Annex B) are derived by removing unavailable time and severely errored seconds from the total time and then consecutively grouping the remaining seconds into blocks of 60. The basic one-second intervals are derived from a fixed period.

Note 3 – The time interval T_L, over which the percentages are to be assessed has not been specified since the period may depend upon the application. A period of the order of any one month is suggested as a reference.

Note 4 – For practical reasons, at 64 kbit/s, a minute containing four errors (equivalent to an error ratio of 1.04×10^{-6}) is not considered degraded. However, this does not imply relaxation of the error ratio objective of $1 \cdot 10^{-6}$.

Note 5 – Annex B illustrates how the overall performance should be assessed.

TABLE 5/X.135

Packet layer reference events (PEs) used in measuring data packet transfer delay

X.134 packet layer reference event / Circuit section	Starting/Ending PE
Source access circuit section	10a (X.25)
Destination access circuit section	9a (X.25)
Internetwork circuit section	5a (X.75)

TABLE 9/X.135

Packet layer reference events (PEs) used in measuring clear indication delay

X.134 packet layer reference event / Circuit section	Starting/Ending PE
Clearing DTE access circuit section	6 (X.25)
Cleared DTE access circuit section	5 (X.25)
Internetwork circuit section	3 (X.75)

TABLE 6/X.136

Packet layer reference events (PEs) used in measuring reset probability

Boundaries of section	Pair of PEs
X.25 X.25	[20(X.25) 20(X.25)]
X.25 X.75	[20(X.25) 10(X.75)]
X.75 X.75	[10(X.75) 10(X.75)]

a) Pairs of PEs resulting from reset events

Boundaries of section	Pair of PEs
X.25 X.25	[20(X.25) 24(X.25)]
X.25 X.75	[20(X.25) 12(X.75)] or [24(X.25) 10(X.75)]
X.75 X.75	[10(X.75) 12(X.75)]

b) Additional PE pairs resulting from reset events on PVCs

TABLE 8/X.136

Packet layer reference events (PEs) used in measuring premature disconnect probability

(Pairs of PEs resulting from premature disconnect events)

Boundaries of section	Pair of PEs
X.25 X.25	[5(X.25) 5(X.25)] or [5(X.25) 24(X.25)]
X.25 X.75	[5(X.25) 3(X.75)] or [5(X.25) 12(X.75)] or [24(X.25) 3(X.75)]
X.75 X.75	[3(X.75) 3(X.75)] or [3(X.75) 12(X.75)]

TABLE 10/X.136

Packet layer reference events (PEs) used in measuring call clear failure probability

Circuit section	X.134 Packet layer reference event	
	Starting PE	Ending PE
Clearing DTE access circuit section	6(X.25)	–
Cleared DTE access circuit section	–	5(X.25) (does not occur)
Internetwork circuit section	3(X.75)	3(X.75) (does not occur)

TABLE 1/Z.314

Character set to be used for the CCITT man-machine language

				b_7	0	0	0	0	1	1	1	1
				b_6	0	0	1	1	0	0	1	1
				b_5	0	1	0	1	0	1	0	1
b_4	b_3	b_2	b_1	Pos.	0	1	2	3	4	5	6	7
0	0	0	0	0	NUL		SP	0	ⓐ	P	ⓐ	p
0	0	0	1	1		DC_1	!	1	A	Q	a	q
0	0	1	0	2		DC_2	"	2	B	R	b	r
0	0	1	1	3		DC_3	#	3	C	S	c	s
0	1	0	0	4		DC_4	¤	4	D	T	d	t
0	1	0	1	5			%	5	E	U	e	u
0	1	1	0	6			&	6	F	V	f	v
0	1	1	1	7	BEL		'	7	G	W	g	w
1	0	0	0	8	BS	CAN	(	8	H	X	h	x
1	0	0	1	9	HT (FE1)	EM	)	9	I	Y	i	y
1	0	1	0	10	LF (FE2)	SUB	*	:	J	Z	j	z
1	0	1	1	11	VT (FE3)	ESC	+	;	K	ⓐ	k	ⓐ
1	1	0	0	12	FF (FE4)		,	<	L	ⓐ	l	ⓐ
1	1	0	1	13	CR (FE5)		–	=	M	ⓐ	m	ⓐ
1	1	1	0	14	SO		.	>	N	ⓐ	n	ⓐ
1	1	1	1	15	SI		/	?	O	_	o	DEL

CCITT - 26622

ⓐ These positions are reserved for national use.

TABLE 2/Z.314

Summary of use of characters

CCITT International Alphabet No. 5 (Recommendation T.50) [1]			Man-machine language use
Character or character string	Position number	Name	
CAN	1/8	Cancel	Used as a deletion character.
!	2/1	exclamation mark	An indicator used in dialogue procedures (continuation character in input language).
"	2/2	quotation mark	A text string delimiter and a graphic character.
#	2/3	number sign	A character which may be used in symbolic names and keyed numerals and as a graphic character.
%	2/5	percent sign	A character which may be used in symbolic names and as a graphic character.
&	2/6	ampersand	A separator for information grouping and a graphic character.
'	2/7	apostrophe	A separator used when indication of type of numeral is required. The character is placed between a letter indicating the type of numeral and the numeral itself. Also used as a graphic character.
(	2/8	left parenthesis	Used for delimiting arithmetical expressions, and conditions in a selection argument. Also a graphic character.
)	2/9	right parenthesis	Used for delimiting arithmetical expressions, and conditions in a selection argument. Also a graphic character.
*	2/10	asterisk	Used for keyed numerals, as an arithmetic operator and as a graphic character.
+	2/11	plus sign	A character which may be used in symbolic names, as an arithmetic operator and as a graphical character.
+ +	2/11 2/11	plus sign, plus sign	A separator used for separating the increment from a group of consecutive parameter values.
,	2/12	comma	A separator used to separate parameters (if more than one) within a block of parameters.
–	2/13	hyphen	A separator used to separate information units or to separate identifiers and/or index numbers within compound parameter names. Also used as an arithmetic operator and as a graphic character.
.	2/14	full stop	A separator used for subdividing a number into an integer part and a fraction part and as a graphic character.
/	2/15	solidus	Used as an arithmetic operator and as graphic character.
:	3/10	colon	A separator used to separate blocks of parameters from each other and from the command code, an indicator used in the parameter block request indication and a separator used in output.
;	3/11	semicolon	An indicator used to terminate a command (execution character).
<	3/12	less than sign	An indicator used as a ready indicator for the system to output that it is ready to receive information, and a relational operator used in a selection argument.
=	3/13	equal sign	A separator used to separate the parameter name and the parameter value of a parameter. Also a relational operator used in a selection argument.

TABLE 2/Z.314 *(cont.)*

CCITT International Alphabet No. 5 (Recommendation T.50) [1]			Man-machine language use
Character or character string	Position number	Name	
>	3/14	greater than sign	A separator to terminate the destination identifier and a relational operator used in a selection argument.
< =	3/12 3/13	less than or equal sign	A relational operator used in a selection argument.
< >	3/12 3/14	less than or greater than sign	A relational operator used in a selection argument.
> =	3/14 3/13	greater than or equal sign	A relational operator used in a selection argument.
?	3/15	question mark	An indicator used for prompting or help.
&&	2/6 2/6	ampersand, ampersand	Separator used for information grouping.
&–	2/6 2/13	ampersand, hyphen	Separator used for information grouping.
&&–	2/6 2/6 2/13	ampersand, ampersand, hyphen	Separator used for information grouping.
/*	2/15 2/10	solidus, asterisk	Used to open a comment.
*/	2/10 2/15	asterisk, solidus	Used to close a comment.

PART III

TRILINGUAL GLOSSARY

A

A condition; Z condition
S: estado A; estado Z
F: état A; état Z

A element; Z element
S: elemento A; elemento Z
F: moment A; moment Z

abandon
S: abandonar
F: abandon

abandoned call attempt
S: tentativa de llamada abandonada
F: tentative d'appel abandonnée

abbreviated dialling (short-code selection) (prefix 23)
S: marcación abreviada; marcación de código abreviado (prefijo 23)
F: numérotation abrégée (sélection de code court) (préfixe 23)

abbreviated dialling prefix
S: prefijo de marcación abreviada
F: préfixe de numérotation abrégée

abbreviated dialling services
S: servicio de marcación abreviada
F: service de numérotation abrégée

abbreviated number
S: número abreviado
F: numéro abrégé

abnormal condition report
S: informe de condición anormal
F: rapport sur les conditions anormales; rapport de condition anormale

absent subscriber service
S: servicio de abonado ausente
F: service des abonnés absents

absent subscriber service (in telegraphy and data communication)
S: servicio de abonado ausente (en telegrafía y comunicación de datos)
F: service des abonnés absents (en télégraphie et transmission de données)

absolute address
S: dirección absoluta
F: adresse absolue

absolute power level (dBm)
S: nivel absoluto de potencia (dBm)
F: niveau de puissance absolu (dBm)

absolute priority
S: prioridad absoluta
F: priorité absolue

absolute zero power level (dBm0); load level
S: nivel absoluto de potencia cero (dBm0); nivel de carga
F: niveau de puissance zéro absolu (dBm0); niveau de charge

abstract-association
S: asociación abstracta
F: abstract-association; association abstraite

abstract bind operation
S: operación abstracta de vinculación
F: opération de rattachement abstraite

abstract-bind-parameters
S: parámetros-vinculación-abstracta
F: abstract-bind-parameters; paramètres de rattachement abstrait

abstract data type
S: tipo abstracto de datos
F: type abstrait de données

abstract error
S: error abstracto
F: erreur abstraite

abstract grammar
S: gramática abstracta
F: grammaire abstraite

abstract local primitive (ALP)
S: primitiva local abstracta (PLA)
F: primitive locale abstraite (ALP)

abstract (N)-service-primitive ((N)-ASP)
S: primitiva de servicio (N) abstracta (PSA(N))
F: primitive abstraite du service (N) (ASP(N))

abstract object; object
S: objeto abstracto; objeto
F: objet abstrait; objet

abstract operation
S: operación abstracta
F: opération abstraite

abstract port; port
S: puerto abstracto; puerto
F: accès abstrait; accès

abstract procedure; procedure
S: procedimiento abstracto; procedimiento
F: procédure abstraite; procédure

abstract service
S: servicio abstracto
F: service abstrait

abstract syntax
S: sintaxis abstracta
F: syntaxe abstraite

abstract syntax name
S: nombre de sintaxis abstracta
F: nom de syntaxe abstraite

abstract test case
S: caso de prueba abstracta
F: test élémentaire abstrait

abstract test method
S: método de prueba abstracta
F: méthode de test abstraite

abstract test suite
S: serie de pruebas abstractas
F: suite de tests abstraite

abstract testing methodology
S: metodología de comprobación abstracta
F: méthodologie de test abstraite

abstract unbind operation
S: operación abstracta de desvinculación
F: opération de détachement abstraite

abstract-unbind-parameters
S: parámetros-desvinculación-abstracta
F: abstract-unbind-parameters; paramètres de détachement abstrait

accelerated test
S: prueba acelerada
F: essai accéléré

acceptable level (of a measure)
S: nivel aceptable (de una medida)
F: niveau acceptable (d'une caractéristique)

acceptance input
S: entrada de aceptación
F: entrée d'acceptation

acceptance output
S: salida de aceptación
F: sortie d'acceptation

accepting association control protocol machine
S: máquina de protocolo de control de asociación aceptante
F: machine protocole de contrôle d'association accepteur

accepting-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable aceptadora
F: machine protocole de transfert fiable accepteur

accepting-remote-operation-protocol-machine
S: máquina de protocolo de operaciones a distancia aceptadora
F: machine protocole d'opération distante accepteur

acceptor
S: aceptante; aceptador
F: accepteur

accepting SS-user
S: usuario SS aceptante
F: utilisateur du service de session accepteur

access
S: acceder
F: accès

access and storage system (AS/SYS)
S: sistema de acceso y almacenamiento (AS/SYS)
F: système d'accès et de mémorisation (AS/SYS)

access and transfer system (AT/SYS)
S: sistema de acceso y transferencia (AT/SYS)
F: système d'accès et de transfert (AT/SYS)

access barred
S: prohibición de acceso; acceso prohibido
F: interdiction d'accès; accès interdit

access capability; ISDN access capability
S: capacidad de acceso; capacidad de acceso de la RDSI
F: capacité d'accès; capacité d'accès au RNIS

access channel
S: canal de acceso
F: canal d'accès

access channel and rate
S: canal de acceso y velocidad
F: canal et débit d'accès

access circuit section
S: sección de circuito de acceso
F: section de circuit d'accès

access connection element
S: elemento de conexión de acceso
F: élément de connexion d'accès

access contention
S: contienda de acceso
F: conflit d'accès

access contention resolution
S: resolución de contienda de acceso
F: résolution des conflits d'accès

access control
S: control de acceso
F: contrôle d'accès

access criteria
S: criterios de acceso
F: critère d'accès

access delay
S: retardo de acceso
F: temps d'accès

access denial probability
S: probabilidad de denegación de acceso
F: probabilité d'impossibilité d'accès

access network section
S: sección de red de acceso
F: section de réseau d'accès

access parameters
S: parámetros de acceso
F: paramètres d'accès

access point
S: punto de acceso
F: point d'accès

access protocol
S: protocolo de acceso
F: protocole d'accès

access, storage, and transfer system (AST/SYS)
S: sistema de acceso, almacenamiento y transferencia (AST/SYS)
F: système d'accès, de mémorisation et de transfert (AST/SYS)

access system (A/SYS)
S: sistema de acceso (A/SYS)
F: système d'accès (A/SYS)

access to maritime PAD (prefix 20)
S: acceso a DEP marítimo (prefijo 20)
F: accès à l'ADP du service maritime (préfixe 20)

access to PSPDN (prefix 25)
S: acceso a la RPDCP (prefijo 25)
F: accès au RPDCP (préfixe 25)

access to supplementary services
S: acceso a servicios suplementarios
F: accès aux services supplémentaires

access to the public telegram service
S: acceso al servicio público de telegramas
F: accès au service public des télégrammes

access transport
S: transporte de acceso
F: enveloppe d'informations d'accès

access unit (AU)
S: unidad de acceso (UA)
F: unité d'accès (UA)

accessibility of a connection to be established
S: accesibilidad de una conexión por establecer
F: accessibilité d'une communication à établir

accessible field; input field
S: campo accesible; campo de entrada
F: champ accessible; champ d'entrée

accounting authority
S: autoridad encargada de la contabilidad
F: autorité chargée de la comptabilité

accounting authority identification code (AAIC)
S: código de identificación de la autoridad encargada de la contabilidad (CIAC)
F: code d'identification de l'autorité chargée de la comptabilité (CIAC)

accounting rate
S: tasa de distribución
F: taxe de répartition

accounting rate share
S: parte alícuota de distribución
F: quote-part de répartition

accounting revenue division procedure
S: procedimiento de división de los ingresos de distribución
F: méthode de division des recettes de répartition

accounts for shared terminal
S: cuentas de un terminal compartido
F: décompte pour terminal partagé

accumulated down time
S: tiempo de indisponibilidad acumulado
F: durée cumulée d'indisponibilité

accumulated time
S: tiempo acumulado
F: durée cumulée

acknowledgement
S: acuse de recibo
F: accusé de réception

acknowledgement indicator
S: indicador de acuse de recibo
F: indicateur d'accusé de réception

acknowledgement signal unit (ACU)
S: unidad de señalización de acuse de recibo (ACU)
F: unité de signalisation d'accusé de réception (ACU)

acknowledgement window
S: ventana de acuse de recibo
F: fenêtre d'accusé de réception

acoustic artificial voice
S: voz artificial acústica
F: voix artificielle acoustique

acoustic coupler (in telephonometry)
S: acoplador acústico (en telefonometría)
F: coupleur acoustique (en téléphonométrie)

acoustic hood
S: cabina acústica; burbuja acústica
F: abri téléphonique; abriphone

acoustic shock (in telephony)
S: choque acústico (en telefonía)
F: choc acoustique (en téléphonie)

acoustic shock suppressor (in telephony)
S: supresor de choques acústicos; antichoque (en telefonía)
F: anti-choc (en téléphonie)

ACSE-provider
S: proveedor ESCA
F: fournisseur de l'ACSE

ACSE service-provider
S: proveedor de servicio ESCA
F: fournisseur du service ACSE

ACSE service-user
S: usuario de servicio ESCA
F: utilisateur du service ACSE

ACSE-user
S: usuario ESCA
F: utilisateur d'ASE

action
S: acción
F: action

action modifier
S: modificador de acción
F: modificateur d'action

ACTIVATE
S: ACTIVAR
F: ACTIVATION

activate
S: activar
F: activer

activation
S: activación
F: activation

active maintenance time
S: tiempo de mantenimiento activo
F: temps de maintenance active

active position
S: posición activa
F: position active

active position addressing (APA)
S: direccionamiento de posición activa (APA)
F: adressage de position active (APA)

active preventive maintenance time
S: tiempo de mantenimiento preventivo activo
F: temps de maintenance préventive active

active redundancy
S: redundancia activa
F: redondance active

active repair time; active corrective maintenance time
S: tiempo de reparación activo; tiempo de mantenimiento correctivo activo
F: temps de réparation active; temps de maintenance corrective active

active speech level
S: nivel vocal activo
F: niveau de conversation active

active testing
S: prueba activa
F: tests actifs

active time
S: tiempo activo
F: durée d'activité

active timer
S: temporizador activo
F: temporisateur actif

activity factor
S: factor de actividad
F: coefficient d'activité

actual parameter
S: parámetro efectivo
F: paramètre réel

actual parameter list
S: lista de parámetros efectivos
F: liste de paramètres réels

actual recipient
S: destinatario real
F: destinataire effectif

actual recipient; recipient
S: destinatario efectivo; receptor
F: destinataire effectif; destinataire

adaptive break-in echo suppressor
S: supresor de eco con intervención adaptativa
F: suppresseur d'écho à intervention adaptable

adaptive differential pulse code modulation (ADPCM)
S: modulación por impulsos codificados diferencial adaptativa (MICDA)
F: modulation par impulsions et codage différentiel adaptatif (MICDA)

adaptive predictor
S: predictor adaptativo
F: prédicteur adaptatif

adaptive quantizing
S: cuantificación adaptativa
F: quantification adaptative

ADD
S: añadir
F: ajout

additional header information
S: información adicional de encabezamiento
F: information supplémentaire d'en-tête

additional information
S: información adicional
F: information supplémentaire

additional service controls
S: controles de servicios adicionales
F: contrôle de service supplémentaire

add/remove
S: adición/supresión
F: ajouter/supprimer

address
S: dirección
F: adresse

address (in circuit switching)
S: dirección (en conmutación de circuitos)
F: adresse (en commutation de circuits)

address (in information processing)
S: dirección (en tratamiento de la información)
F: adresse (en traitement de l'information)

address complete (network)
S: dirección completa (red)
F: adresse complète (réseau)

address complete (alerting)
S: dirección completa (aviso)
F: adresse complète (alerte)

address complete message (ACM)
S: mensaje de dirección completa (MDC)
F: message d'adresse complète (ACO)

address-complete signal, charge
S: señal de dirección completa, con tasación
F: signal de numéro complet, avec taxation

address-complete signal, coin-box
S: señal de dirección completa, teléfono de previo pago
F: signal de numéro complet, publiphone

address-complete signal, no charge
S: señal de dirección completa, sin tasación
F: signal de numéro complet, sans taxation

address-complete signals (sent in the backward direction)
S: señales de dirección completa (transmitida hacia adelante)
F: signaux d'adresse complète (émis dans le sens: vers l'arrière)

address-complete, subscriber-free signal, charge
S: señal de dirección completa, abonado libre, con tasación
F: signal de numéro complet, ligne d'abonné libre, avec taxation

address-complete, subscriber-free signal, coin-box
S: señal de dirección completa, abonado libre, teléfono de previo pago
F: signal de numéro complet, ligne d'abonné libre, publiphone

address-complete, subscriber-free signal, no charge
S: señal de dirección completa, abonado libre, sin tasación
F: signal de numéro complet, ligne d'abonné libre, sans taxation

address-incomplete signal
S: señal de dirección incompleta
F: signal de numéro incomplet; signal d'adresse incomplet

address presentation restricted indicator
S: indicador de presentación restringida de dirección
F: indicateur de restriction de divulgation d'adresse

address separator
S: separador de dirección
F: séparateur d'adresse

address signal
S: señal de dirección
F: signal d'adresse

address signal (sent in the forward direction)
S: señal de dirección (transmitida hacia adelante)
F: signal d'adresse (émis dans le sens: vers l'avant)

address signal complete
S: señal de dirección completa
F: signal d'adresse complet

adjacent signalling points
S: puntos de señalización adyacentes
F: points sémaphores adjacents

Administration
S: Administración
F: Administration

administration (A)
S: administración (A)
F: gestion (G)

administration directory management domain (ADDMD)
S: dominio de gestión de la guía de administración (DGGAD)
F: domaine de gestion d'annuaire d'Administration (ADDMD)

Administration domain name
S: nombre de dominio de Administración
F: nom d'un domaine d'Administration

Administration management domain (ADMD)
S: dominio de gestión de Administración (DGAD)
F: domaine de gestion d'Administration; domaine de gestion administratif (ADMD)

administration port
S: puerto de administración
F: administration port; accès d'administration

administrative authority
S: autoridad administrativa
F: autorité administrative

administrative delay (for corrective maintenance)
S: retardo administrativo (para el mantenimiento correctivo) demora administrativa
F: délai administratif (pour la maintenance corrective)

administrative system
S: sistema administrativo
F: système d'administration

adverse state
S: estado desfavorable
F: état défavorable

advice of charge
S: aviso del importe de la comunicación; información de tarificación
F: avis de taxation; information de taxation

aeronautical earth station
S: estación terrena aeronáutica
F: station terrienne aéronautique

aeronautical (ground) earth station (GES)
S: estación terrena aeronáutica (situada en tierra); estación terrena aeronáutica (de tierra) (ETT)
F: station terrienne au sol aéronautique (STS)

affected point code
S: código de punto afectado
F: code du point concerné

affected subsystem number
S: número de subsistema afectado
F: numéro de Sous-Système concerné

ageing failure; wearout failure
S: fallo por envejecimiento; fallo por desgaste
F: défaillance par vieillissement; défaillance par usure

ageing fault; wearout fault
S: avería por envejecimiento; avería por desgaste
F: panne par vieillissement; panne par usure

aggregate signal
S: señal global; señal compuesta; señal multiplexada
F: signal composite

aircraft earth station (AES)
S: estación terrena de aeronave (ETA)
F: station terrienne d'aéronef (STA)

alarm
S: alarma
F: alarme

alarm attributes
S: atributos de alarma
F: attributs d'alarme

alarm call services
S: servicio de despertador
F: service du réveil

alarm indication signal (AIS)
S: señal de indicación de alarma (SIA)
F: signal d'indication d'alarme (SIA)

alarm route
S: rutas de las alarmas
F: voie d'acheminement de l'alarme

alarm statement
S: sentencia de alarma
F: instruction d'alarme

alert abstract-operation
S: operación abstracta de alerta
F: alert abstract-operation; opération abstraite d'avertissement

alerting delay at a single element boundary, B_i
S: retardo de aviso en una sola frontera de elemento de conexión, B_i
F: temps d'alerte à une seule limite d'élément B_i

alerting delay between two connection element boundaries
S: retardo de aviso entre dos fronteras de un elemento de conexión
F: temps d'alerte entre deux limites d'un élément de connexion

alerting sending delay for internal traffic
S: retardo de envío de aviso para tráfico interno
F: délai d'émission d'alerte pour le trafic interne

alerting sending delay for terminating traffic
S: retardo de envío de aviso para tráfico de destino
F: délai d'émission d'alerte pour le trafic d'arrivée

algorithm
S: algoritmo
F: algorithme

alias; alias name
S: alias; nombre con alias
F: pseudonyme; nom-pseudonyme

alias entry
S: asiento de alias
F: entrée pseudonyme

alias (entry)
S: alias (inserción de)
F: alias (entrée)

alias name
S: nombre de alias
F: nom alias

aligned around
S: alineado con respecto a una posición
F: aligné sur

alignment
S: alineación
F: alignement

alignment error rate monitoring
S: monitor de tasa de errores en la alineación
F: surveillance du taux d'erreur pendant la procédure d'alignement

alignment jitter
S: fluctuación de fase de alineación
F: gigue d'alignement

alignment signal (AS)
S: señal de ajuste (SA)
F: signal d'alignement (SA)

allocated channel
S: canal asignado
F: voie affectée

ALLOW
S: PERMITIR
F: AUTORISATION

allow
S: permitir
F: autorisation

alphanumeric keyboard
S: teclado alfanumérico
F: clavier alphanumérique

alternate mark inversion code; AMI code
S: código de inversión de marcas alternada; código AMI
F: code bipolaire

alternate mark inversion signal
S: señal de inversión de marcas alternada
F: signal bipolaire

alternate mark inversion violation
S: violación de inversión de marcas alternada
F: violation de bipolarité

alternate recipient
S: destinatario alternativo
F: destinataire suppléant

alternate speech/unrestricted information transfer
S: transferencia alternada de conversación/información sin restricciones
F: transfert de parole et d'information sans restriction à l'alternat

alternating current (a.c.)signalling; a.c. signalling
S: señalización en corriente alterna; señalización en c.a.
F: signalisation en courant alternatif

alternative class
S: clase alternativa
F: classe de repli

alternative hypothesis H_1
S: hipótesis alternativa H_1
F: hypothèse alternative, H_1

alternative representation
S: representación alternativa
F: représentation de repli

alternative route; alternate route
S: ruta alternativa
F: voie d'acheminement secondaire; voie d'acheminement détourné

alternative routing (of signalling)
S: encaminamiento alternativo (de señalización)
F: acheminement (de signalisation) de secours

alternative selection signals
S: pluralidad de señales de selección
F: pluralité des codes de signaux de sélection

alternative test method (ATM)
S: método de prueba alternativo (MPA)
F: méthode de mesure de remplacement (ATM)

alternative traffic route
S: ruta de tráfico alternativa
F: voie d'acheminement de trafic détourné

alternative traffic routing
S: encaminamiento alternativo (de tráfico)
F: acheminement détourné; détournement

amplitude- and phase-corrected echo
S: eco corregido en amplitud y en fase
F: écho corrigé en amplitude et en phase

amplitude modulation
S: modulación de amplitud
F: modulation d'amplitude

amplitude quantized control
S: control por cuantificación de amplitud
F: synchronisation quantifiée

analogue channel
S: canal analógico
F: voie analogique

analogue control
S: control analógico
F: synchronisation analogique

analogue repeater
S: repetidor analógico
F: répéteur analogique

analogue signal
S: señal analógica
F: signal analogique

analogue signalling data link
S: enlace analógico de datos de señalización
F: liaison sémaphore de données analogique

anisochronous
S: anisócrono
F: anisochrone

annotation
S: anotación
F: annotation

annotation symbol
S: símbolo de anotación
F: symbole d'annotation

anomaly
S: anomalía
F: anomalie

answer bid radio (ABR)
S: tasa de tentativas de toma con respuesta (TTTR)
F: taux de tentatives de prise avec réponse (TTPR)

answer message (ANM)
S: mensaje de respuesta (RST)
F: message de réponse (REP)

answer seizure ratio (ASR)
S: tasa de tomas con respuesta (TTR)
F: taux de prises avec réponse (TPR)

answer sending delay
S: retardo de envío de respuesta
F: délai d'émission du signal de réponse

answer signal
S: señal de respuesta
F: signal de réponse

answer signal (sent in the backward direction)
S: señal de respuesta (transmitida hacia atrás)
F: signal de réponse (émis dans le sens en arrière); signal de réponse (émis dans le sens: vers l'arrière)

answer signal, charge
S: señal de respuesta, con tasación
F: signal de réponse, avec taxation

answer-signal delay
S: demora de la señal de respuesta
F: délai du signal de réponse

answer signal, no charge
S: señal de respuesta, sin tasación
F: signal de réponse, sans taxation

answerback unit
S: transmisor automático de indicativo
F: émetteur automatique d'indicatif

answerback unit simulator
S: simulador de transmisor automático de indicativo
F: simulateur d'émetteur d'indicatif

answering TA
S: AT contestador
F: TA de réponse

answering time of operators; request transmission time; delay time; setting-up times of an international call
S: demora en contestar de las operadoras; tiempo de transmisión de la petición; demora; tiempo de establecimiento de una comunicación internacional
F: délai de réponse des opératrices; délai de transmission de la demande; délai d'attente; délai d'établissement d'une communication internationale

answering tone
S: tono de respuesta
F: tonalité de réponse

any type
S: tipo any; tipo cualquiera
F: type Quelconque

application
S: aplicación
F: application

application-association; association
S: asociación de aplicación; asociación
F: association d'application; association

application comments
S: comentarios de aplicación
F: commentaires d'application

application context
S: contexto de aplicación
F: contexte d'application

application entity (AE)
S: entidad de aplicación (EA)
F: entité d'application (AE)

application in an ISDN
S: aplicación en una RDSI
F: application dans un RNIS

application interworking function
S: función de interfuncionamiento de aplicaciones
F: fonctions d'interfonctionnement d'application

application-management
S: gestión de aplicación
F: gestion d'application

application-management-application-entity
S: entidad de aplicación de gestión de aplicación
F: entité d'application de gestion d'application

application message attributes
S: atributos de los mensajes de aplicación
F: attributs des messages d'application

application message characteristics
S: características de los mensajes de aplicación
F: caractéristiques des messages d'application

application message information contents
S: contenido de información de los mensajes de aplicación
F: contenu d'information des messages d'application

application messages
S: mensajes de aplicación
F: messages d'application

application process
S: proceso de aplicación
F: processus d'application

application-relay system
S: sistema de relevo de aplicación
F: relais d'application

application service element (ASE)
S: elemento del servicio aplicación (ESA)
F: élément de service d'application (ASE)

applied and offerd load
S: carga aplicada y ofrecida
F: charge appliquée et charge offerte

applied data bit
S: bit de datos aplicado
F: bit de données appliqué

arc current
S: corriente de arco
F: courant d'arc

arc voltage
S: tensión de arco
F: tension d'arc

area
S: área; zona
F: zone

arithmetic delimiter
S: delimitador aritmético
F: délimiteur arithmétique

arithmetic expression (in MML)
S: expresión aritmética (en LHM)
F: expression arithmétique (en LHM)

arithmetic operator
S: operador aritmético
F: opérateur arithmétique

arithmetical expression
S: expresion aritmética
F: expression arithmétique

array
S: matriz
F: tableau (array)

artificial ear
S: oído artificial
F: oreille artificielle

artificial mouth
S: boca artificial
F: bouche artificielle

artificial mouth excitation signal
S: señal de excitación de la boca artificial
F: signal d'excitation de la bouche artificielle

artificial voice
S: voz artificial
F: voix artificielle

ASN.1 character set
S: juego de caracteres NSA.1
F: jeu de caractères ASN.1

ASN.1 encoding rules
S: reglas de codificación NSA.1
F: règles de codage ASN.1

aspect ratio
S: relación de aspecto
F: rapport d'aspect

assembler; assembly program
S: ensamblador; programa de ensamblaje
F: assembleur; programme d'assemblage

assembly language
S: lenguaje de ensamblaje
F: langage d'assemblage

assign
S: asignar
F: affectation

assignment map
S: correspondencia de asignaciones; mapa de asignaciones
F: carte d'assignation

assignment message
S: mensaje de asignación
F: message d'assignation

assignment statement
S: sentencia de asignación
F: instruction d'affectation

associated mode (of signalling)
S: modo de señalización asociado; modo (de señalización) asociado
F: mode (de signalisation) associé

associated mode of operation
S: modo de explotación asociado
F: mode d'exploitation «associé»

associated signalling
S: señalización asociada
F: signalisation associée

association area
S: área de asociación
F: zone d'association

association control protocol machine
S: máquina de protocolo de control de asociación
F: machine protocole de contrôle d'association

association control service element
S: elemento del servicio de control de asociación
F: élément de service de contrôle d'association

association-initiating-application-entity; association-initiator
S: entidad de aplicación iniciadora de asociación; iniciador de asociación
F: entité d'application engendrant l'application; demandeur d'association

association-initiating-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable iniciadora de asociación
F: machine protocole de transfert fiable demandant l'association

association-initiator
S: iniciador de asociación
F: demandeur de l'association

association-responder
S: respondedor de asociación
F: accepteur de l'association

association-responding-application-entity; association-responder
S: entidad de aplicación respondedora de asociación; respondedor de asociación
F: entité d'application répondant à la demande d'association; répondeur d'association

association-responding-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable respondedora de asociación
F: machine protocole de transfert fiable acceptant l'association

assured reproduction area
S: zona de reproducción garantizada
F: surface de reproduction garantie; zone de reproduction garantie

asymmetric
S: asimétrico
F: asymétrique

asymmetrical through connection
S: transconexión asimétrica
F: transfert asymétrique

(asymptotic) availability A; (steady-state) availability
S: disponibilidad (asintótica) A; disponibilidad (en régimen permanente)
F: disponibilité asymptotique A; disponibilité

asymptotic mean availability $\overline{A}$
S: disponibilidad media asintótica $\overline{A}$
F: disponibilité moyenne asymptotique $\overline{A}$

asymptotic mean unavailability $\overline{U}$
S: indisponibilidad media asintótica $\overline{U}$
F: indisponibilité moyenne asymptotique $\overline{U}$

asymptotic unavailability U
S: indisponibilidad asintótica U
F: indisponibilité asymptotique U

asynchronous time-division multiplexing
S: multiplexación asíncrona por división en el tiempo
F: multiplexage temporel asynchrone

asynchronous transfer mode (ATM)
S: modo de transferencia asíncrono (MTA)
F: mode de transfert asynchrone (MTA)

attenuation A (λ)
S: atenuación A (λ)
F: affaiblissement A (λ)

attenuation coefficient
S: coeficiente de atenuación
F: coefficient d'affaiblissement

attenuation frequency distortion; loss distortion
S: distorsión de atenuación/frecuencia; distorsión de atenuación; distorsión de pérdida
F: distorsion d'affaiblissement en fonction de la fréquence; distorsion d'affaiblissement

attribute
S: atributo
F: attribute; attribut

attribute list
S: lista de atributos
F: liste d'attributs

attribute-type
S: tipo de atributo
F: attribute-type; type d'attribut

attribute value
S: valor de atributo
F: valeur d'attribut

attribute value assertion
S: aserción de valor de atributo
F: affirmation de la valeur d'attribut; assertion de valeur d'attribut

attribute-value-assertion
S: aserción-valor-de atributo
F: attribute-value-assertion; assertion de valeur d'attribut

audible indication
S: indicación audible
F: indication audible

audiographic conference service
S: servicio de conferencia audiográfica
F: service de conférence audiographique

audit
S: verificación
F: vérification

authentication
S: autenticación
F: authentification

authentication mechanisms
S: mecanismos de autenticación
F: mécanismes d'authentification

authentication token; token
S: testigo de autenticación; testigo
F: jeton d'authentification; jeton

authority
S: autoridad
F: autorisation

auto-action
S: acción automática
F: auto-action; action automatique

auto-action-type
S: tipo de acción automática
F: auto-action-type; type d'action automatique

auto-alert
S: alerta automática
F: auto-alert; avertissement automatique

auto-forward
S: retransmisión automática
F: auto-forward; retransmission automatique

automatic alternative routing
S: encaminamiento alternativo automático
F: acheminement automatique sur voie secondaire

automatic answering
S: respuesta automática
F: réponse automatique

automatic booked call service
S: servicio de llamadas automáticas prefijadas
F: service de demande automatique d'une communication

automatic calling
S: llamada automática
F: appel automatique

automatic congestion level
S: nivel automático de congestión
F: indication automatique de surcharge

automatic credit card service
S: servicio automático con tarjeta de crédito
F: service automatique de cartes de crédit

automatic date and time indication
S: indicación automática de fecha y hora
F: indication automatique de date et d'heure

automatic identification
S: identificación automática
F: identification automatique

automatic maintenance
S: mantenimiento automático
F: maintenance automatique

automatic numbering transmitter
S: transmisor de numeración automática
F: émetteur à numérotation automatique (des messages)

automatic observation
S: observación automática
F: observation automatique

automatic retransmitter
S: retransmisor automático
F: réémetteur (télégraphique)

automatic retransmitter with controlled tape-feed mechanism
S: retransmisor automático controlado por impulsos
F: émetteur automatique à commande par impulsions

automatic service
S: servicio automático
F: service automatique

automatic switching equipment
S: equipo de conmutación automática
F: équipement de commutation automatique; commutateur automatique

automatic system
S: sistema automático
F: système automatique

automatic test line (prefix 91)
S: línea de prueba automática (prefijo 91)
F: ligne d'essai automatique (préfixe 91)

automatic transferred charge call service
S: servicio de transferencia automática de la tasa de comunicación
F: service d'appel avec transfert automatique de taxe

automatic transferred debiting of charges service
S: servicio de transferencia automática de las tasas imputadas
F: service de transfert automatique d'imputation de taxes

automatic transmitter
S: transmisor automático
F: émetteur automatique

automatic verbal announcement of charges applied service
S: servicio de indicación automática verbal de la tasa de la comunicación
F: service d'indication automatique verbale des éléments de taxation

auxiliary system
S: sistema auxiliar
F: système auxiliaire

availability in analogue cable transmission systems
S: disponibilidad de los sistemas de transmisión analógica por cable
F: disponibilité des systèmes de transmission analogique par câbles

availability parameters
S: parámetros de disponibilidad
F: paramètres de disponibilité

availability performance
S: disponibilidad
F: disponibilité

available area
S: zona disponible
F: surface disponible; zone disponible

available signalling link
S: enlace de señalización disponible
F: canal sémaphore disponible

average BER
S: TEB media
F: TEB moyen

average bits per sample
S: promedio de bits por muestra
F: nombre moyen de bits par échantillon

average daily peak hour traffic
S: tráfico medio de las horas punta
F: moyenne du trafic des heures chargées

axiom
S: axioma
F: axiome

B

babyphone service
S: servicio de llamadas a un teléfono descolgado
F: service d'appels à destination d'un poste dont le combiné est décroché

background
S: fondo
F: arrière-plan

Backus Naur form (BNF)
S: forma Backus Naur (FBN)
F: forme de Backus Naur (FBN)

backward echo
S: eco hacia atrás
F: écho (vers l'amont)

backward indicator bit (BIB)
S: bit indicador inverso; bit indicador hacia atrás (BII)
F: bit indicateur vers l'arrière (BIR)

backward sequence number (BSN)
S: número secuencial inverso (hacia atrás) (NSI)
F: numéro de séquence vers l'arrière (NSR)

backward signal
S: señal hacia atrás
F: signal vers l'arrière

balance
S: equilibrio
F: équilibre

balance return loss
S: atenuación de equilibrado
F: affaiblissement d'équilibrage

balanced code
S: código equilibrado
F: code à somme bornée

band number
S: número de banda
F: numéro de bande

band sensation level
S: nivel de sensación en la banda
F: niveau de sensation dans la bande

bandwidth (of an optical fibre)
S: anchura de banda (de una fibra óptica)
F: largeur de bande (d'une fibre optique)

barred signal
S: señal de acceso prohibido
F: signal d'interdiction

base address
S: dirección de base
F: adresse de base; adresse base

base earth station
S: estación terrena de base
F: station terrienne de base

base level tasks
S: tareas de nivel de base
F: tâches au niveau de base

base station (BS)
S: estación de base (EB)
F: station de base (SB)

base station area
S: zona de estación de base
F: zone de la station de base

basic access; basic rate access
S: acceso básico; acceso a velocidad básica
F: accès de base; accès au débit de base

basic access; ISDN basic access
S: acceso básico; acceso básico RDSI
F: accès de base; accès de base RNIS

basic component
S: componente básico
F: composant de base

basic (error correction) method
S: método básico (de corrección de errores)
F: méthode (de correction d'erreur) de base

basic features
S: características básicas
F: caractéristiques fondamentales

basic handover procedure
S: procedimiento de traspaso básico
F: procédure de transfert de base

basic interconnection test suite
S: serie de pruebas de interconexión básica
F: suite de tests d'interconnexion de base

basic interconnection testing
S: prueba de interconexión básica
F: test d'interconnexion de base

basic layout object
S: objeto de disposición básico
F: objet physique de base; objet de mise en page

basic logical object
S: objeto lógico básico
F: objet logique de base

basic measurement unit (BMU)
S: unidad de medida básica (UMB)
F: unité de mesure de base (BMU)

basic requirement
S: requisitos básicos
F: fonction de base

basic SDL
S: LED básico
F: LDS de base

basic section of a virtual connection
S: sección básica de una conexión virtual
F: section de base d'une connexion virtuelle

basic service
S: servicio básico
F: service de base

basic session reference
S: referencia básica de la sesión
F: référence de base de la session

basic value
S: valor básico
F: valeur essentielle

baud (Bd)
S: baudio (Bd)
F: baud (Bd)

Baudot telegraphy
S: telegrafía Baudot
F: télégraphie Baudot

bearer
S: portador
F: support

bearer capability information
S: información de capacidad portadora
F: information relative aux possibilités support

bearer channel (BC)
S: canal portador (CP)
F: voie support (VS)

bearer service
S: servicio portador
F: service support

behaviour; functional behaviour
S: comportamiento; comportamiento funcional
F: comportement; comportement fonctionnel

behaviour testing
S: prueba de comportamiento
F: test de comportement

BER excess
S: rebasamiento de la TEB
F: TEB excessif

bias distortion
S: distorsión asimétrica
F: distorsion biaise

bid
S: tentativa de toma
F: tentative de prise

bidirectional
S: bidireccional
F: bidirectionnel

bidirectional asymmetric
S: bidireccional asimétrica
F: bidirectionnel asymétrique

bidirectional symmetric
S: bidireccional simétrica
F: bidirectionnel symétrique

bids per circuit per hour (BCH)
S: tentativas de toma por circuito y por hora (TTCH)
F: tentatives de prise par circuit et par heure (TCH)

bilateral control
S: control bilateral
F: synchronisation bilatérale

billing error probability
S: probabilidad de error de facturación
F: probabilité d'erreur de facturation

billing integrity (probability)
S: integridad de la facturación (probabilidad de)
F: (probabilité de) justesse de facturation

binary digit; bit
S: dígito binario; bit
F: élément binaire; bit

binary figure
S: cifra binaria
F: chiffre binaire

binary numeral
S: numeral binario
F: nombre binaire; numéral binaire

binary rate
S: velocidad binaria
F: débit binaire

binary tariff system
S: sistema binario de tarificación
F: système de tarification binaire

binding
S: vinculación
F: affectation

bindings
S: vinculaciones
F: affectations

bit combination
S: combinación de bits
F: combinaison binaire

bit error ratio (BER)
S: tasa de errores en los bits; tasa de error en los bits (TEB)
F: taux d'erreur sur les bits (TEB)

bit integrity
S: integridad de los bits; integridad de la secuencia de bits
F: intégrité des bits; intégrité sur les éléments binaires

bit-interleaved transmission
S: transmisión con entrelazado de bits
F: transmission multiplex à moments entrelacés

bit sequence independence
S: independencia de la secuencia de bits
F: indépendance de la séquence des bits

bit timing
S: temporización de los bits
F: rythme des bits

bits/sample for voice
S: bits por muestra para señales vocales
F: bits/échantillon pour les signaux vocaux

bitstring type
S: tipo bitstring; tipo cadena de bits
F: type Chaîne binaire

block
S: bloque
F: pavé; bloc

block (data)
S: bloque (de datos)
F: bloc (de données)

block-acknowledged counter
S: contador de bloques de los que se/ ha acusado recibo
F: compteur des blocs dont il est accusé de réception

block alignment
S: alineación de bloque
F: alignement de pavé; alignement de bloc

block area
S: área de bloque
F: zone de bloc

block-completed counter
S: contador de bloques completos
F: compteur des blocs terminés

block definition
S: definición de bloque
F: définition de bloc

block diagram
S: diagrama de bloque
F: diagramme de bloc

block mode transmission
S: transmisión en modo bloque
F: transmission en mode bloc

block of parameters
S: bloque de parámetros
F: bloc de paramètres

block payload
S: carga neta del bloque
F: charge utile de bloc

block separation
S: separación de bloques
F: séparation des blocs

block separator
S: separador de bloques
F: séparateur de blocs

block substructure
S: subestructura de bloque
F: sous-structure de bloc

block substructure definition
S: definición de subestructura de bloque
F: définition de sous-structure de bloc

block substructure diagram
S: diagrama de subestructura de bloque
F: diagramme de sous-structure de bloc

block tree diagram
S: diagrama de árbol de bloques
F: diagramme d'arborescence de bloc

blocked call attempt
S: tentativa de llamada bloqueada
F: tentative d'appel bloquée

blocked mode of operation
S: modo de operación en bloqueo (de llamadas)
F: mode d'exploitation avec blocage

blocked traffic
S: tráfico bloqueado
F: trafic bloqué

blocking
S: bloqueo
F: groupage

blocking acknowledgement message (BLA)
S: mensaje de acuse de bloqueo (ARB)
F: message d'accusé de réception de blocage (BLA)

blocking-acknowledgement signal
S: señal de acuse de recibo de bloqueo
F: signal d'accusé de réception de blocage

blocking message (BLO)
S: mensaje de bloqueo (BLO)
F: message de blocage (BLO)

blocking signal
S: señal de bloqueo
F: signal de blocage

blocking signal (sent in the backward direction)
S: señal de bloqueo (transmitida hacia atrás)
F: signal de blocage (émis dans le sens en arrière); signal de blocage (émis dans le sens: vers l'arrière)

body
S: cuerpo
F: corps

body part
S: parte del cuerpo
F: partie du corps

booked call
S: llamada a hora convenida
F: appel à heure fixe

booking of telephone calls (prefix 17)
S: reserva de llamadas telefónicas (prefijo 17)
F: réservation de communications téléphoniques (préfixe 17)

Boolean
S: booleano; boolean
F: booléen

Boolean type
S: tipo boolean; tipo booleano
F: type Booléen

border
S: marco
F: frontière

border area
S: zona de marco (o lateral)
F: zone périphérique

both-way
S: en ambos sentidos
F: à double sens

bottom edge
S: borde inferior
F: limite inférieure; bord inférieur

bottom left corner
S: esquina inferior izquierda
F: coin inférieur gauche

bottom right corner
S: esquina inferior derecha
F: coin inférieur droit

BQ cycle; response cycle
S: ciclo BQ; ciclo de respuesta
F: cycle BQ; cycle de réponse

branch line multiplex
S: múltiplex de derivación
F: multiplex de déport

break-in hangover time
S: tiempo de bloqueo para la intervención
F: temps de maintien pour l'intervention

bridged tap
S: rama múltiple; derivación en puente
F: terminaison en T

bridging loss
S: pérdida por derivación
F: affaiblissement dû à la dérivation

broadband
S: banda ancha
F: large bande

broadband access
S: acceso de banda ancha
F: accès à large bande

broadband communication channel
S: canal de comunicación de banda ancha
F: voie de communication à large bande

broadband unrestricted bearer services
S: servicios portadores de banda ancha sin restricciones
F: services supports à large bande sans restriction

broadband videotex services
S: servicios de videotex en banda ancha
F: services vidéotex à large bande

broadcast
S: difusión
F: diffusion

broadcast call
S: comunicación de difusión
F: communication de diffusion

broadcast communication
S: comunicación de difusión
F: communication de diffusion

broadcast conference call
S: comunicación conferencia de difusión
F: conférence-diffusion

broadcast repeater
S: repetidor de difusión
F: translation pour diffusion

broadcast videography; teletext
S: videografía radiodifundida; teletexto
F: vidéographie diffusée; télétexte

broadcasting
S: difusión
F: diffusion

broadcasting organization
S: organismo de radiodifusión
F: organisme de radiodiffusion

broadcasting organization (receive)
S: organismo de radiodifusión (recepción)
F: organisme de radiodiffusion (réception)

broadcasting organization (send)
S: organismo de radiodifusión (emisión)
F: organisme de radiodiffusion (émission)

BROWSE
S: HOJEAR
F: LECTURE

browse
S: hojear
F: lecture

bug
S: error de programación
F: erreur de programmation; bogue

bunched frame alignment signal
S: señal de alineación de trama concentrada
F: signal de verrouillage de trame concentré

bureaufax
S: burofax
F: bureaufax

burn-in
S: rodaje
F: rodage

business category
S: categoría negocios
F: profession

busy
S: ocupado
F: occupation

busy (state)
S: ocupado (estado de)
F: occupé

busy-flash seizure ratio (BFSR)
S: relación de señales de ocupado a tomas (RSOT)
F: taux de prises avec signal d'occupation (TPSO)

busy-flash signal (sent in the backward direction)
S: señal (eléctrica) de ocupado (hacia atrás); señal de ocupado (transmitida hacia atrás)
F: signal d'occupation (émis vers l'arrière); signal d'occupation (émis dans le sens en arrière)

busy hour
S: hora cargada
F: heure chargée

busy state
S: estado de ocupación; estado de ocupado
F: état occupé; occupation

busy test
S: prueba de ocupación
F: test d'occupation

busy tone
S: tono de ocupado
F: tonalité d'occupation

byte
S: multibit; byte
F: multiplet

C

call
S: llamada; comunicación
F: appel; communication

(telex) call
S: comunicación télex; llamada télex
F: communication (télex)

call abandonment probability
S: probabilidad de abandono de una tentativa de llamada
F: probabilité d'abandon (d'une tentative d'appel)

call accepted signal
S: señal de llamada aceptada; señal de aceptación de la llamada
F: signal d'acceptation d'appel

call attempt
S: tentativa de llamada
F: tentative d'appel

call attempt (by a user)
S: tentativa de llamada (por un usuario)
F: (tentative d')appel (par un usager)

call attempt (of a user)
S: tentativa de llamada (de un usuario)
F: (tentative d')appel (d'un usager)

call clear-down; connection release
S: liberación de la llamada
F: libération de la communication; libération de la connexion

call clear failure probability
S: probabilidad de fallo de liberación de la llamada
F: probabilité d'échec de la libération d'une communication

call clearing delay
S: tiempo de liberación de la llamada
F: temps de libération

call collision at the DTE/DCE interface
S: colisión de llamadas en el interfaz ETD/ETCD
F: collision d'appel à l'interface ETTD/ETCD

call-confirmation signal
S: señal de confirmación de llamada
F: signal de confirmation d'appel

call congestion
S: congestion de llamadas
F: encombrement d'appel

call-connected signal
S: señal de comunicación establecida
F: signal de communication établie

call control procedure
S: procedimiento de control de la llamada
F: procédure de commande d'appel

call demand
S: demanda de llamada
F: demande d'appel

call establishment
S: establecimiento de la comunicación
F: établissement de l'appel

call establishment; connection establishment
S: establecimiento de llamada; compleción de llamada; establecimiento de conexión
F: établissement de l'appel; établissement de la connexion

call-failure signal
S: señal de llamada infructuosa
F: signal d'échec de l'appel

call forwarding busy (CFB)
S: reenvío de llamada en caso de ocupado (RLLO)
F: réacheminement d'appel en cas de numéro occupé (RANO); renvoi d'appel sur occupation (RAO)

call forwarding busy service
S: servicio de reenvío de llamada en caso de ocupado
F: service de prolongement d'appel sur occupation

call forwarding may occur indicator
S: indicador de que puede ocurrir reenvío de llamada
F: indicateur de prolongement d'appel possible

call forwarding no reply (CFNR)
S: reenvío de llamada en caso de ausencia de respuesta (RLLAR)
F: réacheminement d'appel en cas de non-réponse (RANR); renvoi d'appel sur non-réponse (RANR)

call forwarding no reply service
S: servicio de reenvío de llamada en caso de ausencia de respuesta
F: prolongement d'appel sur non réponse

call forwarding unconditional (CFU)
S: reenvío de llamadas incondicional (RLLI)
F: renvoi d'appel sans condition (RASC); réacheminement d'appel sans condition (RASC)

call forwarding unconditional service
S: servicio de reenvío de llamada incondicional
F: service de prolongement d'appel sans condition

call hold
S: retención de llamadas
F: maintien d'appel

call hold service
S: servicio de retención de llamadas
F: service maintien d'appel en mémoire

call identifier
S: identificador de la llamada
F: identificateur de communication

call identity
S: identidad de llamada
F: identité d'appel

call in software; procedure call
S: llamada (en soporte lógico); llamada de procedimiento
F: appel (en logiciel); appel de procédure

call information
S: información de llamada
F: information d'appel

call intent
S: intención de llamada; intento de llamada
F: intention d'appel

call modification completed message (CMC)
S: mensaje modificación de llamada completada (MLC)
F: message de modification d'appel effectuée (MAE)

call modification reject message (CMRJ)
S: mensaje de rechazo de modificación de llamada (RML)
F: message de refus de modification d'appel (MAR)

call modification request message (CMR)
S: mensaje de petición de modificación de llamada (PML)
F: demande de modification d'appel (MAD)

call not accepted signal
S: señal de rechazo de la llamada
F: signal de refus d'appel

call pattern
S: esquema de llamada
F: structure d'appel

call phases (Teletex service)
S: fases de la comunicación (servicio teletex)
F: phases d'une communication (service télétex)

call processing tasks
S: tareas de procesamiento de llamada
F: tâches de traitement des appels

call progress message (CPG)
S: mensaje de progresión de la llamada (PRL)
F: message de progression d'appel (PRG)

call progress signal
S: señal de progresión de la llamada
F: signal de progression de l'appel

call re-direction
S: redireccionamiento de la llamada
F: renvoi d'appel

call reference
S: referencia de llamada
F: référence d'appel

call release delay
S: demora de liberación de la llamada
F: délai de libération de l'appel

call request
S: petición de comunicación
F: demande de communication

call request signal
S: señal de petición de llamada
F: signal de demande d'appel

call rerouting
S: reencaminamiento de llamada
F: réacheminement d'appel

call route
S: ruta de llamada
F: voie d'acheminement d'appel

call routing
S: encaminamiento de la llamada; encaminamiento de llamada
F: acheminement d'appel; acheminement des appels

call set-up
S: establecimiento de la comunicación
F: établissement de la communication

call set up delay
S: retardo de establecimiento de llamada
F: délai d'établissement de l'appel

call set-up delay at a section boundary, B_i
S: tiempo de establecimiento de la llamada en una frontera de sección B_i
F: temps d'établissement d'une communication à une limite de section B_i

call set-up delay between two section boundaries
S: tiempo de establecimiento de la llamada entre dos fronteras de sección
F: temps d'établissement d'une communication entre deux limites de sections

call set-up error probability
S: probabilidad de error de establecimiento de la llamada
F: probabilité d'erreur dans l'établissement d'une communication

call set-up failure probability
S: probabilidad de fallo del establecimiento de la llamada
F: probabilité d'échec dans l'établissement d'une communication

call set-up time
S: tiempo de establecimiento de la comunicación
F: temps d'établissement d'une communication

call-sign; answer-back code
S: distintivo de llamada; señal de identificación; indicativo
F: signal d'identification; indicatif

call spill-over
S: rebasamiento de llamada
F: empiétement de communications

call string
S: cadena de llamada
F: chaîne d'appel

call transfer
S: transferencia de llamadas
F: transfert d'appel

call waiting
S: llamada en espera
F: appel en instance

call waiting services
S: servicios de indicación de llamada en espera
F: services d'appels en instance

call waiting supplementary service
S: servicio suplementario de llamada en espera
F: service supplémentaire d'appel en instance

call waiting tone
S: tono de indicación de llamada en espera
F: tonalité d'appel en attente

called NS-user
S: usuario SR llamado
F: utilisateur du service de réseau appelé

called/calling party address
S: dirección de la parte llamada/llamante
F: adresse du demandé/du demandeur

called party number
S: número de la parte llamada
F: numéro du demandé

called party's category indicator
S: indicador de la categoría de la parte llamada
F: indicateur de catégorie du demandé

called party's status indicator
S: indicador del estado de la parte llamada
F: indicateur d'état de la ligne appelée

called SS-user
S: usuario SS llamado
F: utilisateur du service de session appelé

called TA
S: AT llamado
F: TA appelé

called terminal
S: terminal llamado
F: équipement terminal demandé

called TS-user
S: usuario ST llamado
F: utilisateur du service de transport appelé

caller waiting tone
S: tono de indicación de llamada en espera para el llamante
F: tonalité de demandeur en attente

calling line identification presentation (CLIP)
S: presentación de la identificación de la línea llamante (PILLN)
F: présentation d'identification de la ligne appelante (PILA)

calling line identification restriction (CLIR)
S: restricción de la identificación de la línea llamante (RILLN)
F: restriction d'identification de la ligne appelante (RILA)

calling NS-user
S: usuario SR llamante
F: utilisateur du service de réseau appelant

calling number indication service
S: servicio de indicación del número del abonado que llama
F: service d'indication du numéro du demandeur

calling/called party address
S: dirección de la parte llamante/llamada
F: adresse du demandeur/du demandé

calling party address request indicator
S: indicador de petición de la dirección de la parte llamante
F: indicateur de demande d'adresse du demandeur

calling party address response indicator
S: indicador de respuesta sobre la dirección de la parte llamante
F: indicateur de réponse à une demande d'adresse du demandeur

calling party number
S: número de la parte llamante
F: numéro du demandeur

calling party number incomplete indicator
S: indicador de número de la parte llamante incompleto
F: indicateur de numéro du demandeur incomplet

calling party's category
S: categoría de la parte llamante
F: catégorie du demandeur

calling party's category indicator
S: indicador de la categoría del abonado llamante; indicador de la categoría del abonado que llama
F: indicateur de catégorie du demandeur

calling party's category request indicator
S: indicador de petición de la categoría de la parte llamante
F: indicateur de demande de catégorie du demandeur

calling party's category response indicator
S: indicador de respuesta sobre la categoría de la parte llamante
F: indicateur de réponse à une demande de catégorie du demandeur

calling party's category signals (sent in the forward direction)
S: señales de categoría del abonado que llama (transmitida hacia adelante)
F: signal indiquant la catégorie du demandeur (émis dans le sens: vers l'avant)

calling rate
S: tasa de llamadas
F: taux d'appel

calling signal
S: señal de llamada
F: signal d'appel

calling SS-user
S: usuario SS llamante
F: utilisateur du service de session appelant

calling station response
S: respuesta de la estación llamante
F: réponse du poste d'appel

calling TA
S: AT llamante
F: TA appelant

calling terminal
S: terminal llamante; terminal que llama
F: équipement terminal demandeur

calling terminal
S: terminal llamante
F: équipement terminal demandeur

calling tone
S: tono de llamada
F: tonalité d'appel

calling TS-user
S: usuario ST llamante
F: utilisateur du service de transport appelant

camp-on: connect when free
S: conexión tras liberación
F: attente sur occupation

camp-on with recall
S: conexión tras liberación con rellamada
F: attente sur occupation avec rappel

cancellation (A_{CANC})
S: compensación; cancelación (A_{COMP})
F: annulation (A_{NL})

candidate MSC
S: CCM candidato
F: CCM candidat

capabilities of an IUT
S: capacidades de una RSP
F: capacités d'une IUT

capability
S: capacidad
F: capacité; capabilité d'une entité

capability testing
S: pruebas de aptitud
F: test de capacités

carriage return
S: retroceso del carro
F: retour du chariot

carrier transmission
S: transmisión por portadoras
F: transmission par courants porteurs

case shift
S: cambio de posición; inversión
F: inversion

cataleptic failure
S: fallo cataléptico
F: défaillance cataleptique

category of access
S: categoría de acceso
F: catégorie d'accès

cause value
S: valor de causa
F: valeur de la cause

CCITT service
S: servicio del CCITT
F: service du CCITT

cell
S: célula; celda
F: cellule

central processing unit
S: unidad central de procesamiento
F: unité centrale de traitement

centralized clock interface
S: interfaz de reloj centralizado
F: jonction à horloge centrale; interface à horloge centralisée

centralized multi-endpoint-connection
S: conexión de puntos extremos múltiples centralizada
F: connexion multipoint centralisée

centralized multipoint
S: multipunto centralizado
F: liaisons multipoints centralisées

centred
S: centrado
F: centré

centrex service
S: servicio céntrex
F: service centrex

certificate serial number
S: número secuencial de certificado
F: numéro de série d'utilisateur

certification authority (CA)
S: autoridad de certificación (AC)
F: autorité de certification (CA)

certification path
S: trayecto de certificación
F: itinéraire de certification

CF national number
S: número nacional de UC
F: numéro national de l'UC

CF prefix
S: prefijo de UC
F: préfixe de l'UC

chaining
S: concatenación
F: chaînage

chaining search
S: búsqueda en cadena
F: recherche en chaîne

CHANGE
S: CAMBIAR
F: MODIFICATION

change
S: cambiar
F: modifier

change-over
S: cambio
F: mutation

changeback
S: retorno al enlace de servicio; retorno (al enlace normal)
F: retour sur canal sémaphore normal; retour sur la liaison normale

changeback code
S: código de retorno al enlace de servicio
F: code de retour sur canal sémaphore normal

changed address interception
S: interceptación de cambios de dirección
F: intervention pour transfert d'abonné; intervention pour changement de numéro d'appel

changeover
S: paso a enlace de reserva
F: passage sur canal sémaphore de secours; passage sur liaison de réserve

changeover signal
S: señal de paso a un enlace de reserva
F: signal de commutation sur liaison de réserve

channel; transmission channel
S: canal; canal de transmisión
F: voie; voie de transmission

channel (rate)
S: canal (velocidad)
F: canal (débit)

channel associated signalling
S: señalización asociada al canal
F: signalisation voie par voie

channel definition
S: definición de canal
F: définition de canal

channel definition area
S: área de definición de canal
F: zone de définition de canal

channel gate
S: puerta de canal
F: porte de canal; porte de voie

channel substructure
S: subestructura de canal
F: sous-structure de canal

channel substructure definition
S: definición de subestructura de canal
F: définition de sous-structure de canal

channel substructure diagram
S: diagrama de subestructura de canal
F: diagramme de sous-structure de canal

channel switching
S: conmutación de canales
F: commutation de voies

channel time-slot
S: intervalo de tiempo de canal
F: créneau temporel de voie; intervalle de temps de voie

character
S: carácter
F: caractère

character alignment
S: alineación de caracteres
F: alignement de caractères

character base line
S: línea de base de carácter
F: ligne de base de caractère

character cycle
S: ciclo de carácter
F: cycle de caractère

character fonts
S: tipos de caracteres
F: police de caractères

character format
S: formato de carácter
F: format de caractère

character image
S: imagen de carácter
F: image de caractère

character-interleaved transmission
S: transmisión con entrelazado de caracteres
F: transmission multiplex à caractères entrelacés

character length
S: longitud de carácter
F: longueur de caractère

character mode transmission
S: transmisión en modo carácter
F: transmission en mode caractère

character orientation
S: orientación del carácter
F: orientation de caractère

character path
S: trayecto de caracteres
F: trajet des caractères

character rate
S: velocidad de caracteres
F: rapidité de transfert de caractères

character sequence
S: secuencia de caracteres
F: séquence de caractères

character set
S: juego de caracteres
F: jeu de caractères

character set (in MML)
S: juego de caracteres; conjunto de caracteres (en LHM)
F: ensemble de caractères (en LHM)

character signal
S: señal de carácter
F: signal de caractère

character spacing
S: espaciamiento de caracteres
F: espacement des caractères

character string type
S: tipo characterstring; tipo cadena de caracteres
F: type Chaîne de caractères

character switching
S: conmutación de caracteres
F: commutation de caractères

characteristic
S: característica
F: caractère (statistique)

characteristic distortion
S: distorsión característica
F: distorsion caractéristique

characteristic distortion compensation
S: compensación de distorsión característica
F: compensation de distorsion caractéristique

characteristic frequency
S: frecuencia característica
F: fréquence caractéristique

characters spacing (for constant spacing fonts only)
S: espaciamiento de caracteres (únicamente con tipos de caracteres de espaciamiento constante)
F: espacement des caractères (dans le seul cas de polices de caractères à espacement constant)

charge indicator
S: indicador de tasa
F: indicateur de taxation

charge information message (CRG)
S: mensaje de información de tasación (TAS)
F: message de taxation (TAX)

charge information request indicator
S: indicador de petición de información de tasa
F: indicateur de demande d'informations de taxation (utilisation nationale)

charge information response indicator
S: indicador de respuesta de información sobre la tasa
F: indicateur de réponse à une demande d'informations de taxation (utilisation normale)

chargeable duration; charged duration
S: duración tasable; duración tasada
F: durée taxable; durée taxée

charstring
S: cadena-de-caracteres; charstring
F: chaîne de caractères (charstring)

check bit (CK)
S: bit de control (BC)
F: bit de contrôle (CRT)

check loop
S: bucle de pruebas de continuidad
F: boucle pour essais de continuité; boucle pour contrôle de continuité

check-out time
S: tiempo de verificación (de funcionamiento)
F: temps de vérification (du fonctionnement)

checkpoint
S: punto de comprobación; punto de validación
F: point de repère

child-entry
S: inscripción-vástago
F: child-entry; entrée secondaire

child-operation
S: operación vástago
F: opération fille

child-sequence-number
S: número secuencial de vástago
F: child-sequence-number; numéro d'ordre d'une entrée secondaire

CHILL
S: CHILL
F: CHILL

choice type
S: tipo choice; tipo elección
F: type Choix

chromatic dispersion
S: dispersión cromática
F: dispersion chromatique

chromatic dispersion coefficient
S: coeficiente de dispersión cromática
F: coefficient de dispersion chromatique

circuit; telecommunication circuit
S: circuito; circuito de telecomunicación
F: circuit; circuit de télécommunications

circuit (specific function)
S: circuito (de función determinada)
F: circuit (fonction déterminée)

circuit access points
S: puntos de acceso al circuito
F: points d'accès au circuit

circuit control station
S: estación directora de circuito
F: station directrice de circuit

circuit group
S: haz de circuitos
F: faisceau de circuits

circuit group blocking acknowledgement message (CGBA)
S: mensaje de acuse de bloqueo de grupo de circuitos (ARBG)
F: message d'accusé de réception de blocage de groupe de circuits (BGA)

circuit group blocking message (CGB)
S: mensaje de bloqueo de grupo de circuitos (BGC)
F: message de blocage de groupe de circuits (BLG)

circuit-group-congestion signal
S: señal de congestión en el haz de circuitos
F: signal d'encombrement du faisceau des circuits

circuit group query message (CQM)
S: mensaje de indagación sobre grupo de circuitos (IGC)
F: message d'interrogation de groupe de circuits (IGD)

circuit group query response message (CQR)
S: mensaje de respuesta a indagación sobre grupo de circuitos (RIG)
F: message de réponse à une interrogation de groupe de circuits (IGR)

circuit group reset acknowledgement message (GRA)
S: mensaje de acuse de reinicialización de grupo de circuitos (ARRG)
F: message d'accusé de réception de remise à zéro de groupe de circuits (RZA)

circuit group reset message (GRS)
S: mensaje de reinicialización de grupos de circuitos (RGC)
F: message de remise à zéro de groupe de circuits (RZG)

circuit group supervision message type indicator
S: indicador de tipo de mensaje de supervisión de grupo de circuitos
F: indicateur du type de message de supervision de groupe de circuits

circuit group unblocking acknowledgement message (CGUA)
S: mensaje de acuse de desbloqueo de grupo de circuitos (ARDG)
F: accusé de réception de déblocage de groupe de circuits (DGA)

circuit group unblocking message (CGU)
S: mensaje de desbloqueo de grupo de circuitos (DGC)
F: message de déblocage de groupe de circuits (DBG)

circuit identification code (CIC)
S: código de identificación de circuito (CIC)
F: code d'identification de circuit (CIC)

circuit-mode, alternate speech/64 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito para la transmisión alternada de conversación y 64 kbit/s sin restricciones
F: catégorie de service support structuré à 8 kHz en mode circuit transmettant alternativement de la parole et des signaux à 64 kbit/s non vocaux sans restriction

circuit-mode 2 × 64 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 2 × 64 kbit/s sin restricciones
F: catégorie de service support structuré à 8 kHz en mode circuit à 2 × 64 kbit/s sans restriction

circuit-mode 64 kbit/s, 8 kHz structured bearer service category usable for 3.1 kHz audio information transfer
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 64 kbit/s, utilizable para transferencia de información de audio a 3,1 kHz
F: catégorie de service support structuré à 8 kHz en mode circuit à 64 kbit/s, utilisable pour le transfert d'informations audiofréquence à 3,1 kHz

circuit-mode 64 kbit/s, 8 kHz structured bearer service category usable for speech information transfer
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 64 kbit/s, utilizable para transferencia de información
F: catégorie de service support structuré à 8 kHz en mode circuit à 64 kbit/s, utilisable pour le transfert de signaux de parole

circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 64 kbit/s sin restricciones
F: catégorie de service support structuré à 8 kHz en mode circuit à 64 kbit/s sans restriction

circuit-mode 1920 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 1920 kbit/s sin restricciones
F: catégorie de service support structuré à 8 kHz, sans restriction en mode circuit à 1920 kbit/s

circuit-mode 384 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 384 kbit/s sin restricciones
F: catégorie de service support sans restriction, structuré à 8 kHz en mode circuit à 384 kbit/s

circuit-mode 1536 kbit/s unrestricted, 8 kHz structured bearer service category
S: categoría de servicio portador estructurado a 8 kHz en modo circuito a 1536 kbit/s sin restricciones
F: catégorie de service support structuré à 8 kHz, sans restriction en mode circuit à 1536 kbit/s

circuit section
S: sección de circuito
F: section de circuit

circuit state indicator
S: indicador de estado del circuito
F: indicateur d'état de circuit

circuit sub-control station
S: estación subdirectora de circuito
F: station sous-directrice de circuit

circuit sub-group
S: subhaz de circuitos
F: sous-groupe de circuits; sous-faisceau de circuits

circuit-switched connection
S: conexión conmutada de circuitos
F: liaison commutée

circuit-switched data communication service
S: servicio de comunicación de datos con conmutación de circuitos
F: service de communication de données avec commutation de circuits

circuit-switched data transmission service
S: servicio de transmisión de datos con conmutación de circuitos
F: service de transmission de données à commutation de circuits

circuit switching
S: conmutación de circuitos
F: commutation de circuits

circuit switching exchange; switch (circuit)
S: centro de conmutación de circuitos; conmutador (de circuitos)
F: commutateur de circuits

circuit test access point
S: punto de acceso para las medidas de circuito
F: point d'accès pour les mesures de circuit

circuit transfer mode
S: modo de transferencia circuito; modo de transferencia por circuitos
F: mode de transfert par circuit

circuit validation test (CVT)
S: prueba de validación del circuito (PVC)
F: essai de validation d'un circuit (EVC)

circular routing
S: encaminamiento circular
F: acheminement circulaire

CL channel
S: canal CL
F: canal CL

cladding
S: revestimiento
F: gaine

cladding mode stripper
S: supresor de modos de revestimiento
F: suppresseur de mode de gaine

cladding surface
S: superficie del revestimiento
F: surface de la gaine

cladding surface centre
S: centro de la superficie del revestimiento
F: centre de surface de la gaine

cladding surface diameter
S: diámetro de la superficie del revestimiento
F: diamètre de la surface de la gaine

clarifying text
S: texto aclaratorio
F: texte explicatif

class A function; MML function
S: función de clase A; función LHM
F: fonction de la classe A; fonction LHM

class B function
S: función de clase B
F: fonction de la classe B

class C function
S: función de clase C
F: fonction de la classe C

Class I
S: clase I
F: classe I

Class II
S: clase II
F: classe II

Class III
S: clase III
F: classe III

class of operation
S: clase de operación
F: classe d'opération

class of SCCP service
S: clase de servicio PCCS
F: classe de service SSCS

(user) class of service signal
S: señal de clase de servicio (de usuario)
F: signal de catégorie

classified information
S: información clasificada
F: renseignements classifiés

clear-back signal
S: señal de colgar
F: signal de raccrochage

clear-back signal (sent in the backward direction)
S: señal de colgar (transmitida hacia atrás)
F: signal de raccrochage (émis dans le sens en arrière); signal de raccrochage (émis dans le sens: vers l'arrière)

clear-back signals
S: señales de colgar
F: signaux de raccrochage

clear confirmation delay (CLCD)
S: retardo de confirmación de liberación (RCL)
F: temps de confirmation de libération

clear-forward signal
S: señal de fin (desconexión)
F: signal de fin

clear-forward signal (sent in the forward direction)
S: señal de fin (transmitida hacia adelante)
F: signal de fin (émis dans le sens en avant); signal de fin (émis dans le sens: vers l'avant)

clear indication delay
S: retardo de indicación de liberación
F: temps d'indication de libération

clear request delay (CLRD)
S: retardo de petición de liberación (RPL)
F: temps de demande de libération

clearing signal
S: señal de liberación
F: signal de libération

client
S: cliente
F: client

clipped pel array
S: formación de pels recortada
F: tableau d'éléments d'image découpé

clipping
S: mutilación; recorte
F: mutilation de la parole; découpage

clique; bundle
S: haz; asociación
F: clique; bloc

clock
S: reloj
F: générateur de rythme; générateur d'horloge; horloge

clock control signal
S: señal de control de reloj
F: signal de commande d'horloge

closed area
S: zona cerrada
F: aire fermée

closed-circuit working
S: funcionamiento en circuito cerrado
F: transmission par fermeture de circuit ou par envoi de courant

closed private network
S: red privada cerrada
F: réseau privé fermé

closed user group (CUG)
S: grupo cerrado de usuarios (GCU)
F: groupe fermé d'usagers

closed user group call indicator
S: indicador de llamada de grupo cerrado de usuarios
F: indicateur d'appel de groupe fermé d'usagers

closed user group interlock code
S: código de enclavamiento de grupo cerrado de usuarios
F: code de verrouillage de groupe fermé d'usagers

closed window
S: ventana cerrada
F: fenêtre fermée

coast earth station (CES)
S: estación terrena costera (ETC)
F: station terrienne côtière (STC)

coast earth station test position
S: posición de pruebas de una estación terrena costera
F: position d'essai d'une station terrienne côtière

coast station
S: estación costera
F: station côtière

coast station identity
S: identidad de estación costera
F: identité de la station côtière

code
S: código
F: code

code character
S: carácter de código
F: caractère (télégraphique)

code combination
S: combinación de código
F: combinaison de code

code conversion
S: conversión de código
F: transcodage; conversion de code

code converter
S: convertidor de código; transcodificador
F: transcodeur; convertisseur de code

code dependent channel
S: canal dependiente del código
F: voie dépendante du code

code division
S: división por código
F: répartition en code

code element
S: elemento de código
F: élément de code

code extension
S: extensión de código; ampliación de código
F: extension de code

code extension announcers
S: anunciadores de extensión de código
F: annonceurs d'extensions de code

code independent channel
S: canal independiente del código
F: voie indépendante du code

code table
S: tabla de código
F: tableau de code

code violation
S: violación de código
F: violation du code

code word; PCM word
S: palabra de código; palabra MIC
F: mot de code; mot MIC

codec
S: códec
F: codec

coded character set; code
S: juego de caracteres codificados; código
F: jeu de caractères codés; code

coded inband signalling
S: señalización codificada dentro de banda
F: signalisation dans la bande avec codage

coding attributes
S: atributos de codificación
F: attributs de codage

coding rectangle
S: rectángulo de codificación
F: rectangle de codage

coding standard
S: norma de codificación
F: norme de codage

codirectional interface
S: interfaz codireccional
F: interface codirectionnelle; jonction codirectionnelle

collect calls (prefix 35)
S: llamadas de cobro revertido (prefijo 35)
F: communications payables à l'arrivée (préfixe 35)

collection charge
S: tasa de percepción
F: taxe de perception

co-located exchange concentrator
S: concentrador de central local
F: concentrateur de central local

colour
S: color
F: couleur

combined delivery/non-delivery notification (CN)
S: notificación combinada de entrega/no entrega (CN)
F: notification mixte de remise ou non-remise (NM)

combined link set
S: conjunto combinado de enlaces
F: faisceau combiné de canaux sémaphores

combined local/transit exchange
S: central combinada local/de tránsito
F: centre mixte urbain et de transit

combined loss (A_{COM})
S: atenuación combinada (A_{COMB})
F: affaiblissement combiné (A_{COM})

comfort tone
S: tono de paciencia
F: tonalité de file d'attente

command
S: instrucción (de control); instrucción; orden
F: commande

command (in MML)
S: instrucción; orden; comando (en LHM)
F: commande (en LHM)

command code
S: código de instrucción
F: code de commande

command entry sequence
S: secuencia de introducción de instrucción
F: séquence d'introduction de commande

command identifier (CI); response identifier (RI)
S: identificador de instrucción (II); identificador de respuesta (IR)
F: identificateur de commande (IC); identificateur de réponse (IR)

command language
S: lenguaje de instrucciones; lenguaje de órdenes
F: langage de commande

command reference
S: referencia de instrucción
F: référence de commande

command sequence number
S: número secuencial de instrucción
F: numéro de séquence de commande

comment
S: comentario
F: commentaire

comment (in MML)
S: comentario (en LHM)
F: commentaire (en LHM)

comment (in SDL)
S: comentario (en LED)
F: commentaire (en LDS)

commissioning objective
S: objetivo de puesta en servicio inicial
F: objectif pour la mise en service

commissioning tests (prefix 92)
S: pruebas de puesta en servicio (prefijo 92)
F: essais de mise en service (préfixe 92)

common channel exchange
S: central de canal común
F: centre utilisant un système de signalisation sur voie commune

common channel exchange, first
S: central de canal común, primera
F: centre utilisant un système de signalisation sur voie commune, premier

common channel exchange, intermediate
S: central de canal común, intermedia
F: centre utilisant un système de signalisation sur voie commune, intermédiaire

common channel exchange, last
S: central de canal común, última
F: centre utilisant un système de signalisation sur voie commune, dernier

common channel signalling
S: señalización por canal común
F: signalisation sur voie commune; signalisation par canal sémaphore

common name
S: nombre común
F: nom courant

common textual grammar
S: gramática textual común
F: grammaire textuelle commune

commonality
S: comunidad de diseño
F: communauté de conception

communicated text area
S: zona de texto comunicado
F: zone du texte communiqué

communication
S: comunicación
F: communication

communication capability
S: capacidad de comunicación
F: capacité de communication

communication configuration
S: configuración de la comunicación
F: configuration de la communication

communication path
S: trayecto de comunicación
F: trajet de communication

compandor advantage
S: ventaja de un compansor
F: avantage du compresseur-extenseur

comparability (of results)
S: comparabilidad (de resultados)
F: comparabilité (des résultats)

compare
S: comparar
F: comparaison

compatibility
S: compatibilidad
F: compatibilité

compelled signalling (general sense)
S: señalización de secuencia obligada (sentido general)
F: signalisation asservie

compelled signalling; fully compelled signalling; continuous compelled signalling
S: señalización de secuencia obligada; totalmente obligada; señalización de secuencia continuamente obligada
F: signalisation asservie; signalisation entièrement asservie; signalisation continuellement asservie

compensation for frequency drift
S: compensación de deriva de frecuencia
F: compensation de la dérive de fréquence

compiler; compiling program
S: compilador; programa compilador
F: compilateur

complete fault; function preventing fault
S: avería completa
F: panne complète

complete generator set
S: conjunto generador completo
F: ensemble complet générateur

complete interface between a Base Station (BS) and its associated Mobile Stations (MS)
S: interfaz completo entre un estación base (EB) y sus estaciones móviles (EM) asociadas
F: interface complète entre une station de base (SB) et ses stations mobiles associées (SM)

complete loopback
S: bucle completo
F: bouclage complet; boucle complète

complete telegraph channel
S: canal telegráfico completo
F: voie télégraphique complète

complete valid input signal set
S: conjunto completo de señales de entrada válidas
F: ensemble complet de signaux d'entrée valides

completed call attempt; effective call attempt
S: tentativa de llamada completada; tentativa de llamada eficaz
F: tentative d'appel ayant abouti; tentative d'appel efficace

completion of calls to busy subscribers service
S: servicio de compleción de llamadas a abonado ocupado
F: service d'aboutissement d'appels adressés à des abonnés occupés

completion ratio
S: relación respuesta/toma; tasa de compleción; tasa de eficacia
F: taux d'efficacité

compliance test
S: prueba de conformidad
F: essai de conformité

component
S: componente
F: composant

component correlation
S: correlación de componentes
F: corrélation de composants

component type
S: tipo componente
F: type composant

composite component
S: componente compuesto
F: composant composite

composite layout object
S: objeto de disposición compuesto
F: objet physique composite; objet de mise en page composite

composite logical object
S: objeto lógico compuesto
F: objet logique composite

composite loss or gain
S: pérdida Q compuesta; ganancia compuesta
F: affaiblissement composite; gain composite

composite part
S: parte compuesta
F: partie composite

compound parameter argument
S: argumento de parámetro compuesto
F: argument de caractère composé

compression
S: compresión
F: compression

computer language; machine language
S: lenguaje de computador; lenguaje de máquina
F: langage-machine

concatenation
S: concatenación
F: concaténation

concealment
S: ocultación
F: masquage

concentration (in a switching stage)
S: concentración (en una etapa de conmutación)
F: concentration (dans un étage de commutation)

concentrator; digital concentrator
S: concentrador; concentrador digital
F: concentrateur; concentrateur numérique

concrete grammar
S: gramática concreta
F: grammaire concrète

concrete graphical grammar
S: gramática gráfica concreta
F: grammaire graphique concrète

concrete graphical syntax
S: sintaxis gráfica concreta
F: syntaxe graphique concrète

concrete syntax
S: sintaxis concreta
F: syntaxe concrète

concrete textual syntax
S: sintaxis textual concreta
F: syntaxe textuelle concrète

concurrent
S: concurrente
F: simultanée

condition
S: condición
F: condition

conditional (parameter)
S: condicional (parámetro)
F: paramètre conditionnel

conditional C component
S: componente condicional (C)
F: conditional C component; élément conditionnel (C)

conditional expression
S: expresión condicional
F: expression conditionnelle

conducted conference
S: conferencia dirigida
F: conférence dirigée

conference
S: conferencia
F: conférence

conference call
S: comunicación conferencia
F: communication de conférence

conference call services
S: servicio de comunicación pluripartita; servicio o de conferencia múltiple
F: service de communication conférence

conference calling
S: comunicación de conferencia
F: communication conférence

conference conductor
S: director de la conferencia
F: président de la conférence

conference repeater
S: repetidor para conferencias
F: translation pour conférence

confidence coefficient; confidence level
S: coeficiente de confianza; nivel de confianza
F: niveau de confiance

confidence interval
S: intervalo de confianza
F: intervalle de confiance

confidence limit
S: límite de confianza
F: limite de confiance

confirm (primitive)
S: confirmación (primitiva)
F: confirmation (primitive)

confirmation of clearing signal
S: señal de confirmación de liberación
F: signal de confirmation de libération

confirmation time, T_c
S: tiempo de confirmación, T_c
F: temps de confirmation, T_c

confirmed-service
S: servicio confirmado
F: service confirmé

conformance assessment process
S: proceso de evaluación de conformidad
F: évaluation de conformité

conformance log
S: registro de conformidad
F: journal de conformité

conformance test suite
S: serie de pruebas de conformidad
F: suite de tests de conformité

conformance testing
S: prueba de conformidad
F: test de conformité

conforming implementation
S: realización conforme
F: réalisation conforme

confusion message (CFN)
S: mensaje de confusión (CFN)
F: message d'incohérence (ICO)

confusion signal
S: señal de confusión
F: signal de confusion

congestion tone
S: tono de congestión
F: tonalité d'encombrement

CONNECT
S: CONECTAR
F: CONNEXION

connect
S: conectar
F: connect

connect message (CON)
S: mensaje de conexión (CNX)
F: message de connexion (CON)

connect seizing signal; (sent in the forward direction)
S: señal de toma (transmitida hacia adelante)
F: signal de prise (émis dans le sens: vers l'avant)

connected line identification presentation (COLP)
S: presentación de la identificación de la línea conectada (PILC)
F: présentation d'identification de la ligne connectée (PILC)

connected line identification restriction (COLR)
S: restricción de la identificación de la línea conectada (RILC)
F: restriction d'identification de la ligne connectée (RILC)

connected number
S: número conectado
F: numéro connecté

connection
S: conexión; cadena de conexión
F: connexion; chaîne de connexion

(complete) connection
S: conexión completa; cadena de conexión completa
F: chaîne de connexion complète; (chemin de) communication

connection accessibility
S: accesibilidad de una conexión
F: accessibilité (d'une connexion)

connection attribute; ISDN connection attribute
S: atributo de conexión; atributo de conexión de RDSI
F: attribut de connexion; attribut de connexion RNIS

connection configuration
S: configuración de la conexión
F: configuration de la connexion

connection confirm (CC)
S: confirmación de conexión (CC)
F: confirmation de connexion (CCO)

connection control protocol; information transfer coding/protocol
S: protocolo de control de la conexión; protocolo/codificación de transferencia de información
F: protocole de commande de connexion; codage/protocole de transfert d'information

connection element; ISDN connection element
S: elemento de conexión; elemento de conexión de RDSI
F: élément de connexion; élément de connexion RNIS

connection end-point
S: punto extremo de conexión
F: point terminal de connexion

connection identification
S: identificación de conexión
F: identification de connexion

(complete) connection in telecommunication
S: conexión completa; cadena de conexión completa (en telecomunicaciones)
F: chaîne de connexion complète; (chemin de) communication

connection integrity for telephone service
S: integridad de una conexión para el servicio telefónico
F: intégrité des communications pour le service téléphonique

connection-oriented network service
S: servicio de red con conexión
F: service de réseau en mode connexion

connection pattern
S: esquema de conexión
F: structure de connexion

connection refused (CREF)
S: conexión rechazada (CRCH)
F: refus de connexion (RFC)

connection release delay
S: retardo de liberación de conexión
F: délai de libération de la connexion

connection request (CR)
S: petición de conexión (PC)
F: demande de connexion (DCO)

connection retainability
S: retenibilidad (de una conexión)
F: continuabilité (d'une chaîne de connexion)

connection section
S: sección de conexión
F: section de connexion

connection set-up delay at a single connection element boundary, B_i
S: retardo de establecimiento de la conexión en una sola frontera de elemento de conexión, B_i
F: temps d'établissement de connexion à une seule limite d'un élément de connexion B_i

connection set-up delay between two connection element boundaries
S: retardo de establecimiento de conexión entre dos fronteras de elemento de conexión
F: temps d'établissement de connexion entre deux limites d'éléments de connexion

connection through an analogue international exchange
S: conexión a través de una central analógica internacional
F: connexion à travers un commutateur international analogique

connection through an exchange
S: conexión a través de una central
F: connexion à travers un central

connection type, ISDN connection type
S: tipo de conexión; tipo de conexión de RDSI
F: type de connexion; type de connexion RNIS

connectionless network service
S: servicio de red sin conexión
F: service de réseau en mode sans connexion

connectionless service
S: servicio sin conexión
F: service sans connexion

connectionless (service)
S: sin conexión (servicio)
F: sans connexion (service)

connectivity rules
S: reglas de conectividad
F: règles de connectivité

connector
S: conector
F: connecteur

connector (in SDL)
S: conector (en LED)
F: connecteur (en LDS)

consistent partitioning subset
S: subconjunto de partición consistente
F: sous-ensemble de subdivision cohérent

consistent refinement subset
S: subconjunto de refinamiento consistente
F: sous-ensemble de raffinement cohérent

constant failure intensity period
S: periodo de intensidad de fallos constante
F: période d'intensité constante de défaillance

constant failure rate period
S: periodo de tasa de fallos constante
F: période de densité constante de défaillance; période de taux constant de défaillance

constant spacing
S: espaciamiento constante
F: espacement constant

constituent
S: constituyente
F: constituant

constructed encoding
S: codificación construida
F: codage constructeur

consumer's risk (point)
S: (punto de) riesgo del consumidor
F: (point du) risque du client

content
S: contenido
F: contenu

content architecture
S: arquitectura de contenido
F: architecture de contenu

content architecture class
S: clase de arquitectura de contenido
F: classe d'architectures de contenu

content architecture level
S: nivel de arquitectura de contenido
F: niveau d'architecture du contenu

content editing process
S: proceso de edición de contenido
F: processus d'édition de contenu

content element
S: elemento de contenido
F: élément de contenu

content generator
S: generador de contenido
F: générateur de contenu

content identifier – logical content identifier – layout
S: identificador de contenido – lógico identificador de contenido – de disposición
F: identificateur logique de contenu; identificateur de contenu

content information
S: información de contenido
F: information de contenu

content layout process
S: proceso de disposición de contenido
F: processus de formatage de contenu; processus de mise en page de contenu

content-length
S: longitud del contenido
F: content-length; longueur du contenu

content portion
S: porción de contenido
F: portion de contenu

content portion description
S: descripción de porción de contenido
F: description de la portion de contenu

content portions
S: porciones de contenido
F: portions de contenu

content-returned
S: contenido devuelto
F: content-returned; contenu renvoyé

content type
S: tipo de contenido
F: type de contenu

contents octets
S: octetos de contenido
F: octets de contenu

context prefix
S: prefijo de contexto
F: préfixe de contexte

continental circuit
S: circuito continental
F: circuit continental

continental connection
S: conexión continental
F: communication continentale

continental exchange
S: central continental
F: centre continental

continuation character
S: carácter de continuación
F: caractère suite

continuity check
S: prueba de continuidad; verificación de continuidad
F: contrôle de continuité; essai de continuité

continuity check indicator
S: indicador de prueba de continuidad
F: indicateur de contrôle de continuité

continuity check message
S: mensaje de prueba de continuidad
F: message de contrôle de continuité

continuity check request message (CCR)
S: mensaje de petición de prueba de continuidad (PPC)
F: message de demande de contrôle de continuité (CCD)

continuity check transceiver
S: transmisor receptor para pruebas de continuidad; transceptor para pruebas de continuidad
F: émetteur-récepteur pour essais de continuité

continuity check transponder
S: transpondedor para pruebas de continuidad; transmisor-respondedor para pruebas de continuidad
F: répondeur pour contrôle de continuité

continuity indicator
S: indicador de continuidad
F: indicateur de continuité

continuity message (COT)
S: mensaje de continuidad (CON)
F: message de contrôle de continuité (CCP)

continuity signal
S: señal de continuidad
F: signal de continuité

continuous checking
S: comprobación continua
F: contrôle continu

continuous signal
S: señal continua
F: signal continu

contradirectional interface
S: interfaz contradireccional
F: interface contradirectionnelle; jonction contradirectionnelle

contribution; contribution application
S: contribución; aplicación de contribución
F: contribution

control
S: control
F: commande

control channel
S: canal de control
F: voie de commande

control channel; C-channel
S: canal de control; canal C
F: canal de commande; canal C

control character
S: carácter de control; carácter de mando
F: caractère de commande

control circuit
S: circuito de control; circuito de conversación; circuito de órdenes
F: circuit de conversation; circuit de commande

control equipment
S: equipo de control
F: équipement de commande

control flow diagram
S: diagrama de flujo de control
F: diagramme de liaison de contrôle

control function
S: función de control
F: fonction de commande

control key
S: tecla de control
F: touche de commande

control procedure
S: procedimiento de control
F: procédure de commande

control signalling rate
S: velocidad de señalización de control
F: débit de la signalisation de commande

control station
S: estación directora
F: station directrice

controlled maintenance
S: mantenimiento dirigido
F: maintenance dirigée

controlled rerouting
S: reencaminamiento controlado
F: retour sous contrôle sur route normale

controlled slip
S: deslizamiento controlado
F: glissement commandé

controlled station
S: estación controlada
F: station commandée

controlling exchange
S: central directora
F: centre directeur

controlling operator
S: operador director; o controlador
F: opérateur directeur; opératrice directrice

controlling station (on a circuit)
S: estación directora (de un circuito)
F: station directrice (sur un circuit)

convenor
S: convocador
F: organisateur

conventional degree of distortion
S: grado convencional de distorsión
F: degré conventionnel de distorsion

convergence
S: convergencia
F: convergence

convergence protocol
S: protocolo de convergencia
F: protocole de convergence

convergence time
S: tiempo de convergencia
F: temps de convergence

conversation time
S: duración de conferencia
F: durée de conversation

conversational mode
S: modo conversacional
F: mode dialogué

conversational service
S: servicio conversacional
F: service conversationnel

conversion
S: conversión
F: conversion

conversion facility (CF)
S: unidad de conversión (UC)
F: unité de conversion (UC)

converted EITs
S: TIC convertidos
F: converted EITs; EIT converti

coordinated test method
S: método de prueba coordinada
F: méthode de test coordonnée

Coordinated Universal Time (UTC)
S: Tiempo Universal Coordinado (UTC)
F: Temps Universel Coordonné (UTC)

copy information
S: información copia
F: information dupliquée

core
S: núcleo
F: cœur

core area
S: superficie del núcleo
F: zone du cœur

core centre; cladding centre
S: centro del núcleo; centro del revestimiento
F: centre du cœur (de la gaine)

core/cladding concentricity error
S: error de concentricidad del núcleo/revestimiento
F: erreur de concentricité cœur/gaine

core diameter; cladding diameter
S: diámetro del núcleo; diámetro del revestimiento
F: diamètre du cœur (de la gaine)

core diameter deviation; cladding diameter deviation
S: desviación del diámetro del núcleo; deviación del diámetro del revestimiento
F: écart sur le diamètre du cœur (de la gaine)

core tolerance field; cladding tolerance field
S: campo de tolerancia del núcleo; campo de tolerancia del revestimiento
F: champ de tolérance du cœur (de la gaine)

corrected equivalent resistance error
S: error de resistencia equivalente corregido
F: écart équivalent corrigé

corrected reference equivalents
S: equivalentes de referencia corregidos (ERC)
F: équivalents de référence corrigés (ERC)

correction character
S: carácter de corrección
F: caractère de correction

corrective maintenance; repair
S: mantenimiento correctivo; reparación
F: maintenance corrective; réparation; dépannage

correspondent (N)-entities
S: entidades (N) interlocutoras
F: entités (N) correspondantes

country code
S: indicativo de país
F: indicatif de pays

country-code indicator
S: indicador del indicativo de país
F: indicateur d'indicatif de pays

country-code indicator; echo-suppressor indicator (sent in the forward direction)
S: indicación de indicativo de país; indicación (transmitida hacia adelante)
F: indicateurs d'indicatifs de pays et de suppresseur d'écho (émis dans le sens: vers l'avant)

country name
S: nombre de país
F: nom de pays

coupled reperforator and tape reader; fully automatic reperforator transmitter distributor (FXRD)
S: reperforador y lector de cinta acoplados
F: réémetteur à bande perforée (à lecture complète); réémetteur FRXD

coupling
S: acoplamiento
F: couplage

CREATE
S: CREAR
F: CRÉATION

create
S: crear
F: créer

create line area
S: área de línea de crear
F: zone de ligne de création

create request
S: petición de crear
F: demande de création

creation-time
S: hora de creación
F: creation-time; date-heure de création

credit
S: crédito
F: crédit; indicateur de crédit

credit card calls (prefix 36)
S: llamadas con tarjeta de crédito (prefijo 36)
F: communications payables par carte de crédit (préfixe 36)

critical defect
S: defecto crítico
F: défaut critique

critical defective item
S: elemento defectuoso crítico
F: défectueux critique

critical failure
S: fallo crítico
F: défaillance critique

critical fault
S: avería crítica
F: panne critique

critical region
S: región crítica
F: région critique

critical state
S: estado crítico
F: état critique

critical values
S: valores críticos
F: valeurs critiques

cross-exchange check (cross-office)
S: verificación a través de la central
F: vérification du trajet dans le central

cross-office check
S: verificación a través de la central; prueba a través de la central; prueba de continuidad a través de una central; verificación de continuidad a través de una central
F: vérification de la voie de conversation dans le central (le centre); contrôle de continuité à travers un commutateur

cross-office (transit) delay
S: retardo de tránsito a través de la central; tiempo (de tránsito) a través de la central
F: temps (de transit) dans le commutateur

cross-office transfer time T_{cu}
S: tiempo de transferencia a través de la central T_{cu}
F: temps de traversée d'un commutateur T_{cu}

cross reference
S: referencia recíproca
F: référence croisée

crossbar switch
S: conmutador de barras cruzadas
F: commutateur crossbar

crossbar system
S: sistema de barras cruzadas
F: système automatique «crossbar»

crosstalk
S: diafonía
F: diaphonie

cryptographic system; cryptosystem
S: sistema criptográfico; criptosistema
F: système cryptographique

current layout position
S: posición de disposición vigente
F: position physique courante; position de mise en page courante

current turnoff time
S: tiempo de corte de la corriente
F: temps de rétablissement

cursor
S: cursor
F: curseur

cursor control functions
S: funciones de control de cursor
F: fonctions de commande du curseur

cursor off (COF)
S: cursor inactivo (COF)
F: curseur arrêté (COF)

cursor on (CON)
S: cursor activo (CON)
F: curseur en marche (CON)

customer
S: cliente
F: client

customer dialled operator assisted call service
S: asistencia de operadora en comunicaciones establecidas por el abonado
F: communication établie par l'abonné et assistée par une opératrice

customer equipment
S: equipo del cliente
F: équipement d'abonné

customer recorded information service
S: servicio de información grabada por el abonado
F: service particulier d'information enregistrée

cut-off wavelength
S: longitud de onda de corte
F: longueur d'onde de coupure

cyclic distortion
S: distorsión cíclica
F: distorsion cyclique

cyclic redundancy check; cyclic redundancy procedure
S: verificación por redundancia cíclica (procedimiento de)
F: contrôle de redondance cyclique; procédure de redondance cyclique

D

dash (in Morse code)
S: raya (en código Morse)
F: trait (en code Morse)

data
S: datos
F: données utilisateur

data acknowledgement (AK)
S: acuse de recibo de datos (AC)
F: accusé de réception de données (ARD)

data activity ratio
S: factor de actividad de los datos
F: taux d'activité des données

data carrier failure detector
S: detector de interrupción de la portadora de datos
F: détecteur d'interruption de la porteuse de données

data channel
S: canal de datos
F: voie de données

data channel, analogue
S: canal de datos, analógico
F: voie de données (analogique)

data channel, digital
S: canal de datos, digital
F: voie de données (numérique)

data channel failure detector
S: detector de interrupción del canal de datos
F: détecteur d'interruption de la voie de données

data channel propagation time (T_p)
S: tiempo de propagación del canal de datos (T_p)
F: temps de propagation sur la voie de données (T_p)

data channel propagation time T_p
S: tiempo de propagación del canal de datos T_p
F: temps de propagation sur la voie de données, T_p

data-circuit
S: circuito de datos
F: circuit de données

data circuit terminating equipment (DCE)
S: equipo de terminación del circuito de datos (ETCD)
F: équipement de terminaison du circuit de données; ETCD

data communication
S: comunicación de datos
F: communication de données

data communications function (DCF) block
S: bloque de funciones de comunicaciones de datos (FCD)
F: bloc de fonction de communication de données (FCD)

data communications network (DCN)
S: red de comunicaciones de datos (RCD)
F: réseau de communication de données (RCD)

data concentrator
S: concentrador de datos
F: concentrateur de données

data country code
S: indicativo de país para datos
F: indicatif de pays pour la transmission de données

data form 1 (DT1)
S: forma de datos 1 (DT 1)
F: données de type 1 (DT1)

data form 2 (DT2)
S: forma de datos 2 (DT 2)
F: données de type 2 (DT2)

data link
S: enlace de datos
F: liaison de données

data-link-connection
S: conexión de enlace de datos
F: connexion de liaison de données

data-link-connection-mode data transmission
S: transmisión de datos con conexión del enlace de datos
F: transmission de données en mode avec connexion sur la liaison de données

data-link-connectionless-mode data transmission
S: transmisión de datos sin conexión del enlace de datos
F: transmission de données en mode sans connexion sur la liaison de données

data network identification code (DNIC)
S: código de identificación de red de datos (CIRD)
F: code d'identification de réseau pour données (CIRD)

data object
S: objeto de datos
F: objet de données

data packet transfer delay
S: tiempo de transferencia de paquetes de datos
F: temps de transfert des paquets de données

data queue freezeout fraction (Data FOF)
S: fracción de exclusión por ocupación de la cola de datos (FEOD)
F: taux de gel dans la file d'attente pour données (TDG données)

data-sensitive fault
S: avería dependiente de los datos
F: panne mise en évidence par les données

data service calls
S: llamadas de servicios de datos
F: communications de données relatives aux services

data set
S: conjunto de datos
F: ensemble de données

data signalling rate
S: velocidad binaria; velocidad de señalización de datos
F: débit binaire

data sink
S: sumidero de datos
F: puits de données

data source
S: fuente de datos
F: source de données

data station
S: estación de datos
F: station de données

data structure
S: estructura de datos
F: structure des données

data terminal equipment (DTE)
S: equipo terminal de datos (ETD)
F: équipement terminal de traitement de données (ETTD)

data transfer
S: transferencia de datos
F: transfert de données

data transfer rate
S: velocidad de transferencia de datos
F: rapidité de transfert de données

data transmission
S: transmisión de datos
F: transmission de données

data transmission relations
S: relaciones de transmisión de datos
F: relations pour la transmission de données

data transmission service
S: servicio de transmisión de datos
F: service de transmission de données

data type
S: tipo de datos
F: type de données

data type definition
S: definición de tipo de datos
F: définition de type de données

Data User Part (DUP)
S: parte usuario de datos (PUD)
F: Sous-Système Utilisateur Données (SSUD)

data user part handling time, T_{hu}
S: tiempo de tratamiento de la parte usuario de datos, T_{hu}
F: temps de traitement pour le Sous-système Utilisateur Données, T_{hu}

data value
S: valor de datos
F: valeur de données

day to busy hour ratio
S: relación del tráfico diario al tráfico en la hora cargada
F: rapport du trafic journalier au trafic à l'heure chargée

dBm0
S: dBm0
F: dBm0

dBm
S: dBm
F: dBm

dBm0p
S: dBm0p
F: dBm0p

dBm0s
S: dBm0s
F: dBm0s

dBr
S: dBr
F: dBr

dBrn
S: dBrn
F: dBrn

dBrs
S: dBrs
F: dBrs

DCME frame
S: trama EMCD
F: trame EMCN

DCME gain (DCMG)
S: ganancia del EMCD (GMCD)
F: gain de l'EMCN (GMCN)

DCME overload (mode)
S: sobrecarga del EMCD (modo de)
F: surcharge EMCN (Mode)

DEACTIVATE
S: DESACTIVAR
F: DÉSACTIVATION

deactivate
S: desactivar
F: désactiver

deactivation
S: desactivación
F: désactivation

dead sector
S: sector inutilizable; sector muerto
F: secteur mort

dead time
S: tiempo muerto
F: temps mort

deblocking
S: desbloqueo
F: dégroupage

decentralized multi-endpoint-connection
S: conexión de puntos extremos múltiples descentralizada
F: connexion multipoint décentralisée

decentralized multipoint
S: multipunto descentralizado
F: liaisons multipoints décentralisées

decimal numeral
S: numeral decimal
F: numéral décimal; nombre décimal

decision
S: decisión
F: décision

decision (in SDL)
S: decisión (en LED)
F: décision (en LDS)

decision area
S: área de decisión
F: zone de décision

decision circuit
S: circuito de decisión
F: circuit de décision

decision instant; decision instant of a digital signal
S: instante de decisión; instante de decisión de una señal digital
F: instant de décision; instant de décision d'un signal numérique

decision value
S: valor de decisión
F: valeur de décision

decoder
S: decodificador
F: décodeur

decoding
S: decodificación
F: décodage

decomposition meta-language; information structure meta-language
S: metalenguaje de descomposición; metalenguaje de estructura de información
F: métalangage de subdivision; métalangage de structure d'information

dedicated circuit (in telegraphy and data transmission)
S: circuito especializado (en telegrafía y transmisión de datos); circuito dedicado (en telegrafía y transmisión de datos)
F: liaison spécialisée (en télégraphie et transmission de données)

default
S: por defecto
F: défaut

default context
S: contexto por defecto
F: contexte par défaut

default option
S: opción por defecto
F: option par défaut

default value
S: valor por defecto
F: valeur par défaut

default value lists
S: listas de valores por defecto
F: listes des valeurs par défaut

defect
S: defecto
F: défaut; faute

defective; defective item
S: defectuoso; elemento defectuoso
F: défectueux; entité défectueuse

deferred maintenance
S: mantenimiento diferido
F: maintenance différée

deferred maintenance alarm (DMA)
S: alarma de mantenimiento diferido (AMD)
F: alarme de maintenance différée (AMD)

defined context set
S: conjunto de contextos definidos
F: ensemble des contextes définis

degraded minute (DM)
S: minutos degradados (MD)
F: minutes dégradées (MD)

degree of gross start-stop distortion
S: grado de distorsión arrítmica global
F: degré de distorsion arythmique global

degree of individual distortion (of a particular significant instant)
S: grado de distorsión individual (de un instante significativo) determinado
F: degré de distorsion individuelle (d'un instant significatif)

degree of isochronous distortion
S: grado de distorsión isócrona
F: degré de distorsion isochrone

degree of standardized test distortion
S: grado de distorsión normalizado de prueba
F: degré de distorsion d'essai normalisé

degree of start-stop distortion
S: grado de distorsión arrítmica
F: degré de distorsion arythmique

degree of synchronous start-stop distortion; degree of start-stop distortion at the actual mean modulation rate
S: grado de distorsión arrítmica en el sincronismo; grado de distorsión en el sincronismo a la velocidad media real de modulación
F: degré de distorsion arythmique au synchronisme; degré de distorsion arythmique à la rapidité réelle moyenne

delay-dialling signal (sent in the backward direction)
S: señal de demora (transmitida hacia atrás)
F: signal invitant à différer la numérotation (émis dans le sens: vers l'arrière)

delay distortion
S: distorsión por retardo
F: distorsion de temps de propagation

delay mode of operation
S: modo de operación con espera (de llamadas)
F: mode d'exploitation avec attente

delayed delivery
S: entrega diferida
F: remise différée

delayed release message (DRS)
S: mensaje de liberación diferida (LID)
F: message de libération différée (LID); message de libération retardée (MLR)

delaying
S: retardar
F: retarder

DELETE
S: BORRAR
F: SUPPRESSION

delete
S: borrar
F: suppression

delete abstract-operation
S: operación abstracta de supresión
F: delete-abstract-operation; opération abstraite suppression

delimiter
S: delimitador
F: délimiteur

delivered duplicate frames
S: tramas entregadas duplicadas
F: trames remises en double

delivered-EITs
S: TIC entregados
F: delivered-EITs; EIT-remis

delivered errored frames
S: tramas entregadas erróneas
F: trames remises erronées

delivered-message entry
S: inscripción de mensaje entregado
F: delivered-message entry; entrée message remis

delivered out-of-sequence frames
S: tramas entregadas fuera de secuencia
F: trames remises hors séquence

delivered-report entry
S: inscripción por informe entregado
F: delivered-report entry; entrée rapport remis

delivery
S: entrega
F: remise

delivery notification (DN)
S: notificación de entrega (NE)
F: notification de remise (NR)

delivery of messages
S: entrega de mensajes
F: remise des messages

delivery report
S: informe de entrega
F: rapport de remise

delta modulation
S: modulación delta
F: modulation delta

demand (communication)
S: por demanda (comunicación)
F: à la demande (communication)

demand operating
S: explotación en servicio rápido
F: exploitation en service rapide

demand service; demand telecommunication service
S: servicio por demanda; servicio de telecomunicación por demanda
F: service à la demande; service de télécommunications à la demande

democratic network; democratic mutually synchronized network
S: red democrática; red democrática mutuamente sincronizada
F: réseau démocratique; réseau à synchronisation mutuelle démocratique

demultiplexer
S: demultiplexor
F: démultiplexeur

demultiplexing
S: demultiplexación; demultiplexión
F: démultiplexage

dependability
S: seguridad de funcionamiento
F: sûreté de fonctionnement

dependent (repeater) station
S: estación telealimentada
F: station téléalimentée; station de répéteurs téléalimentée

dereferencing
S: desreferenciación
F: déréférençage

derived performance parameter
S: parámetro derivado de calidad de funcionamiento
F: paramètre de performance dérivé

descrambler
S: desaleatorizador
F: désembrouilleur

description
S: descripción
F: description

description (in SDL)
S: descripción (en LED)
F: description (en LDS)

descriptor
S: descriptor
F: descripteur

design defect
S: defecto de diseño
F: défaut de conception

design failure
S: fallo de diseño
F: défaillance de conception

design fault
S: avería de diseño
F: panne de conception

design objective
S: objetivo de diseño
F: objectif pour les projets

designation method
S: método con designación
F: méthode avec désignation

destination
S: destino
F: destination

destination code
S: código de destino
F: code télex de destination

destination country (or Administration)
S: país (o Administración) de destino
F: pays (ou Administration) de destination

destination identifier
S: identificador de destino
F: identificateur de destination

destination indicator (public telegram)
S: indicador de destino (telegrama público)
F: indicateur de destination (télégramme public)

destination network (DN) code
S: indicativo de red de destino (RD)
F: indicatif de réseau de destination (RD)

destination node
S: nodo destino
F: nœud de destination

destination PDN
S: RPD de destino
F: RPD de destination

destination point (signalling-)
S: punto de destino (de la señalización)
F: point sémaphore de destination

destination point code (DPC)
S: código del punto de destino (CPD)
F: code du point de destination (CPD)

destination prologue
S: prólogo de destino
F: prologue de destination

destination SFU
S: UAR de destino
F: UER de destination

destruction characteristic
S: característica de destrucción
F: conditions de destruction

destructive
S: destructivo
F: destructif

detection time, T_1
S: tiempo de detección, T_1
F: temps de détection, T_1

determinate fault
S: avería clara; avería determinable
F: panne franche

determination test
S: prueba de determinación
F: essai de détermination

deterministic; ATM deterministic transfer mode
S: determinístico; modo de transferencia determinístico MTA
F: mode de transfert asynchrone déterministe

device control
S: instrucción de dispositivo; mando de dispositivo
F: commande d'appareil (auxiliaire)

device start (DST)
S: arranque de dispositivo (DST)
F: mise en marche dispositif (DST)

device stop (DSP)
S: detención de dispositivo (DSP)
F: arrêt dispositif (DSP)

device wait (DW)
S: espera de dispositivo (DW)
F: dispositif en attente (DW)

diagnostic
S: diagnóstico
F: diagnostic

diagnostic code in Recommendation X.25
S: código de diagnóstico de la Recomendación X.25
F: code de diagnostic dans la Recommandation X.25

diagram
S: diagrama
F: diagramme

dial selection (in telegraph)
S: selección por disco (en telegrafía); marcación por disco (en telegrafía)
F: numérotation au cadran (en télégraphie)

dial tone
S: tono de invitación a marcar
F: tonalité de numérotation

dial-tone delay
S: demora del tono de invitación a marcar; periodo de espera del tono de invitación a marcar
F: durée d'attente de tonalité

dialling mistake probability
S: probabilidad de error de marcación
F: probabilité d'erreur de numérotation

dialling-time
S: tiempo de marcación
F: durée de numérotation

dialogue
S: diálogo
F: dialogue

dialogue element
S: elemento de diálogo
F: élément de dialogue

dialogue procedure
S: procedimiento de diálogo
F: procédure de dialogue

dialogue procedure; dialogue session
S: procedimiento de diálogo; diálogo; sesión
F: procédure de dialogue; dialogue; session

diary service
S: servicio de agenda
F: service de rappel de date

DIB fragment
S: fragmento de base de información de la guía (BIG)
F: fragment de base de données de l'annuaire (DIB)

dichotomizing search
S: búsqueda dicotómica
F: recherche dichotomique

differential echo suppressor
S: supresor de eco diferencial
F: suppresseur d'écho différentiel

differential pulse code modulation (DPCM)
S: modulación por impulsos codificados diferencial (MICD)
F: modulation par impulsions et codage différentiel (MICD)

differential sensitivity
S: sensibilidad diferencial
F: sensibilité différentielle

digilogue channel
S: canal digi-analógico
F: voie digilogue

digilogue circuit
S: circuito digi-analógico
F: circuit digilogue

digit
S: cifra; dígito
F: chiffre; élément numérique

digit position
S: posición de dígito
F: position d'un élément de signal; position d'un élément numérique

digit rate
S: velocidad digital
F: débit numérique

digit sequence integrity
S: integridad de la secuencia de dígitos
F: intégrité de la suite des éléments numériques

digit time-slot
S: intervalo de tiempo de dígito
F: créneau temporel élémentaire; intervalle de temps pour élément numérique

digital access link
S: enlace de acceso digital
F: liaison d'accès numérique

digital block
S: bloque digital
F: bloc numérique

digital channel; digital transmission channel
S: canal digital; canal de transmisión digital
F: voie numérique; voie de transmission numérique

digital circuit; digital telecommunication circuit
S: circuito digital; circuito de telecomunicación digital
F: circuit numérique; circuit numérique de télécommunications

digital circuit multiplication equipment (DCME)
S: equipo de multiplicación de circuitos digitales (EMCD); equipo digital de multiplicación de circuitos (EDMC)
F: équipement de multiplication de circuit numérique (EMCN)

digital circuit multiplication system (DCMS)
S: sistema de multiplicación de circuitos digitales (SMCD); sistema digital de multiplicación de circuitos (SDMC)
F: système de multiplication de circuit numérique (SMCN)

digital connection
S: conexión digital
F: connexion numérique

digital demultiplexer
S: demultiplexor digital
F: démultiplexeur numérique

digital demultiplexing
S: demultiplexación digital
F: démultiplexage numérique

digital distribution frame
S: repartidor digital
F: répartiteur numérique

digital exchange
S: central digital
F: commutateur numérique; centre numérique

digital filling
S: relleno digital
F: remplissage numérique

digital line link
S: enlace de línea digital; trayecto de línea digital
F: liaison de ligne numérique; conduit de ligne numérique

digital line path
S: trayecto de línea digital
F: conduit de ligne numérique

digital line section
S: sección de línea digital
F: section de ligne numérique

digital line system
S: sistema de línea digital
F: système de ligne numérique

digital link; digital transmission link
S: enlace digital; enlace de transmisión digital; trayecto digital
F: liaison numérique; liaison de transmission numérique; conduit numérique

digital local line
S: línea local digital
F: ligne locale numérique

digital loopback
S: bucle digital
F: bouclage numérique; mise en boucle numérique

digital multiplex equipment
S: equipo múltiplex digital
F: équipement de multiplexage numérique

digital multiplex hierarchy
S: jerarquía de los múltiplex digitales
F: hiérarchie de multiplexage numérique

digital multiplexer
S: multiplexor digital
F: multiplexeur numérique

digital multiplexing
S: multiplexación digital
F: multiplexage numérique

digital network; integrated digital network
S: red digital; red digital integrada
F: réseau numérique; réseau numérique intégré

digital node; digital switching node
S: nodo digital; nodo de conmutación digital
F: point nodal numérique; point nodal de commutation numérique

digital path
S: trayecto digital
F: conduit numérique

digital radio link
S: enlace radiodigital; trayecto radiodigital
F: liaison radioélectrique numérique; conduit radioélectrique numérique

digital radio path
S: trayecto radiodigital
F: conduit hertzien numérique

digital radio section
S: sección radiodigital
F: section radioélectrique numérique; section hertzienne numérique

digital radio system
S: sistema radiodigital
F: système radioélectrique numérique; système hertzien numérique

digital section
S: sección digital
F: section numérique

digital section boundaries
S: fronteras de sección digital
F: frontières de section numérique

digital signal
S: señal digital
F: signal numérique

digital signalling data link
S: enlace de datos de señalización digital
F: liaison sémaphore de données numérique

digital speech interpolation (DSI)
S: interpolación digital de la palabra (IDP)
F: concentration numérique de la parole (CNP)

digital sum
S: suma digital
F: somme numérique

digital sum variation
S: variación de la suma digital
F: variation de la somme numérique

digital switching
S: conmutación digital
F: commutation numérique

digital switching node
S: nodo de conmutación digital
F: nœud de commutation numérique

digital system; digital transmission system
S: sistema digital; sistema de transmisión digital
F: système numérique; système de transmission numérique

digital transmission
S: transmisión digital
F: transmission numérique

digital transmission system
S: sistema de transmisión digital
F: système de transmission numérique

digital transparency
S: transparencia digital
F: transparence numérique

dimensions
S: dimensiones
F: dimensions

direct access; direct access connection element
S: acceso directo; elemento de conexión de acceso directo
F: accès direct; élément de connexion d'accès direct

direct access
S: acceso directo
F: accès sélectif [accès aléatoire]

direct address
S: dirección directa
F: adresse directe

direct current (d.c.) signalling; d.c. signalling
S: señalización en corriente continua; señalización en c.c.
F: signalisation en courant continu

direct current transmission
S: transmisión en corriente continua
F: transmission par courant continu

direct dialling in (DDI)
S: marcación directa de extensiones (MDE)
F: sélection directe d'un poste supplémentaire (SDPS); sélection directe à l'arrivée (SDA)

direct incoming selection
S: selección directa de llegada
F: sélection directe à l'arrivée

direct incoming selection with integrated numbering
S: selección directa de llegada con numeración integrada
F: sélection directe à l'arrivée avec numérotation intégrée

direct incoming selection with two-stage selection
S: selección directa de llegada con marcación bietapa
F: sélection directe à l'arrivée avec numérotation en deux temps

direct information entry
S: introducción directa de información
F: introduction directe d'information

direct outgoing selection
S: selección directa de salida
F: prise directe

direct printer
S: impresor directo
F: récepteur traducteur imprimeur

direct service circuit
S: circuito de servicio directo
F: circuit de service direct

direct submission
S: depósito directo
F: dépôt direct

direct-transit country
S: país de tránsito directo
F: pays de transit direct

direct user
S: usuario directo
F: utilisateur direct

directly powered (repeater) station
S: estación alimentada directamente
F: station à alimentation indépendante; station autoalimentée

directory
S: guía
F: annuaire

directory entry
S: inserción de guía
F: entrée d'annuaire

(directory) entry
S: asiento de la guía
F: entrée (d'annuaire)

directory information base (DIB)
S: base de información de la guía (BIG)
F: base de données de l'annuaire (DIB)

directory information tree (DIT)
S: árbol de información de la guía (AIG)
F: arbre de données de l'annuaire (DIT); arbre d'information de l'annuaire (DIT)

directory inquiry service
S: servicio de información sobre guías telefónicas
F: service de renseignements concernant les listes d'abonnés

directory interrogation
S: interrogación de guía
F: interrogation d'annuaire

directory management domain (DMD)
S: dominio de gestión de guía (DGG)
F: domaine de gestion de l'annuaire (DMD)

directory modification
S: modificación de guía
F: modification d'annuaire

directory name
S: nombre de guía
F: nom d'annuaire

(directory) name
S: nombre (en la guía)
F: nom (d'annuaire)

directory schema
S: esquema de la guía; plan de la guía
F: schéma d'annuaire

directory system agent (DSA)
S: agente de sistema de guía (ASG)
F: agent de système d'annuaire (ASA)

directory system agent (DSA)
S: agentes de sistema de guía (ASG)
F: agent de système d'annuaire (DSA)

(directory) user
S: usuario (de la guía)
F: usager (de l'annuaire)

directory user agent (DUA)
S: agente de usuario de guía (AUG)
F: agent d'usager d'annuaire (AUA)

disabled state; outage
S: estado de incapacidad
F: état d'incapacité

disabled time
S: tiempo de incapacidad
F: temps d'incapacité

discharge current
S: corriente de descarga
F: courant de décharge

discharge current, alternating
S: corriente alterna de descarga
F: courant alternatif de décharge

discharge current, impulse
S: corriente de choque de descarga
F: courant de choc de décharge

discharge voltage
S: tensión de descarga
F: tension de décharge

discharge voltage/current characteristic
S: característica tensión/corriente de descarga
F: caractéristique de la tension de décharge en fonction du courant

DISCONNECT
S: DESCONECTAR
F: DÉCONNEXION

disconnect delay between two connection element boundaries, B_i and B_j
S: retardo de desconexión entre dos fronteras de un elemento de conexión, B_i y B_j
F: temps de déconnexion entre deux limites d'un élément de connexion B_i et B_j

disconnect signal; forward-transfer signal (sent in the forward direction)
S: señal de fin (transmitida hacia adelante)
F: signal de fin (émis dans le sens: vers l'avant)

discretely-timed signal
S: señal discretamente temporizada
F: signal discret; signal temporel discret

disengagement parameters
S: parámetros de abandono; parámetros de desocupación
F: paramètres de retrait

disparity
S: disparidad
F: disparité

display area
S: zona de visualización
F: zone de visualisation

displayed form
S: formulario visualizado
F: formulaire affiché

disrupt
S: quebrantar; disrupción
F: interruption

distinguished name
S: nombre distinguido
F: nom distinctif

distinguished name (of an object)
S: nombre distinguido (de un objeto)
F: nom spécifique (d'un objet)

distinguished value
S: valor distinguido
F: valeur distinctive; valeur spécifique

distortion analyser
S: analizador de distorsión
F: analyseur de distorsion

distortion meter
S: distorsiómetro
F: distorsiomètre

distributed frame alignment signal
S: señal de alineación de trama distribuida
F: signal de verrouillage de trame réparti

distributed name resolution
S: resolución de nombre distribuida
F: résolution répartie du nom

distributed test method
S: método de prueba distribuida
F: méthode de test répartie

distribution; distribution application
S: distribución; aplicación de distribución
F: distribution

distribution cable
S: cable de distribución
F: câble de distribution

distribution frame
S: repartidor
F: répartiteur

distribution function
S: función de distribución
F: fonction de répartition

distribution list (DL)
S: lista de distribución (LD)
F: liste de distribution (LD)

distribution list expansion
S: expansión de una lista de distribución
F: allongement de liste de distribution

distribution list name
S: nombre de lista de distribución
F: nom de liste de distribution

distribution service
S: servicio de distribución
F: service de distribution

distribution service with user individual presentation control
S: servicio de distribución con control de la presentación por el usuario
F: service distribué avec contrôle de présentation par l'usager

distribution service without user individual presentation control
S: servicio de distribución sin control de la presentación por el usuario
F: service distribué sans contrôle de présentation par l'usager

distribution services with user individual presentation control
S: servicios de distribución con control de la presentación por el usuario
F: services de distribution avec commande de présentation par l'usager

distribution services without user individual presentation control
S: servicios de distribución sin control de la presentación por el usuario
F: services de distribution sans commande de présentation par l'usager

DIT structure
S: estructura AIG
F: structure du DIT

DIT structure rule
S: regla de estructura del árbol de información de la guía (AIG)
F: règle de structure de l'arbre d'information de l'annuaire (DIT)

diversion if number busy service
S: servicio de transferencia de llamadas en caso de línea ocupada; transferencia por ocupación
F: service de transfert d'appel en cas de numéro occupé

DLC voice-on ratio
S: factor de activación del control dinámico de carga (CDC) para señales vocales
F: taux de contrôle dynamique de charge (CDC) sur signaux vocaux

do not dereference alias
S: no desreferenciar alias
F: non-franchissement des alias

do not disturb service
S: servicio «no molestar»
F: service «ne pas déranger»

do not use copy
S: no utilizar copia
F: non-utilisation de copie

document
S: documento
F: document

document application profile
S: perfil de aplicación de documento
F: profil d'application d'un document

document architecture
S: arquitectura de documento
F: architecture de document

document architecture class
S: clase de arquitectura de documento
F: classe d'architectures de document

document architecture level
S: nivel de arquitectura de documento
F: niveau de l'architecture d'un document

document body
S: cuerpo de documento
F: corps d'un document

document bulk transfer
S: transferencia de documento en bloque
F: transfert de masse de document

document bulk transfer and manipulation
S: transferencia y manipulación de documento en bloque
F: transfert de masse et manipulation de document

document class
S: clase de documento
F: classe de documents

document class description
S: descripción de clase de documento
F: description de classe de documents

document layout process
S: proceso de disposición de documento
F: processus de formatage d'un document; processus de mise en page d'un document

document layout root
S: raíz de disposición de documento
F: racine physique d'un document; racine de mise en page d'un document

document logical root
S: raíz lógica de documento
F: racine logique d'un document

document manipulation
S: manipulación de documento
F: manipulation de document

document profile
S: perfil de documento
F: profil d'un document

document profile level
S: nivel de perfil de documento
F: niveau du profil d'un document

document transfer and interactive mode
S: modo transferencia de documentos e interactivo
F: transfert de documents et mode interactif

document transfer mode
S: modo transferencia de documentos
F: mode de transfert de documents

documents A through G
S: documentos A a G
F: documents A à G

domain-defined attribute
S: atributo definido por el dominio
F: attribut défini par domaine

dot (in Morse code)
S: punto (en código Morse)
F: point (en code Morse)

double current transmission
S: transmisión a doble polaridad; transmisión por corriente doble
F: transmission par double courant

double-ended synchronization
S: sincronización biterminal
F: synchronisation locale et distante

double phantom circuit
S: circuito superfantasma
F: circuit superfantôme

down state; internal disabled state
S: estado de indisponibilidad; estado de incapacidad interna
F: état d'indisponibilité; état d'incapacité interne

down time
S: tiempo de indisponibilidad
F: temps d'indisponibilité

drawing convention
S: convenio de representación
F: convention de tracé

drift compensation
S: compensación de deriva
F: compensation de dérive

drum factor
S: factor de cilindro
F: facteur de cylindre

DTAM user
S: usuario de TMD
F: utilisateur DTAM

DTE address
S: dirección de ETD
F: adresse d'ETTD

DTE busy
S: ETD ocupado
F: ETTD occupé

DTE controlled not ready
S: ETD no preparado controlado
F: ETTD non prêt commandé

DTE uncontrolled not ready
S: ETD no preparado no controlado
F: ETTD non prêt automatique

DTE/DCE interface
S: interfaz ETD/ETCD
F: interface ETTD/ETCD

dual seizure
S: doble toma; toma simultánea
F: prise simultanée

dual telephone numbers service
S: servicio de duplicidad de números telefónicos
F: service de numéros de téléphone doubles

duplex
S: dúplex
F: duplex; bilatéral simultané

durability
S: durabilidad
F: durabilité

duration
S: duración; duration
F: durée (duration)

duration of a call (conversation time)
S: duración de conferencia
F: durée de la conversation

dynamic conformance
S: conformidad dinámica
F: conformité dynamique

dynamic conformance requirements
S: requisitos de conformidad dinámica
F: conditions de conformité dynamique

dynamic load control (DLC)
S: control dinámico de carga (CDC)
F: contrôle dynamique de charge (CDC)

dynamic multiplex
S: múltiplex dinámico
F: multiplex dynamique

dynamic window control
S: control dinámico de la ventana
F: commande dynamique de la fenêtre

dynamically redefinable character set (DRCS)
S: juego de caracteres dinámicamente redefinibles (JCDR)
F: jeu de caractères dynamiquement redéfinissables (JCDR)

E

ear reference point (ERP)
S: punto de referencia oído (PRO)
F: point de référence oreille (PRO)

earcap reference plane
S: plano de referencia auricular
F: plan de référence écouteur

earcap reference point (ECRP)
S: punto de referencia auricular (PRA)
F: point de référence écouteur (PRE)

earlier transmitted bits
S: bits precedentes transmitidos
F: bits transmis précédemment

early distortion
S: distorsión en adelanto
F: distorsion en avance

early failure period
S: periodo de fallos inicial
F: période initiale de défaillance

earphone coupling loss (L_E)
S: pérdida de acoplamiento del auricular (L_E)
F: affaiblissement de couplage de l'écouteur (L_E)

earth-return double phantom circuit
S: circuito superfantasma con vuelta por tierra
F: (circuit) approprié de fantôme; (circuit) approprié de combiné; circuit télégraphique superfantôme avec retour par la terre

earth-return phantom circuit
S: circuito fantasma con vuelta por tierra
F: circuit approprié; circuit télégraphique fantôme avec retour par la terre

echo
S: eco
F: écho

echo balance return loss
S: atenuación de equilibrado para el eco
F: affaiblissement d'équilibrage pour l'écho

echo cancellation
S: compensación de eco; cancelación de eco
F: annulation d'écho

echo canceller
S: compensador de eco; cancelador de eco
F: annuleur d'écho

echo control device
S: dispositivo de control de eco
F: dispositif de réduction de l'écho

echo control device indicator
S: indicador de dispositivo de protección contra el eco
F: indicateur de suppresseur d'écho

echo curve
S: curva de eco
F: courbe d'écho

echo loss (A_{ECHO})
S: atenuación del eco (A_{ECO})
F: affaiblissement d'écho (A_{ECHO})

echo suppressor
S: supresor de eco
F: suppresseur d'écho

echo suppressor indicator
S: indicador de supresor de eco
F: indicateur de suppresseur d'écho

echometric measurement
S: medición ecométrica
F: mesure échométrique

echoplex mode
S: modo ecoplex
F: mode échoplex

EDIT
S: EDITAR
F: ÉDITION

edit
S: editar
F: éditer

editing
S: edición
F: édition

editing process
S: proceso de edición
F: processus d'édition

effective character rate
S: velocidad efectiva de caracteres
F: cadence utile de transfert

effective data transfer rate
S: velocidad real de transferencia de datos
F: débit effectif du transfert des données

effective duration of a call
S: duración efectiva de una comunicación
F: durée d'une communication

effective margin (of a given apparatus)
S: margen efectivo (de un aparato dado)
F: marge effective (d'un appareil donné)

effective traffic
S: tráfico eficaz
F: trafic efficace

effectively transmitted signals in sound-programme transmission
S: señales efectivamente transmitidas en una transmisión radiofónica
F: signaux effectivement transmis dans une transmission radiophonique

effectiveness (performance)
S: efectividad
F: efficacité

efficiency factor in time
S: factor de eficacia en el tiempo
F: facteur d'efficacité dans le temps

efficiency factor in time (of a transmission with automatic repetition for the correction of errors)
S: factor de eficacia en el tiempo (de una transmisión con corrección de errores por repetición automática; eficacia en el tiempo de una transmisión con corrección de errores por repetición automática
F: facteur d'efficacité dans le temps (d'une transmission avec correction d'erreurs par répétition)

eight (8) kHz integrity
S: integridad a 8 kHz
F: intégrité de 8 kHz

eight (8) kHz integrity with restricted differential time delay (RDTD)
S: integridad a 8 kHz con retardo diferencial restringido (RDR)
F: intégrité de 8 kHz avec temps de propagation différentiel restreint (TPDR)

(electric) circuit
S: circuito (eléctrico)
F: circuit (électrique)

electrical artificial voice
S: voz artificial eléctrica
F: voix artificielle électrique

electrical objective loudness rating (EOLR)
S: índice de sonoridad objetivo eléctrico (ISOE)
F: équivalent objectif électrique pour la sonie (EOES)

element error rate; character error rate
S: tasa de errores en los elementos; tasa de errores en los caracteres
F: taux d'erreurs sur les éléments; taux d'erreurs sur les caractères

element interleaving; character interleaving
S: entrelazado de elementos; entrelazador de caracteres
F: entrelacement par éléments; entrelacement par caractères

element of service
S: elemento de servicio
F: élément de service

element synchronism
S: sincronismo de los elementos
F: synchronisme élémentaire

element synchronization
S: sincronización de los elementos
F: synchronisation élémentaire

elementary cable section
S: sección elemental de cable
F: section élémentaire de câble

elementary echo
S: eco elemental
F: écho élémentaire

elementary maintenance activity
S: acción elemental de mantenimiento
F: opération élémentaire de maintenance

elementary regenerated section
S: sección elemental con regeneración; sección elemental de regeneración
F: section élémentaire régénérée

elementary repeater section
S: sección elemental de repetición
F: section élémentaire amplifiée

elementary repeatered section
S: sección elemental con amplificación
F: section élémentaire amplifiée

embedded testing
S: prueba insertada
F: test encastré

emergency call service
S: servicio de llamadas de emergencia
F: service d'appels d'urgence

emergency changeover
S: paso de emergencia a enlace de reserva
F: passage d'urgence sur canal sémaphore de secours

emergency-load-transfer signal
S: señal de transferencia de tráfico de emergencia
F: signal de transfert d'urgence de la charge

emergency restart
S: rearranque de emergencia
F: remise en fonctionnement d'urgence

emergency routes
S: rutas de emergencia
F: voies de secours

emergency routing
S: encaminamiento de emergencia
F: acheminement de secours

en-bloc signalling
S: señalización en bloque
F: signalisation «en bloc»

enabling condition
S: condición habilitante; condición habilitadora
F: condition de validation

enabling condition area
S: área de condición habilitante; área de condición habilitadora
F: zone de condition de validation

encoded information type (EIT)
S: tipo de información codificada (TIC)
F: type de codage (TC)

encoder
S: codificador
F: codeur

encoding
S: codificación
F: codage

encoding (of a data value)
S: codificación (de un valor de datos)
F: codage (d'une valeur de données)

encoding law
S: ley de codificación
F: loi de quantification

end-aligned
S: alineado al final
F: alignement-fin; aligné sur la fin

end edge
S: borde final
F: limite de fin

end-of-contents octets
S: octetos de fin de contenido
F: octets de fin-de-contenu

end of dialogue
S: fin de diálogo
F: fin de dialogue

end of input indication
S: fin de indicación de entrada
F: fin d'indication d'entrée

end of optional parameters
S: fin de parámetros facultativos
F: fin des paramètres facultatifs

end of output
S: fin de salida
F: fin de sortie

end-of-pulsing (ST) signal
S: señal de fin de numeración (ST o FIN)
F: signal de fin de numérotation (ST)

end-of-pulsing signal (sent in the forward direction)
S: señal de fin de numeración (transmitida hacia adelante)
F: signal de fin de numérotation (émis dans le sens: vers l'avant)

end-of-selection signal
S: señal de fin de selección
F: signal de fin de sélection

end statement
S: sentencia de fin
F: instruction de fin

end system
S: sistema de extremo
F: système d'extrémité

end-to-end call set-up delay
S: tiempo de establecimiento de la llamada de extremo a extremo
F: temps d'établissement d'une communication de bout en bout

end-to-end clear indication delay
S: retardo de indicación de liberación de extremo a extremo
F: temps d'indication de libération de bout en bout

end-to-end communication
S: comunicación de extremo a extremo
F: communication de bout en bout

end-to-end data packet transfer delay
S: tiempo de transferencia de paquetes de datos de extremo a extremo
F: temps de transfert des paquets de données de bout en bout

end-to-end digital leased circuit
S: circuito arrendado digital de extremo a extremo
F: circuit loué numérique de bout en bout

end-to-end information indicator
S: indicador de información de extremo a extremo
F: indicateur d'information de bout en bout

end-to-end method indicator
S: indicador de método de transferencia de extremo a extremo
F: indicateur de méthode de bout en bout

end-to-end signalling
S: señalización de extremo a extremo
F: signalisation de bout en bout

end-user (SCCP)
S: usuario de extremo (PCCS)
F: utilisateur terminal (SSCS)

endpoint identifier (EID)
S: identificador de punto extremo (IDPE)
F: identificateur de point d'extrémité (EID)

endurance test
S: prueba de resistencia
F: essai d'endurance

engaged; busy signal
S: señal de ocupado; señal de ocupación
F: signal d'occupation

engaged test; busy test
S: prueba de ocupación
F: test d'occupation

engineered capacity
S: capacidad proyectada
F: capacité nominale

engineered exchange capacity
S: capacidad de la central establecida en el diseño
F: capacité dimensionnée de commutateur

enhanced-quality television
S: televisión de calidad mejorada
F: télévision de qualité améliorée

enhanced services offered over the existing network
S: servicios mejorados ofrecidos por la red existente
F: amélioration de services offerts sur le réseau existant

enquiry (in a transaction)
S: averiguación; indagación (en una transacción)
F: demande (dans une transaction)

ensemble activity
S: actividad de conjunto
F: activité globale

entity or (N) entity
S: entidad o entidad N
F: entité ou entité (N)

entity class
S: clase de entidad
F: classe d'entité

entry
S: inscripción
F: entry; entrée

entry; directory entry
S: inserción; inserción de guía; asiento; asiento de guía
F: entrée; entrée d'annuaire

entry-information
S: información-asiento
F: entry-information; information d'entrée

entry-information-selection
S: selección-información-inscripción
F: entry-information-selection; sélection d'information d'entrée

entry-status
S: estado-inscripción
F: entry-status; état de l'entrée

entry-type
S: tipo-inscripción
F: entry-type; type d'entrée

enumerated type
S: tipo enumerated; tipo enumerado
F: type Enuméré

envelope
S: sobre
F: enveloppe

environment
S: entorno
F: environnement

environment of a system
S: entorno de un sistema
F: environnement d'un système

equal-length code
S: código de igual longitud
F: code à moments

equation
S: ecuación
F: équation

equipment
S: equipo
F: équipement

equipment identity register
S: registro de identidad del equipo; registro de identidades de equipo
F: enregistreur d'identité d'équipement

equipped channel
S: canal equipado
F: voie équipée

equivalent binary content
S: contenido binario equivalente
F: contenu binaire équivalent

equivalent bit rate
S: velocidad binaria equivalente
F: débit binaire équivalent

equivalent random traffic
S: tráfico aleatorio equivalente
F: trafic équivalent

equivalent resistance error
S: error de resistencia equivalente
F: écart équivalent

equivalent r.m.s. sine wave power of the peak of a multiplex telephone signal
S: potencia equivalente de cresta de una señal múltiplex telefónica
F: puissance équivalente de crête d'un signal téléphonique multiplex

erasure signal
S: señal de borrado
F: signal d'oblitération

erlang
S: erlang
F: erlang

error; digital error
S: error; error digital
F: erreur; erreur numérique

error burst
S: ráfaga de errores
F: paquet d'erreurs

error cause
S: causa de errores
F: raison de l'erreur

error code
S: código de error
F: code d'erreur

error control
S: control de errores; protección contra errores
F: contrôle des erreurs

error control loop
S: bucle de protección contra errores
F: boucle de protection contre les erreurs

error correcting code
S: código corrector de errores
F: code de correction des erreurs

error-correcting DCE
S: equipo de terminación del circuito de datos (ETCD) con corrección de errores
F: équipement terminal de traitement de données de correction d'erreur; ETCD de correction d'erreur

error correction
S: corrección de error
F: correction d'erreur

error correction by detection and repetition (ARQ)
S: corrección de errores por detección y repetición (ARQ)
F: correction d'erreurs par détection et répétition (ARQ)

error detecting code
S: código detector de errores
F: code détecteur d'erreurs

error free seconds (EFS)
S: segundos sin error (SSE)
F: secondes sans erreur (SSE)

error indication
S: indicación de error
F: indication d'erreur

error multiplication
S: multiplicación de errores
F: multiplication d'erreurs

error multiplication factor
S: factor de multiplicación de errores
F: facteurs de multiplication d'erreurs

error of the first kind
S: error de primera clase
F: erreur de première espèce

error of the second kind
S: error de segunda clase
F: erreur de seconde espèce

error performance parameter
S: parámetros de características de error
F: paramètres relatifs à la performance d'erreur

error rate monitor
S: monitor de la tasa de errores
F: appareil de surveillance du taux d'erreur

error ratio
S: tasa de errores
F: taux d'erreur

error spread
S: dispersión de errores
F: étalement d'erreurs; répartition des erreurs

errored seconds
S: segundos con error (SE)
F: secondes erronées (SE)

escape code
S: código de escape
F: code d'échappement

escape indication
S: indicación de escape
F: indication d'échappement

escape sequence
S: secuencia de escape
F: séquence d'échappement

escapement point
S: punto de escape
F: point d'échappement

essential information (of internal automatic observations)
S: información esencial (de las observaciones automáticas internas)
F: informations indispensables (des observations automatiques internes)

establishment of communication
S: establecimiento de la comunicación
F: établissement de la communication

establishment of connection
S: establecimiento de la conexión
F: établissement de la connexion

estimate
S: estimación
F: estimation

estimated ...
S: ... estimado
F: ... estimé

estimation
S: estimación (de parámetros)
F: estimation (de paramètres)

estimator
S: estimador
F: estimateur

event indicator
S: indicador de suceso
F: indicateur d'événement

event presentation restricted indicator
S: indicador de presentación restringida de suceso
F: indicateur de restriction de divulgation d'événement

exchange; switching exchange; switching centre
S: central; central de conmutación; centro de conmutación
F: centre; commutateur; central; centre de commutation; central de commutation

exchange cable
S: cable de central
F: câble de central

exchange call release delay
S: retardo de liberación de la llamada en la central; tiempo de liberación de la comunicación por una central; tiempo de liberación de la llamada por una central
F: délai de libération de la communication; temps de libération de la communication par le central

exchange call set-up delay
S: demora de establecimiento de la comunicación por una central; tiempo de establecimiento de la comunicación por una central
F: durée de sélection d'un commutateur; délai d'établissement de la communication (par le central); temps d'établissement de la communication dans le central

exchange call set-up delay (transit and originating outgoing traffic connections)
S: retardo de establecimiento de la llamada en la central (conexiones de tráfico de tránsito y saliente de origen)
F: temps de sélection du commutateur (connexions du trafic de transit et de départ)

exchange concentrator
S: concentrador de central
F: concentrateur de central

exchange connection
S: conexión de central
F: connexion de commutateur

exchange control system
S: sistema de control de la central
F: système de commande du commutateur

exchange function
S: función de central
F: fonction de commutateur

exchange function set
S: conjunto de funciones de central
F: ensemble de fonctions de commutateur

exchange group
S: grupo de centrales
F: groupe de centraux

exchange input and output
S: entrada y salida de la central
F: entrée et sortie du commutateur

exchange input and output ports
S: puertos de entrada y de salida de la central
F: bornes d'entrée et de sortie du commutateur

exchange signalling transfer delay (other than answer signal
S: retardo de transferencia de señalización en la central (distinta de la señal de respuesta)
F: délai de transfert de signalisation du commutateur (autre que le délai d'émission du signal de réponse)

exchange termination (ET)
S: terminación de central (TC)
F: terminaison de commutateur (TC)

exchange test points
S: puntos de prueba de la central
F: points de mesure du commutateur

executable test case
S: caso de prueba ejecutable
F: test élémentaire exécutable

executable test suite
S: serie de pruebas ejecutables
F: suite de tests exécutables

EXECUTE
S: EJECUTAR
F: EXÉCUTION

execution character
S: carácter de ejecución
F: caractère d'exécution

execution error; generated error
S: error de ejecución
F: erreur d'exécution

executive program; supervisory program; supervisor
S: programa ejecutivo; programa supervisor; supervisor
F: (programme) superviseur; superviseur

exercise
S: ejercicio
F: exercice

existing-quality television
S: televisión de calidad convencional
F: télévision de qualité conventionnelle

expanded session reference
S: referencia extendida de la sesión
F: référence élargie de la session

expansion (in a switching stage)
S: expansión (en una etapa de conmutación)
F: expansion (dans un étage de commutation)

expectation (of a random variable); mean (of a random variable)
S: esperanza matemática (de una variable aleatoria); media (de una variable aleatoria)
F: espérance mathématique (d'une variable aléatoire); moyenne (d'une variable aléatoire)

expedited data (ED)
S: datos acelerados (DA); datos expeditados
F: données exprès (DEX)

expedited data acknowledgement (EA)
S: acuse de recibo de datos acelerados (AA)
F: accusé de réception de données exprès (ARX)

expedited (N)-service-data-unit; (N)-expedited-data-unit
S: unidad de datos del servicio (N) acelerada; unidad de datos acelerada (N)
F: unité de données exprès du service (N)N)/; unité de données exprès (N)/N)

explicit congestion message
S: mensaje explícito de congestión
F: message d'encombrement explicite

explicit conversion
S: conversión explícita
F: conversion explicite

export operation; export
S: operación de exportación; exportación
F: opération d'exportation; export

exported variable
S: variable exportada
F: variable exportée

exporter
S: exportador
F: exportateur

expression
S: expresión
F: expression

extension indicator
S: indicador de ampliación
F: indicateur d'extension

extension of physical delivery address components
S: componentes de ampliación de dirección de entrega física
F: développement de composants d'adresse de remise physique

extension of postal O/R address components
S: componentes de ampliación de dirección postal O/D
F: développement de composants d'adresse postale E/D

external blocking
S: bloqueo externo
F: blocage externe

external disabled state
S: estado de incapacidad externa
F: état d'incapacité externe

external disabled time; external loss time
S: tiempo de incapacidad externa
F: temps d'incapacité externe

external document class
S: clase de documento externo
F: classe de documents externe

external routing
S: encaminamiento externo
F: acheminement externe

external synonym
S: sinónimo externo
F: synonyme externe

external test methods
S: métodos de prueba externa
F: méthode de test externe

external transfer
S: transferencia externa
F: transfert externe

external type
S: tipo external; tipo externo
F: type Externe

external videotex application provider
S: proveedor externo de una aplicación videotex
F: fournisseur d'application externe vidéotex

external videotex host computer
S: ordenador principal videotex externo
F: ordinateur principal externe vidéotex

external videotex host computer
S: ordenador videotex principal externo
F: ordinateur principal externe vidéotex

extract!
S: extraer!; extract!
F: extract!

extrapolated ...
S: ... extrapolado
F: ... extrapolé

F

F interface
S: interfaz F
F: interface F

f reference points
S: puntos de referencia f
F: points de référence f

facility accepted message (FAA)
S: mensaje facilidad aceptada (FAA)
F: message d'acceptation de service supplémentaire (SUAC)

facility indicator
S: indicador de facilidad
F: indicateur de service supplémentaire

facility reject message (FRJ)
S: mensaje facilidad rechazada (RFA)
F: message de refus de service supplémentaire (SURF)

facility request message (FAR)
S: mensaje de petición de facilidad (PFA)
F: message de demande de service supplémentaire (SUDM)

facsimile
S: facsímil
F: télécopie; fac-similé

facsimile on private networks
S: facsímil por redes privadas
F: télécopie sur réseaux privés

facsimile service
S: servicio facsímil
F: service de télécopie

facsimile telephone number
S: número telefónico facsímil
F: numéro de téléphone pour la télécopie

facsimile terminal; facsimile machine
S: terminal facsímil; aparato facsímil
F: terminal de télécopie ;télécopieur

factor of cooperation
S: factor de cooperación
F: facteur de coopération

factor set
S: conjunto factor
F: ensemble mis en facteur

fail safe
S: prevención de fallos
F: protégé contre défaillances à sûreté intégrée

"fail" verdict
S: veredicto de «desfavorable»
F: verdict «échec»

failure
S: fallo
F: défaillance

failure cause
S: causa de fallo
F: cause de défaillance

failure intensity acceleration factor
S: factor de aceleración de la intensidad de fallos
F: facteur d'accélération de l'intensité de défaillance

failure mechanism
S: mecanismo de fallo
F: mécanisme de défaillance

failure rate (λ)
S: tasa de fallos (λ)
F: taux d'échec (λ)

failure rate acceleration factor
S: factor de aceleración de la tasa de fallos
F: facteur d'accélération de la densité de défaillance; facteur d'accélération du taux de défaillance

failure response time
S: tiempo de respuesta a fallo
F: temps de réponse à une défaillance

false
S: false; falso
F: faux

far-end crosstalk (FEXT)
S: telediafonía (FEXT)
F: télédiaphonie (FEXT)

fault
S: avería
F: panne; dérangement

fault; intermittent fault
S: avería intermitente
F: panne intermittente

fault analysis
S: análisis de averías
F: analyse des pannes

fault correction
S: corrección (de una avería)
F: correction (de panne)

fault correction time
S: tiempo de corrección de una avería
F: temps de correction de panne

fault coverage
S: cobertura de averías
F: couverture de pannes

fault definition program
S: programa de definición de avería
F: programme de définition de faute

fault diagnosis
S: diagnóstico (de una avería)
F: diagnostic (de panne)

fault localization; fault location (deprecated in this sense)
S: localización (de una avería)
F: localisation de panne

fault localization; localization of faults
S: localización (de una avería)
F: localisation des dérangements

fault localization time; fault location time (deprecated)
S: tiempo de localización de una avería
F: temps de localisation (de panne)

fault masking
S: enmascaramiento de avería
F: masquage de panne

fault mode
S: modo de avería
F: mode de panne

fault modes, effects and criticality analysis (FMECA)
S: análisis de los modos de avería, sus efectos y su criticidad (AMAEC)
F: analyse des modes de panne, de leurs effets et de leur criticité (AMDEC)

fault recognition
S: detección (de una avería)
F: détection (de panne)

fault report point (circuit)
S: punto de avisos de averías en los circuitos
F: service de signalisation des dérangements sur les circuits

fault report point (network)
S: punto de avisos de averías en la red
F: service de signalisation des dérangements dans le réseau

fault reporting centre (FRC)
S: centro de información de fallos (CIF)
F: centre de signalisation des dérangements (CSD)

fault tolerance
S: tolerancia a las averías
F: tolérance aux pannes

fault tree
S: árbol de averías
F: arbre de panne

fault tree analysis (FTA)
S: análisis en árbol de averías
F: analyse par arbre de panne

faulty
S: averiado
F: en panne

faulty link information
S: información de enlace averiado
F: information de liaison défaillante

FAX 4
S: FAX 4
F: FAX 4

fetch abstract-operation
S: operación-abstracta de captura
F: fetch abstract-operation; opération abstraite extraction

fetch-restrictions
S: restricciones a captura
F: fetch-restrictions; restrictions à l'extraction

field
S: campo
F: domaine; zone; champ

field data
S: datos de explotación
F: donnée d'exploitation

field test
S: prueba en condiciones de explotación; prueba en condiciones reales
F: essai dans des conditions d'exploitation

fifteen (15) kHz audio
S: audio a 15 kHz
F: audiofréquence de 15 kHz

fifteen (15) supergroup assembly
S: agregado de 15 grupos secundarios
F: assemblage de 15 groupes secondaires

fifteen (15) -supergroup assembly link
S: enlace en agregado de 15 grupos secundarios
F: liaison en assemblage de 15 groupes secondaires

fifteen (15) -supergroup assembly section
S: sección de agregado de 15 grupos secundarios
F: section d'assemblage de 15 groupes secondaires

figure-shift signal
S: señal de cambio a cifras; señal de inversión cifras
F: signal d'inversion-chiffres

figures case
S: posición cifras
F: série des chiffres

figures shift
S: cambio a cifras; inversión cifras
F: inversion-chiffres

file
S: fichero
F: fichier

filing
S: archivado
F: archivage

fill-in signal unit (FISU)
S: unidad de señalización de relleno (USR)
F: trame sémaphore de remplissage (TSR)

fill order
S: orden de relleno
F: ordre de remplissage

filling bit
S: bit de relleno
F: bit de remplissage

filter
S: filtro
F: filter; filtre

FILTER
S: FILTRAR
F: FILTRE

filter-item
S: elemento del filtro
F: filter-item; item-filtre

final character
S: carácter final
F: caractère final

final circuit group
S: haz final de circuitos
F: faisceau final

first call attempt
S: primera tentativa de llamada
F: première tentative d'appel

first choice circuit group
S: haz de circuitos de primera elección
F: faisceau de premier choix

first choice set of circuits
S: haz de circuitos de primera elección
F: faisceau de premier choix

first line offset
S: desplazamiento de la primera línea
F: décalage de la première ligne

first-order digital transmission hierarchy
S: jerarquía de transmisión digital de primer orden
F: hiérarchie de transmission numérique du premier ordre

first-order multiplexes; first-order multiplexed signals
S: múltiplex de primer orden; señales multiplexadas de primer orden
F: multiplex du premier ordre; signaux multiplexés du premier ordre

fixed destination call services
S: servicio de llamada de línea directa
F: service d'appels à destination fixe

fixed overhead
S: tara fija; elementos auxiliares fijos
F: servitude fixe

flag (F)
S: bandera (BAN)
F: fanion (F)

flat-bed transmitter
S: transmisor de exploración plana
F: émetteur à plat

flat-rate price per circuit procedure
S: procedimiento de remuneración a tanto alzado por circuito
F: méthode de rémunération forfaitaire par circuit

flow control
S: control de flujo
F: contrôle de flux

flow control parameter selection/negotiation and indication for virtual call service
S: selección/negociación e indicación de parámetros de control de flujo para el servicio de llamada virtual
F: sélection, négociation et indication des paramètres de contrôle de flux pour service de communication virtuelle

flow line
S: línea de flujo
F: ligne de liaison

follow current
S: corriente residual
F: courant résiduel

font
S: tipo de caracteres
F: police de caractères

font size
S: tamaño del tipo de caracteres
F: taille d'une police de caractères

forced rerouting
S: reencaminamiento forzado
F: passage sous contrainte sur route de secours

forced retransmission (procedure)
S: retransmisión forzada (procedimiento de)
F: retransmission forcée (procédure de)

foreseen outcome
S: resultado previsto
F: résultat prévu

form
S: formulario
F: formulaire

form filling
S: cumplimentación de formulario
F: remplissage de formulaire

form identity
S: identidad de formulario
F: identité de formulaire

form output
S: salida de formulario
F: formation en ligne

formal description technique (FDT)
S: técnica de descripción formal (TDF)
F: technique de description formelle (TDF)

formal parameter
S: parámetro formal
F: paramètre formel

formal parameter list
S: lista de parámetros formales
F: liste de paramètres formels

format
S: formato
F: format

format effector
S: determinante de formato
F: commande de mise en page; caractère de mise en page

formatted form
S: forma formatada
F: forme formatée

formatted postal O/R address
S: dirección postal O/D formatizada
F: adresse postale E/D formatée

formatted processable form
S: forma formatada procesable
F: forme retraitable formatée

formatting
S: formatación
F: formatage; mise en page

formatting indicator
S: indicador de formatación
F: indicateur de formatage

fortuitous distortion
S: distorsión fortuita
F: distorsion fortuite

forward echo
S: eco hacia adelante
F: écho vers l'aval; traînage

forward indicator bit (FIB)
S: bit indicador directo; bit indicador hacia adelante (BID)
F: bit indicateur vers l'avant (BIA)

forward sequence number (FSN)
S: número secuencial directo (hacia adelante) (NSD)
F: numéro de séquence vers l'avant (NSA)

forward signal
S: señal hacia adelante
F: signal vers l'avant

forward switching signal
S: señal de conmutación hacia adelante
F: signal (de commutation) vers l'avant

forward transfer message (FOT)
S: mensaje de intervención (INT)
F: message d'intervention (d'une opératrice) (IOP)

forward-transfer signal
S: señal de intervención
F: signal d'intervention

forward-transfer signal (sent in the forward direction)
S: señal de intervención (transmitida hacia adelante)
F: signal d'intervention (émis dans le sens en avant); signal d'intervention (émis dans le sens: vers l'avant)

forwarding-request
S: petición de retransmisión
F: forwarding-request; demande de retransmission

four concentric circles near field template
S: plantilla de campo próximo de cuatro círculos concéntricos
F: gabarit dans le champ proche composé de quatre cercles concentriques

four concentric circles refractive index template
S: plantilla de índice de refracción de cuatro círculos concéntricos
F: gabarit d'indice de réfraction à quatre cercles concentriques

four-wire chain (4-wire chain)
S: cadena a cuatro hilos
F: chaîne à quatre fils

four-wire switching
S: conmutación a cuatro hilos
F: commutation à quatre fils

frame
S: trama
F: trame; cadre

frame alignment
S: alineación de trama
F: verrouillage de trame

frame alignment recovery time
S: tiempo de recuperación de la alineación de trama
F: temps de reprise du verrouillage de trame

frame alignment signal
S: señal de alineación de trama
F: signal de verrouillage de trame

frame alignment time-slot
S: intervalo de tiempo de alineación de trama
F: créneau temporel de verrouillage de trame; intervalle de temps de verrouillage de trame

frame resynchronization
S: resincronización de trama
F: resynchronisation de trame

frame slot
S: intervalo de tiempo de trama
F: intervalle élémentaire de temps de trame

frame structure
S: estructura de trama
F: structure de trame

framed interface
S: interfaz entramado
F: interface tramée

free circuit condition
S: estado de circuito libre
F: état de disponibilité

freephone service
S: servicio de cobro revertido automático
F: service «libre-appel»

freezeout
S: bloqueo; exclusión por ocupación
F: blocage; gel

freezeout fraction (FOF)
S: fracción de exclusión por ocupación (FEO); fracción de bloqueo
F: taux de gel (TDG); blocage partiel

frequency departure
S: desviación de frecuencia
F: écart de fréquence

frequency division
S: división de frecuencia
F: répartition en fréquence; répartition fréquentielle

frequency division multiplexing (FDM)
S: multiplexación por división de frecuencia (MDF); multiplexión por división de frecuencia
F: multiplexage par répartition en fréquence (MRF)

frequency division switching
S: conmutación por división de frecuencia
F: commutation par répartition en fréquence

frequency-exchange modulation; two tone modulation
S: modulación por cambios opuestos de frecuencia; modulación de dos frecuencias
F: modulation par mutation de fréquences

frequency modulation
S: modulación de frecuencia
F: modulation de fréquence (ou modulation en fréquence)

frequency shift keying (FSK); frequency shift modulation
S: modulación por desplazamiento de frecuencia (MDF)
F: modulation par déplacement de fréquence (MDF)

frozen reference
S: referencia congelada
F: référence gelée

full break-in
S: intervención total
F: intervention totale

full break-in operate time
S: tiempo de funcionamiento para la intervención total
F: temps de fonctionnement pour l'intervention totale

full character rate
S: plena velocidad de caracteres
F: cadence complète de caractères

full echo suppressor
S: supresor de eco completo
F: suppresseur d'écho complet

full refund
S: reembolso total
F: remboursement complet

fully automatic operation
S: explotación automática; operación automática
F: fonctionnement entièrement automatique

fully dissociated mode of operation
S: modo de explotación enteramente disociado
F: mode d'exploitation «entièrement dissocié»

fully dissociated signalling
S: señalización enteramente disociada
F: signalisation entièrement dissociée

fully provided circuit group
S: haz de circuitos totalmente provisto
F: faisceau totalement fourni

function
S: función
F: fonction

function-affecting maintenance
S: mantenimiento que afecta a la función
F: maintenance affectant les fonctions

function check-out
S: verificación de funcionamiento
F: vérification (de fonctionnement)

function code
S: código de función
F: code de fonction

function control
S: instrucción de función; mando de función))
F: commande de fonction

function-degrading maintenance
S: mantenimiento con degradación de funciones
F: maintenance avec dégradation; maintenance dégradant les fonctions

function element (FE)
S: elementos de función (EF)
F: éléments de fonction (EF)

function identification
S: identificación de función
F: identification de fonction

function key
S: tecla de función
F: touche de fonction

function model
S: modelo de función
F: modèle de fonction

function-permitting maintenance
S: mantenimiento sin discontinuidad de funciones
F: maintenance en fonctionnement; maintenance en exploitation

function-preventing maintenance
S: mantenimiento con discontinuidad de funciones
F: maintenance-arrêt; maintenance empêchant l'accomplissement des fonctions

function signal
S: señal de función
F: signal de fonction

functional block (in SDL)
S: bloque funcional (en LED)
F: bloc fonctionnel (en LDS)

functional description (FD) (in SDL)
S: descripción funcional (DF) (en LED)
F: description fonctionnelle (DF) (en LDS)

functional entity
S: entidad funcional
F: entité fonctionnelle

functional group
S: grupo funcional
F: groupe fonctionnel

functional groupings
S: grupos funcionales
F: groupements fonctionnels

functional mode
S: modo de funcionamiento
F: mode de fonctionnement

functional specification (FS) (in SDL)
S: especificación funcional (EF) (en LED)
F: spécification fonctionnelle (SF) (en LDS)

functional test
S: prueba de funcionamiento
F: essai de fonctionnement

functional unit
S: unidad funcional
F: unité fonctionnelle

G

G interface
S: interfaz G
F: interface G

g reference points
S: puntos de referencia g
F: points de référence g

gas discharge tube
S: descargador de gas
F: parafoudre à gaz

gated RQ
S: punteado de RQ
F: pointage de RQ

gateway mobile service switching centre (MSC)
S: centro de conmutación de los servicios móviles (CCM) de cabecera
F: centre de commutation pour les services mobiles tête de ligne; CCM tête de ligne

gateway MSC
S: CCM de cabecera
F: CCM d'accès

gateway PLMN
S: RMTP de cabecera
F: RMTP d'accès

general-attribute
S: atributo general
F: general-attribute; attribut général

general-auto-action
S: acción automática general
F: general-auto-action; action automatique générale

general information window area
S: zona de ventana de información general
F: sous-fenêtre d'information générale

general negative recorded announcement
S: anuncio grabado general negativo
F: annonce enregistrée générale négative

general option
S: opción general
F: option générale

general option area
S: área de opción general
F: zone d'option générale

general parameters
S: parámetros generales
F: paramètres généraux

general parameters (in SDL)
S: parámetros generales (en LED)
F: caractéristiques générales (en LDS)

general positive recorded announcement
S: anuncio grabado general positivo
F: annonce enregistrée générale positive

general recorded announcement
S: anuncio grabado general
F: annonce enregistrée générale

general telecommunications information service
S: servicio de información general sobre telecomunicaciones
F: service de renseignements généraux sur les télécommunications

generator
S: generador
F: générateur

generator for subordinates
S: generador de subordinados
F: générateur pour subordonnées

generic address
S: dirección genérica
F: adresse générique

generic content portion
S: porción de contenido genérico
F: portion de contenu générique

generic content portion description
S: descripción de porción de contenido genérico
F: description d'une portion de contenu générique

generic-document
S: documento genérico
F: document générique

generic layout structure
S: estructura de disposición genérica
F: structure physique générique; structure de mise en page générique

generic logical structure
S: estructura lógica genérica
F: structure logique générique

generic test case
S: caso de prueba genérica
F: test élémentaire générique

generic test suite
S: serie de pruebas genéricas
F: suite de tests génériques

Gentex network
S: red géntex
F: réseau Gentex

geographically distributed exchange
S: central geográficamente distribuida
F: centre géographiquement dispersé

geometric graphic element
S: elemento gráfico geométrico
F: élément graphique géométrique

global network addressing domain
S: dominio de direccionamiento de red global
F: domaine global d'adressage du réseau

global title (GT)
S: título global (TG)
F: appellation globale (AG)

glow current
S: corriente de efluvio
F: courant d'effluve

glow-to-arc transition current
S: corriente de transición de efluvio a arco
F: courant de passage de régime d'effluve au régime d'arc

glow voltage
S: tensión de efluvio
F: tension d'effluve

Government telex calls
S: comunicaciones télex de Estado
F: communications télex d'Etat

grade
S: grado
F: grade; catégorie

grade of service (GOS)
S: grado de servicio (GDS)
F: qualité d'écoulement du trafic

gradual failure; degradation failure; drift failure
S: fallo gradual; fallo por degradación; fallo por deriva
F: défaillance progressive; dégradation; défaillance par dérive

graph
S: gráfico
F: graphe

graphic character
S: carácter gráfico
F: caractère graphique

graphic character sets
S: juegos de caracteres gráficos
F: jeux de caractères graphiques

graphic character subrepertoire
S: subrepertorio de caracteres gráficos
F: sous-répertoire de caractères graphiques

graphic characters
S: caracteres gráficos
F: caractères graphiques

graphic code extension
S: extensión del código gráfico
F: extension de code graphique

graphic element
S: elemento gráfico
F: élément graphique

graphic rendition
S: reproducción gráfica
F: mise en valeur graphique

graphic terminals
S: terminales gráficos
F: terminaux graphiques

ground expression
S: expresión fundamental
F: expression close

group 2
S: grupo 2
F: groupe 2

group 3
S: grupo 3
F: groupe 3

group 4
S: grupo 4
F: groupe 4

group
S: grupo primario
F: groupe primaire

group (of facsimile terminals)
S: grupo (de terminales facsímil)
F: groupe (de télécopieurs)

group-audio terminals
S: terminal audio de grupo
F: terminal audio de communication de groupe

group delay
S: retardo de grupo
F: temps de propagation de groupe

group-delay distortion
S: distorsión por retardo de grupo
F: distorsion de temps de propagation de groupe

group 4 facsimile apparatus
S: aparato facsímil del grupo 4
F: télécopieur du groupe 4

group link
S: enlace en grupo primario
F: liaison en groupe primaire

group section
S: sección de grupo primario
F: section de groupe primaire

guarantor Administration
S: Administración garante
F: Administration garante

guarantor service
S: servicio de garantía
F: service de garantie

guard-ring
S: anillo de guarda
F: anneau de garde

guarding (in VF signalling)
S: guarda (en señalización FV)
F: protection (dans un système de signalisation à fréquences vocales)

guidance output
S: salida de orientación
F: sortie de guidage

guidelines
S: área funcional; subárea funcional
F: lignes directrices

H

half character rate; quarter character rate
S: media velocidad de caracteres; cuarto de la velocidad de caracteres
F: demie cadence de caractères; quart de cadence de caractères

half connection
S: semiconexión
F: demi-connexion

half-duplex apparatus
S: aparato semidúplex
F: appareil (fonctionnant) à l'alternat

half-duplex operation
S: explotación semidúplex; funcionamiento semidúplex
F: exploitation en semi-duplex

half-echo suppressor
S: semisupresor de eco
F: demi-suppresseur d'écho

handover
S: traspaso
F: transfert intercellulaire; relais de communication

hands free (telephone) set
S: aparato telefónico manos libres; teléfono manos libres
F: poste (téléphonique) mains-libres

hang-up signal; clear-back signal (sent in the backward direction)
S: señal de colgar (transmitida hacia atrás)
F: signal de raccrochage [du demandé] (émis dans le sens: vers l'avant)

hard line terminator
S: terminador de línea fijo
F: fin de ligne imposée

harmful out-of-band components
S: componentes fuera de banda perjudiciales
F: composantes extra-bandes nuisibles

harmless out-of-band components
S: componentes fuera de banda neutras
F: composantes extra-bandes neutres

hash function
S: función hash
F: fonction hachage

head and torso simulator (HATS)
S: simulador de cabeza y tronco (SCT)
F: simulateur de tête et de torse (STET)

head-on collision
S: colisión frontal
F: double prise (sur circuit mixte); collision frontale

header
S: encabezamiento
F: en-tête

header; block header
S: encabezamiento; encabezamiento de bloque
F: en-tête de bloc

heading
S: encabezamiento
F: en-tête

help output
S: salida de ayuda
F: sortie d'assistance

help request
S: petición de ayuda
F: demande d'assistance

heterochronous
S: heterócrono
F: hétérochrone

heterogeneous multiplex
S: múltiplex heterogéneo
F: multiplex hétérogène

hexadecimal numeral
S: numeral hexadecimal
F: nombre hexadécimal; numéral hexadécimal

hierarchic mutually synchronized network
S: red jerárquica mutualmente sincronizada
F: réseau hiérarchisé à synchronisation mutuelle

hierarchic network; hierarchic synchronized network
S: red jerárquica; red con sincronización jerárquica
F: réseau hiérarchisé; réseau à synchronisation hiérarchisée

hierarchical structure
S: estructura jerárquica
F: structure hiérarchique

hierarchical transmultiplexer
S: transmultiplexor jerárquico
F: transmultiplexeur hiérarchique

high definition TV and existing quality TV distribution services
S: servicios de distribución de televisión de alta definición y de televisión de calidad convencional
F: services de distribution de télévision à haute définition et de distribution de la télévision de qualité existante

high layer compatibility information
S: información de compatibilidad de capa superior
F: information de compatibilité de couches supérieures

high level language (HLL)
S: lenguaje de alto nivel
F: langage évolué

high quality broadband videoconference services
S: servicios de videoconferencia de banda ancha de alta calidad
F: services de visioconférence à large bande de haute qualité

high usage circuit group
S: haz de circuitos de gran utilización
F: faisceau débordant

highlighting
S: resaltación
F: renforcement

highway
S: arteria; bus
F: bus; jonction multiplex interne

(time division) highway (in switching); bus
S: arteria; canal principal (por división en el tiempo) (en conmutación)
F: canal (à multiplexage dans le temps)

hold
S: retención
F: maintien

hold provided indicator
S: indicador de retención suministrada
F: indicateur de maintien effectué (utilisation nationale)

holding indicator
S: indicador de retención
F: indicateur de maintien (utilisation nationale)

holding time
S: tiempo de retención; tiempo de ocupación
F: durée d'occupation

holding time of an international circuit
S: duración de ocupación de un circuito internacional
F: durée d'occupation du circuit international

holdover voltage
S: tensión de mantenimiento de la descarga
F: tension d'extinction

hollowness
S: cavernosidad
F: son caverneux

home location register
S: registro de posiciones base
F: enregistreur de localisation nominal (ELN)

home location register (HLR)
S: registro de posiciones base (RPB)
F: enregistreur de localisation nominal (ELN)

home mobile service switching centre (HMSC)
S: centro de conmutación de servicio móvil (CCM) propio (CCMP)
F: CCM de rattachement (CCMR)

home MSC
S: CCM base
F: CCM nominal

home PLMN
S: RMTP propia
F: RMTP nominal

home position
S: posición inicial
F: position initiale

home public land mobile network (HPLMN)
S: red móvil terrestre pública (RMTP) propia
F: réseau mobile terrestre public de rattachement; RMTP de rattachement

homochronous
S: homócrono
F: homochrone

homogeneous multiplex
S: múltiplex homogéneo
F: multiplex homogène

homogeneous section
S: sección homogénea
F: section homogène

homogeneous structure
S: estructura homogénea
F: structure homogène

horizontal direction (of a layout object)
S: dirección horizontal (de un objeto de disposición)
F: direction horizontale (d'un objet physique)

horizontal plane
S: plano horizontal
F: plan horizontal

human-machine interface
S: interfaz hombre-máquina; interfaz persona-máquina
F: interface homme-machine

hybrid interface structure
S: estructura híbrida de interfaz
F: structure d'interface hybride

hybrid multiplex
S: múltiplex híbrido
F: multiplex hybride

hypothetical reference circuit; nominal maximum circuit
S: circuito ficticio de referencia; circuito máximo nominal
F: circuit fictif de référence

hypothetical reference circuit for telephony
S: circuito ficticio de referencia para la telefonía
F: circuit fictif de référence pour la téléphonie

hypothetical reference connection (HRX)
S: conexión ficticia de referencia (CFR)
F: communication fictive de référence

hypothetical signalling reference connection (HSRC)
S: conexión ficticia de referencia para la señalización; conexión hipothética de referencencia para la señlización
F: communication fictive de référence pour la signalisation

I

ideal instant
S: instante ideal
F: instants idéals

identification invitation
S: invitación a la identificación
F: invitation à identification

identification procedure
S: procedimiento de identificación
F: procédure d'identification

identification request
S: petición de identificación
F: demande d'identification

identifier (ID)
S: identificador (ID)
F: identificateur (ID)

identifier octets
S: octetos de identificación
F: octets de l'identificateur

idle circuit condition
S: estado de circuito en reposo
F: état de repos (d'un circuit)

idle state; free state
S: estado de reposo; estado libre
F: état vacant; état libre

idle time; free time
S: tiempo de reposo; tiempo muerto; tiempo libre
F: période vacante; temps mort; temps libre

image area
S: zona de imagen
F: zone image

image dimensions
S: dimensiones de la imagen
F: dimensions des images

imaging order
S: orden de imaginización
F: ordre de restitution; ordre d'illustration

imaging process
S: proceso de imaginización
F: processus de restitution; processus d'illustration

immediate recipient
S: destinatario inmediato
F: destinataire direct

immediate superior (noun)
S: superior inmediato (sustantivo)
F: supérieur immédiat

immediately superior
S: inmediatamente superior
F: immédiatement supérieur

impedance
S: impedancia
F: impédance

imperative operator
S: operador imperativo
F: opérateur impératif

implementation under test (IUT)
S: realización sometida a prueba (RSP)
F: réalisation à tester (IUT)

implicit congestion control
S: control implícito de congestión
F: protection implicite contre les encombrements

implicit conversion
S: conversión implícita
F: conversion implicite

implicit transition
S: transición implícita
F: transition implicite

import operation; import
S: operación de importación; importación
F: opération d'importation; import

imported variable
S: variable importada
F: variable importée

importer
S: importador
F: importateur

impulse spark-over voltage/time curve
S: curva de tensión de cebado por choque/tiempo
F: courbe de tension d'amorçage au choc en fonction du temps

impulse waveform
S: forma de onda de un impulso de choque
F: forme d'onde de choc

IN variable
S: variable IN
F: variable «IN»

inaccessible field
S: campo inaccesible; campo de salida
F: champ inaccessible; champ de sortie

inactive character
S: carácter inactivo
F: caractère inactif

inactivity test (IT)
S: prueba de inactividad (PI)
F: test d'inactivité (TIN)

inadequately handled call attempts
S: tentativas de llamada tratadas inadecuadamente
F: tentatives d'appels traitées de façon inadéquate

in-band information indicator
S: indicador de información dentro de banda
F: indicateur d'information dans la bande

in-band parameter exchange
S: intercambio de parámetros dentro de banda
F: échange de paramètres dans la bande

inband signalling
S: señalización dentro de banda
F: signalisation dans la bande

in-call rearrangement
S: reestructuración en comunicación
F: remaniement des liaisons pendant la communication

incoming call barring service
S: servicio de prohibición de llamadas entrantes
F: service de limitation des appels d'arrivée

incoming call indication sending delay (for terminating and internal traffic connections)
S: retardo de envío de indicación de llamada entrante (para conexiones de tráfico terminal e interno)
F: délai d'émission d'indication d'appel d'arrivée (pour les connexions du trafic interne et d'arrivée); délai d'émission d'indication d'appel entrant (pour les connexions de trafic d'arrivée et interne)

incoming only terminal
S: terminal de llegada solamente
F: terminal spécialisé en arrivée

incoming response delay
S: demora de la preselección; duración de la preselección
F: durée de présélection; délai de réponse à l'arrivée; temps de réponse à la prise d'un circuit d'arrivée

incoming response delay (transit and terminating incoming traffic connections)
S: retardo de respuesta entrante (conexiones de tráfico de tránsito y terminal entrante)
F: temps de présélection en arrivée (connexions du trafic de transit et d'arrivée)

incoming traffic
S: tráfico entrante
F: trafic entrant

"inconclusive" verdict
S: veredicto de «dudoso»
F: verdict «non concluant»

in-connector
S: conector de entrada
F: connecteur d'entrée

incorrect access probability
S: probabilidad de acceso incorrecto
F: probabilité d'accès incorrect

incorrect charging or accounting probability
S: probabilidad de tarificación o de contabilidad incorrectas
F: probabilité de taxation erronée

incorrect signal
S: señal incorrecta
F: signal incorrect

indentation
S: sangrado
F: indentation

indenture level (for maintenance)
S: nivel de intervención (para el mantenimiento)
F: niveau d'intervention (pour la maintenance)

indeterminate fault
S: avería indeterminable
F: panne indéterminée

index number
S: número índice
F: indice

index of cooperation
S: índice de cooperación
F: module de coopération

indication
S: indicación
F: indication

indication of charge
S: indicación del importe de la comunicación
F: indication de taxe

indication of duration
S: indicación de duración
F: indication de durée

indicator
S: indicador
F: indicateur

indirect address
S: dirección indirecta
F: adresse indirecte

indirect submission
S: depósito indirecto
F: dépôt indirect

indirect-submission port
S: puerto de depósito indirecto
F: indirect-submission port; accès de dépôt indirect

indirect user
S: usuario indirecto
F: utilisateur indirect

indivisibility
S: indivisibilidad
F: indivisibilité

infix operator
S: operador infijo
F: opérateur infixe

INFO
S: INFO
F: INFO

informal text
S: texto informal
F: texte informel

information-base
S: base de información
F: information-base; base d'information

information-base-type
S: tipo de base de información
F: information-base-type; type de base d'information

information element
S: elemento de información
F: élément d'information

information entity
S: entidad de información
F: entité d'information

information entry
S: introducción de información
F: introduction d'information

information entry through form filling
S: introducción de información por cumplimentación de formulario
F: introduction d'information par remplissage de formulaire

information entry through menu-item selection
S: introducción de información por selección de elemento de menú
F: introduction d'information par sélection en mode menu

information flow
S: flujo de información
F: flux d'information

information integrity
S: integridad de la información
F: intégrité de l'information

information message (INF)
S: mensaje de información (INF)
F: message d'information (INF)

information object
S: objeto de información
F: objet informationnel

information payload capacity
S: capacidad de carga neta de información
F: capacité utile d'information

information rate
S: velocidad de información
F: débit d'information

information request message (INR)
S: mensaje de petición de información (MPI)
F: message de demande d'information (IND)

information structure (diagram)
S: estructura de información diagrama de
F: structure d'information (diagramme)

information transfer capability
S: capacidad de transferencia de información
F: possibilité de transfert d'information

information transfer mode
S: modo de transferencia de información
F: mode de transfert d'information

information transfer rate
S: velocidad de transferencia de información
F: débit de transfert d'information

information transfer susceptance
S: susceptancia de transferencia de información
F: susceptance au transfert d'information

information unit
S: unidad de información
F: unité d'information

inherent distortion (of a transmission channel)
S: distorsión propia (de un canal de transmisión)
F: distorsion propre (d'un canal de transmission)

inherent regeneration
S: regeneración inherente
F: régénération inhérente

INHIBIT
S: INHIBIR
F: INTERDICTION

inhibit
S: inhibir
F: interdire

initial address message (IAM)
S: mensaje inicial de dirección
F: message d'adresse initial (IAM); message initial d'adresse (MIA)

initial address message with additional information (IAI)
S: mensaje inicial de dirección con información adicional (MII)
F: message initial d'adresse avec informations supplémentaires (IAI)

initial algebra
S: álgebra inicial
F: algèbre initiale

initial alignment (procedure)
S: alineación inicial (procedimiento de)
F: alignement initial (procédure d')

initial offset
S: desplazamiento inicial
F: décalage initial

initial point
S: punto inicial
F: point initial

initial signal unit (ISU)
S: unidad inicial de señalización (UIS)
F: unité de signalisation initiale (ISU)

initialization
S: inicialización
F: initialisation

INITIALIZE
S: INICIALIZAR
F: INITIALISATION

initialize
S: inicializar
F: initialiser

initiator
S: iniciador; iniciadora
F: appelant; entité appelante; SPM appelante

inlet
S: entrada (en conmutación); acceso de entrada
F: accès d'arrivée; accès entrant

in-local override
S: anulación del funcionamiento en local
F: priorité sur le fonctionnement en local

INMARSAT mobile international number
S: número internacional móvil INMARSAT
F: numéro international de mobile INMARSAT

INMARSAT mobile number
S: número móvil INMARSAT
F: numéro de mobile INMARSAT

INMARSAT mobile terminal number
S: número de terminal móvil INMARSAT
F: numéro terminal de mobile INMARSAT

inopportune test event
S: suceso de prueba inoportuno
F: événement de test inopportun

IN/OUT variable
S: variable IN/OUT
F: variable «IN/OUT»

INPUT
S: INTRODUCIR; INPUT
F: ENTRÉE

input
S: entrada; introducir
F: entrée

input acknowledgement
S: acuse de entrada
F: accusé de réception d'entrée

input area
S: área de entrada
F: zone d'entrée

input connection
S: conexión de entrada
F: connexion d'entrée

input error
S: error de entrada
F: erreur d'entrée

input error information
S: información de error de entrada
F: information d'erreur d'entrée

input message acknowledgement (IMA)
S: acuse de recibo de mensaje introducido (IMA)
F: accusé de dépôt (IMA)

input port
S: puerto de entrada
F: port d'entrée

input/output
S: entrada/salida
F: entrée/sortie

input/output devices; I/O devices
S: dispositivos de entrada/salida; dispositivos E/S
F: dispositif d'entrée/sortie; dispositif E/S

insertion gain; orthotelephonically referred gain
S: ganancia de inserción; ganancia referida ortotelefónicamente
F: gain d'insertion; gain de référence orthotéléphonique

in-slot signalling
S: señalización dentro del intervalo
F: signalisation dans le créneau temporel; signalisation dans l'intervalle de temps

installation cable
S: cable de instalación
F: câble d'installation

instance
S: instancia
F: instance

instant of time
S: instante (de tiempo)
F: instant

instantaneous ...
S: ... instantáneo
F: ... instantané

instantaneous availability A(t); pointwise availability
S: disponibilidad instantánea A(t)
F: disponibilité (instantanée) A(t)

instantaneous availability of a leased circuit
S: disponibilidad instantánea de un circuito arrendado
F: disponibilité instantanée d'un circuit loué

instantaneous exchange inaccessibility
S: inaccesibilidad instantánea al servicio de una central
F: inaccessibilité instantanée du central

instantaneous unavailability U(t); pointwise unavailability
S: indisponibilidad instantánea U(t)
F: indisponibilité (instantanée), U(t)

(instantaneous) failure intensity z(t)
S: intensidad (instantánea) de fallos z(t)
F: intensité (instantanée) de défaillance z(t)

(instantaneous) failure rate $\lambda(t)$
S: tasa (instantánea) de fallos $\lambda(t)$
F: densité (temporelle) (instantanée) de défaillance; taux (instantané) de défaillance $\lambda(t)$

(instantaneous) repair rate $\mu(t)$
S: tasa (instantánea) de reparaciones $\mu(t)$
F: densité (temporelle) (instantanée) de réparation $\mu(t)$

instantiation
S: instanciación
F: instantiation

integer
S: entero; integer
F: entier (integer)

integer type
S: tipo integer; tipo entero
F: type Entier

integrated digital network (IDN)
S: red digital integrada (RDI)
F: réseau numérique intégré (RNI)

integrated digital transmission and switching
S: transmisión y conmutación digitales integradas
F: transmission et commutation numériques intégrées

integrated services digital network (ISDN)
S: red digital de servicios integrados (RDSI)
F: réseau numérique avec intégration des services (RNIS)

integrated services exchange
S: central de servicios integrados
F: central avec intégration des services

integrated services network
S: red de servicios integrados
F: réseau avec intégration des services

intelligible crosstalk components
S: componentes de diafonía inteligible
F: composantes de diaphonie intelligible

intended recipient
S: destinatario deseado
F: destinataire prévu

interaction diagram
S: diagrama de interacción
F: diagramme d'interaction

interaction error (man-machine)
S: error de interacción (hombre-máquina)
F: erreur d'interaction (homme-machine)

interaction management
S: gestión de interacción
F: gestion de l'interaction

interaction request output
S: salida de petición de interacción
F: sortie de demande interactive

interactive
S: interactiva
F: interactive

interactive mode
S: modo interactivo; modo dialogado
F: mode interactif

interactive operating sequence
S: secuencia operativa interactiva
F: séquence d'exploitation interactive

interactive service
S: servicio interactivo
F: service interactif

inter-activity defined context set
S: conjunto de contextos definido entre actividades
F: ensemble des contextes définis entre activités

interband telegraphy
S: telegrafía interbanda
F: télégraphie interbandes

interception of calls service
S: servicio de interceptación de llamadas
F: service d'interception d'appels

interchange
S: intercambio
F: échange

interchange data element
S: elemento de datos de intercambio
F: élément de données d'échange

interchange format
S: formato de intercambio
F: format d'échange

interchange format class
S: clase de formato de intercambio
F: classe de formats d'échange

inter-character space
S: espacio entre caracteres
F: espacement intercaractère

intercommunication
S: intercomunicación
F: intercommunication

interconnected store-and-forward
S: almacenamiento y retransmisión con interconexión
F: enregistrement et retransmission avec interconnexion

interconnected transit store-and-forward
S: almacenamiento y retransmisión en tránsito con interconexión
F: enregistrement et retransmission en transit avec interconnexion

intercontinental circuit
S: circuito intercontinental
F: circuit intercontinental

intercontinental connection
S: conexión intercontinental
F: communication intercontinentale

intercontinental transit circuit
S: circuito intercontinental de tránsito
F: circuit intercontinental de transit

intercontinental transit exchange
S: central intercontinental de tránsito
F: centre intercontinental de transit

interface
S: interfaz
F: jonction; interface

interface adaptor
S: adaptador de interfaces
F: adaptateur de jonctions

interface control functions
S: funciones de control de interfaz
F: fonctions de commande d'interface

interface overhead
S: tara del interfaz
F: charge supplémentaire d'interface

interface payload
S: carga neta del interfaz
F: charge utile d'interface

interface rate; interface bit rate
S: velocidad del interfaz; velocidad binaria del interfaz
F: débit (binaire) de l'interface

interface specification
S: especificación de interfaz
F: spécification d'interface

interface structure; ISDN user-network interface structure
S: estructura de interfaz; estructura de interfaz usuario-red de la RDSI
F: structure d'interface; structure d'interface RNIS usager-réseau

interface units
S: unidades de interfaz
F: unités d'interface

interim INIC
S: CIRI provisional
F: CIR RNIS intérimaire

intermediate character
S: carácter intermedio
F: caractère intermédiaire

intermediate distribution frame
S: repartidor intermedio
F: répartiteur intermédiaire

intermediate equipment
S: equipo intermedio
F: équipement intermédiaire

Intermediate Service Part
S: parte servicio intermedio
F: Sous-Système Services Intermédiaires (SSSI)

intermittent fault; volatile fault; transient fault
S: avería intermitente; avería transitoria
F: panne intermittente; panne temporaire

internal blocking
S: bloqueo interno
F: blocage interne

internal connection
S: conexión interna
F: connexion interne

internal freephone service
S: servicio internacional de cobro revertido automático
F: service (libre-appel) international

internal loss probability
S: probabilidad de pérdida interna
F: probabilité de perte interne

internal network number indicator
S: indicador interno de número de red
F: indicateur de numéro réseau interne

internal reference
S: referencia interna
F: référence interne

internal routing
S: encaminamiento interno
F: acheminement interne

internal traffic
S: tráfico interno
F: trafic interne

internal transfer
S: transferencia interna
F: transfert interne

internal videotex application provider
S: proveedor interno de una aplicación videotex
F: fournisseur d'application interne vidéotex

international alphabet No. 5 (IA5)
S: alfabeto internacional N.º 5 (AI N.º 5)
F: alphabet international n° 5 (AI n° 5)

international automatic circuit
S: circuito automático internacional
F: circuit automatique international

international chain
S: cadena internacional
F: chaîne internationale

international circuit
S: circuito internacional
F: circuit international

international connection
S: conexión internacional
F: communication internationale

international data number
S: número de datos internacional
F: numéro international pour la transmission de données

international data number format
S: formato del número de datos internacional
F: format du numéro international pour la transmission de données

international exchange
S: central internacional
F: centre international

international freephone service (IFS)
S: servicio internacional de cobro revertido automático (SICRA)
F: service de libre-appel international (SLAI)

international information service (prefix 12)
S: servicio de información internacional (prefijo 12)
F: service des renseignements internationaux (préfixe 12)

international leased circuit
S: circuito internacional arrendado
F: circuit international loué

international leased group or supergroup link
S: enlace internacional arrendado en grupo primario o secundario
F: liaison internationale louée en groupe primaire ou secondaire

international line
S: línea internacional
F: ligne internationale

international link
S: enlace internacional
F: liaison internationale

international main section
S: sección principal internacional
F: section internationale principale

international mobile station identity (IMSI)
S: identidad internacional de estación móvil (IIEM); identidad de estación móvil en el servicio internacional
F: identité internationale de la station mobile (IISM); identité internationale d'une station mobile

international mobile station number
S: número internacional de estación móvil
F: numéro international de station mobile

international multiple destination sound-programme circuit
S: circuito radiofónico internacional con destinos múltiples
F: circuit radiophonique international à destinations multiples

international multiple destination sound-programme circuit section
S: sección internacional de circuito radiofónico con destinos múltiples
F: section internationale de circuit radiophonique à destinations multiples

international multiple destination sound-programme connection
S: conexión radiofónica internacional con destinos múltiples
F: communication radiophonique internationale à destinations multiples

international multiple destination sound-programme link
S: enlace radiofónico internacional con destinos múltiples
F: liaison radiophonique internationale à destinations multiples

international multiple destination television circuit
S: circuito internacional de televisión con destinos múltiples
F: circuit télévisuel international à destinations multiples

international multiple destination television circuit section
S: sección internacional de circuito de televisión con destinos múltiples
F: section internationale de circuit télévisuel à destinations multiples

international multiple destination television connection
S: conexión internacional de televisión con destinos múltiples
F: communication télévisuelle internationale à destinations multiples

international multiple destination television link
S: enlace internacional de televisión con destinos múltiples
F: liaison télévisuelle internationale à destinations multiples

international network management
S: gestión de la red internacional
F: gestion du réseau international

international number
S: número internacional
F: numéro international

international outgoing operator (prefix 11)
S: operador (a) internacional de salida (prefijo 11)
F: opérateur international de départ (préfixe 11)

international point-to-multipoint telecommunication service via satellite
S: servicio internacional de telecomunicación punto a multipunto por satélite; servicio internacional de telecomunicaciones por satélite punto a multipunto
F: service international de télécommunications point à multipoint par satellite; service international de télécommunications par satellite point à multipoint

international portion call set-up delay
S: tiempo de establecimiento de la llamada del tramo internacional
F: temps d'établissement d'une communication dans une partie internationale

international portion clear indication delay
S: retardo de indicación de liberación del tramo internacional
F: temps d'indication de libération dans une partie internationale

international portion data packet transfer delay
S: tiempo de transferencia de paquetes de datos en el tramo internacional
F: temps de transfert des paquets de données dans la partie internationale

international portion of an international virtual connection
S: tramo internacional de una conexión virtual internacional
F: partie internationale d'une connexion virtuelle internationale

international prefix
S: prefijo internacional
F: préfixe international

international public facsimile service
S: servicio facsímil público internacional
F: service public international de télécopie

international satellite transmission centre (ISTC)
S: centro de transmisión internacional por satélite (CTIS)
F: centre de transmission international par satellite (CTIS)

international section
S: sección internacional
F: section internationale

international selection sequence
S: secuencia de selección internacional
F: numéro de batterie

international signalling network
S: red de señalización internacional
F: réseau sémaphore international

international signalling point
S: punto de señalización internacional
F: point sémaphore international

international signalling point code
S: código de punto de señalización internacional
F: code du point sémaphore international

international sound programme centre (ISPC)
S: centro radiofónico internacional (CRI)
F: centre radiophonique international (CRI)

international sound-programme circuit
S: circuito radiofónico internacional
F: circuit radiophonique international

international sound-programme connection
S: conexión radiofónica internacional
F: communication radiophonique internationale

international sound-programme link
S: enlace radiofónico internacional
F: liaison radiophonique internationale

international sound-programme transmission
S: transmisión radiofónica internacional
F: transmission radiophonique internationale

international store-and-forward
S: almacenamiento y retransmisión internacional
F: enregistrement et retransmission au niveau international

international switching centre (ISC)
S: central de conmutación internacional (CCI)
F: centre de commutation international (CCI)

international telegraph alphabet No. 1 (ITA1)
S: alfabeto telegráfico internacional N.° 1 (ATI N.° 1)
F: alphabet télégraphique international n° 1 (ATI n° 1)

international telegraph alphabet No. 2 (ITA2)
S: alfabeto telegráfico internacional N.° 2 (ATI N.° 2)
F: alphabet télégraphique international n° 2 (ATI n° 2)

international telegraph alphabet No. 3 (ITA3)
S: alfabeto telegráfico internacional N.° 3 (ATI N. 3)
F: alphabet télégraphique international n° 3 (ATI n° 3)

international telegraph alphabet No. 4 (ITA4)
S: alfabeto telegráfico internacional N.° 4 (ATI N.° 4)
F: alphabet télégraphique international n° 4 (ATI n° 4)

international telephone connection
S: conexión telefónica internacional; conexión telefónica internacional completa
F: communication téléphonique internationale

international television centre (ITC)
S: centro internacional de televisión (CIT)
F: centre télévisuel international (CTI)

international television circuit
S: circuito internacional de televisión
F: circuit télévisuel international

international television connection
S: conexión internacional de televisión
F: communication télévisuelle internationale

international television link
S: enlace internacional de televisión
F: liaison télévisuelle internationale

international television programme centre (ITPC)
S: centro internacional de televisión (CIT)
F: centre télévisuel international (CTI)

international television transmission
S: transmisión internacional de televisión
F: transmission télévisuelle internationale

international telex position
S: posición télex internacional
F: position télex internationale

international transferred account (TA) service
S: servicio de cuentas transferidas (servicio TA) en el servicio internacional de transmisión de datos
F: service de comptes transférés (service TA) dans le service international de transmission de données

international transferred account telegraph and telematic service
S: servicio internacional de cuentas telegráficas y telemáticas transferidas
F: service international de comptes télégraphiques et télématiques transférés

international transit exchange
S: central de tránsito internacional
F: centre de transit international

international transit store-and-forward
S: almacenamiento y retransmisión internacional en tránsito
F: enregistrement et retransmission en transit au niveau international

international two-stage selection
S: selección internacional de dos etapas
F: numérotation internationale en deux temps

international user class of service
S: clase de servicio de usuario internacional
F: catégorie d'usagers du service international

international videotex gateway
S: cabecera videotex internacional
F: accès multiple au vidéotex international

international X.121 format
S: formato X.121 internacional
F: format international X.121

internetwork circuit section
S: sección de circuito interredes
F: section de circuit inter-réseaux

interpersonal message (IPM)
S: mensaje interpersonal (MIP)
F: message de personne à personne (IPM)

interpersonal messaging service
S: servicio de mensajería interpersonal
F: service de messagerie de personne à personne

interpolation gain (IG)
S: ganancia de interpolación (GI)
F: gain de concentration (GC)

INTERROGATE:
S: INTERROGAR
F: INTERROGATION

interrogate
S: interrogar
F: interroger

interruption
S: interrupción
F: interruption

interruption; break (of service)
S: interrupción (de un servicio); corte (de un servicio)
F: interruption; coupure d'un service

interruption control
S: protección contra las interrupciones
F: contrôle d'interruption

interruption duration
S: duración de interrupción
F: durée d'interruption

interruption of a call in progress service
S: servicio de llamada preferente
F: service d'interruption d'une conversation en cours

intersection
S: intersección
F: intersection

intersystem crosstalk
S: diafonía entre sistemas
F: diaphonie entre systèmes

inter-telex SFU messages (IM)
S: mensajes entre UAR télex (MEU)
F: messages entre UER télex (IM)

interworking
S: interfuncionamiento
F: interfonctionnement

interworking between networks
S: interfuncionamiento de redes
F: interconnexion de réseaux

interworking between Teletex and other services
S: interfuncionamiento del servicio teletex con otros servicios
F: interfonctionnement entre le service télétex et d'autres services

interworking by call control mapping
S: interfuncionamiento por correspondencia del control de la llamada
F: interfonctionnement par mappage de commande d'appel

interworking by port access
S: interfuncionamiento mediante acceso por puerto
F: interfonctionnement par point d'accès

interworking function
S: función de interfuncionamiento
F: fonction d'interfonctionnement

interworking functions (IWFs)
S: funciones de interfuncionamiento (FIF)
F: fonction d'interfonctionnement (FIF)

interworking in the Teletex service between different networks
S: interfuncionamiento de redes diferentes en el servicio teletex
F: interfonctionnement dans le service télétex entre des réseaux différents

interworking indicator
S: indicador de interfuncionamiento
F: indicateur d'interfonctionnement

intraband transmission
S: telegrafía intrabanda
F: télégraphie intrabande

intrasystem crosstalk
S: diafonía intrasistema
F: diaphonie dans un système; diaphonie à l'intérieur du système

intrinsic ...; inherent ...
S: ... intrínseco; ... inherente
F: ... intrinsèque; ... inhérent

intrusion tone
S: tono de intervención
F: tonalité d'intrusion

invalid presentation-protocol-data-unit
S: unidad de datos de protocolo de presentación no válida
F: unité de données du protocole de présentation non valide

invalid SPDU
S: UDPS no válida
F: SPDU non valide

invalid TPDU
S: UDPT inválida
F: TPDU non valide

inverse video
S: inversión video
F: inversion vidéo

invoke
S: invocar; invocación
F: lancement

invoking-application-entity; invoker
S: entidad de aplicación invocadora; invocador
F: entité d'application appelante; demandeur

I/O device
S: dispositivo de E/S
F: dispositif d'E/S

IP-message
S: mensaje IP
F: message PP

IPMS user answerback
S: distintivo de usuario SMIP
F: indicatif d'usager du service MPP

irregularity reflection coefficient
S: coeficiente de reflexión de las irregularidades
F: facteur de réflexion sur les irrégularités

ISDN access indicator
S: indicador de acceso RDSI
F: indicateur d'accès RNIS

ISDN address
S: dirección RDSI
F: adresse RNIS

ISDN connection
S: conexión de RDSI
F: connexion RNIS

ISDN customer access
S: acceso de cliente de la RDSI
F: accès d'abonné RNIS

ISDN user part (ISDN-UP)
S: parte usuario de RDSI (PU-RDSI)
F: Sous-Système Utilisateur pour le RNIS (SSUR)

ISDN user part (ISUP)
S: parte usuario RDSI (PUSI)
F: Sous-Système Utilisateur pour le RNIS (SSUR)

ISDN user part indicator
S: indicador de parte usuario RDSI
F: indicateur de Sous-Système Utilisateur pour le RNIS

ISDN user preference indicator
S: indicador de preferencia de la parte usuario RDSI
F: indicateur de préférence pour le Sous-Système Utilisateur pour le RNIS

isochronous
S: isócrono
F: isochrone

item; entity
S: elemento; entidad; ítem
F: entité; individu; item

item description
S: descripción de elemento
F: description de rubrique

item identifier
S: identificador de ítem
F: identificateur d'article

item selection procedure
S: procedimiento de selección de elemento
F: procédure de sélection de rubrique

itemization
S: itemización
F: itémisation

iteration
S: iteración
F: itération

J

jitter
S: fluctuación de fase
F: gigue

job
S: trabajo
F: tâche

job area
S: área de trabajo
F: domaine de tâches

judder (longitudinal)
S: desalineación longitudinal
F: broutage longitudinal

judder (transverse)
S: desalineación transversal
F: broutage transversal

junctor (in the crossbar system)
S: conector (en un sistema de barras cruzadas)
F: joncteur (dans le système automatique crossbar)

justifiable digit time-slot
S: intervalo de tiempo de dígito justificable
F: créneau temporel élémentaire justifiable

justification
S: justificación
F: justification

justification rate
S: velocidad de justificación
F: débit de justification

justification ratio
S: relación de justificación
F: taux de justification

justification service digit
S: dígito de servicio de justificación
F: élément numérique de service de justification

justified
S: justificado
F: justifié

justifying digit
S: dígito de justificación
F: élément numérique de justification

K

kern
S: saliente (de un carácter)
F: crénage

kerning offset
S: expansión por saliente
F: décalage de crénage

key; tag; label
S: clave; rótulo; etiqueta;
F: clé; étiquette label

key parameter
S: parámetro clave
F: paramètre clé

keyboard perforator
S: perforador de teclado
F: perforateur à clavier

keyboard selection
S: selección por teclado; marcación por teclado
F: numérotation au clavier (en télégraphie)

keyboard transmitter
S: transmisor de teclado
F: émetteur à clavier

keyed numeral
S: numeral de teclado
F: numéral clavier

keyword
S: palabra clave
F: mot clé

knowledge information
S: información de conocimiento
F: informations relatives aux connaissances; informations de connaissance

knowledge reference
S: referencia de conocimiento
F: référence de connaissance

knowledge tree
S: árbol de conocimiento
F: arbre de connaissances

KP signal; start-of-pulsing signal (sent in the forward direction)
S: señal KP; señal de comienzo de numeración (transmitida hacia adelante)
F: signal KP; signal de début de numérotation (émis dans le sens: vers l'avant)

L

label
S: etiqueta
F: étiquette

labelled channel
S: canal etiquetado
F: voie étiquetée

labelled deterministic channel
S: canal etiquetado determinístico
F: voie étiquetée déterministe

labelled interface structure
S: estructura de interfaz etiquetado
F: structure d'interface étiquetée

labelled multiplexing
S: multiplexación por etiquetado
F: multiplexage par étiquetage

labelled statistical channel
S: canal etiquetado estadístico
F: voie étiquetée statistique

laboratory test
S: prueba de laboratorio
F: essai en laboratoire

land earth station
S: estación terrena terrestre
F: station terrienne terrestre

land station charge
S: tasa terrestre
F: taxe terrestre

landline charge
S: tasa de línea
F: taxe de ligne

language or discriminating digit (sent in the forward direction)
S: cifra de idioma o de discriminación (transmitida hacia adelante)
F: chiffre de langue ou de discrimination (émis dans le sens: vers l'avant)

late distortion
S: distorsión en retardo
F: distorsion en retard

latent fault
S: avería latente
F: panne latente

layer
S: capa
F: couche

layer 4-7 protocol
S: protocolos de las capas 4 a 7
F: protocole, couches 4 à 7

layer interface
S: interfaz de capa
F: interface de couche; interface entre couches

layer-management
S: gestión de capa
F: gestion de couche

layer service
S: servicio de capa
F: service de couche

layer service element
S: elemento de servicio de capa
F: élément du service de couche

layer service primitives
S: primitivas de servicio de capa
F: primitives du service de couche

layout category
S: categoría de disposición
F: catégorie physique; catégorie de mise en page

layout object
S: objeto de disposición
F: objet physique; objet de mise en page

layout object class
S: clase de objeto de disposición
F: classe d'objet physique; classe d'objet de mise en page

layout option
S: opción de estructuración (de la presentación)
F: option de présentation

layout path
S: trayecto de disposición
F: trajet de formatage

layout process
S: proceso de disposición
F: processus de formatage; processus de mise en page

layout stream
S: tren de disposición
F: flot de formatage; courant de mise en page

layout structure
S: estructura de disposición
F: structure physique; structure de mise en page

layout style
S: estilo de disposición
F: style de formatage; style de mise en page

layout style identifier
S: identificador de estilo de disposición
F: identificateur de style de formatage

leading edge
S: borde anterior
F: bord d'attaque; bord antérieur

leak time
S: tiempo de fuga
F: temps de fuite

learning process
S: aprendizaje
F: apprentissage

lease
S: arriendo
F: location

leased circuit data transmission service
S: servicio de transmisión de datos por circuitos arrendados
F: service de location de circuits pour transmission de données

lecture call service
S: servicio de conferencia múltiple unidireccional
F: service de communication conférence unilatérale

left hand edge
S: borde izquierdo
F: limite gauche; bord gauche

length indicator (LI)
S: indicador de longitud (IL)
F: indicateur de longueur (INL)

length octets
S: octetos de longitud
F: octets de longueur

letter
S: letra
F: lettre

letter-shift signal
S: señal de cambio a letras; señal de inversión letras
F: signal d'inversion-lettres

letters case
S: posición letras
F: série des lettres

letters shift
S: cambio a letras; inversión letras
F: inversion-lettres

level of abstraction; level
S: nivel de abstracción; nivel
F: niveau d'abstraction; niveau

level of maintenance
S: nivel de mantenimiento
F: niveau de maintenance

lexical rules
S: reglas léxicas
F: spécification

lexical unit
S: unidad léxica
F: unités lexicales

limit
S: límite
F: limit; limite

limits for maintenance purposes
S: límites para fines de mantenimiento
F: limites applicables à la maintenance

limit test
S: prueba en los límites
F: essai aux limites

line
S: línea
F: ligne

line [loop]
S: línea
F: ligne [boucle]

line access point
S: puntos de acceso a la línea
F: points d'accès à la ligne

line activation
S: activación de línea
F: activation de ligne

line box
S: casilla de línea
F: boîtier ligne; case de lignes

line code
S: código de línea; código en línea
F: code en ligne

line concentrator; stand-alone concentrator
S: concentrador de líneas; concentrador autónomo
F: concentrateur de lignes; concentrateur autonome

line digit rate
S: velocidad digital de línea
F: débit numérique en ligne

line group
S: grupo de líneas
F: groupe de lignes (ligne groupée)

line home position
S: posición de comienzo de línea
F: position de début de ligne

line hunting
S: búsqueda de línea
F: recherche de ligne

line identification by the network
S: identificación de línea por la red
F: identification de ligne par le réseau

line layout table
S: tabla de disposición de líneas
F: repères de tabulations

line link (using symmetric pairs, coaxial pairs, radio-relay link, etc.)
S: enlace en línea (de pares simétricos, de pares coaxiales, de radioenlaces, etc.)
F: liaison en ligne (à paires symétriques, à paires coaxiales, sur faisceau hertzien, etc.)

line-only activation
S: activación de línea solamente
F: activation de la ligne seule

line-out-of-service signal
S: señal de línea fuera de servicio
F: signal de ligne hors service

line progression
S: progresión de las líneas
F: progression des lignes; progression linéïque

line signalling
S: señalización de línea
F: signalisation de ligne

line spacing
S: espaciamiento de líneas
F: espacement entre lignes

line termination (LT)
S: terminación de línea (TL)
F: terminaison de ligne (TL); fin de ligne

line-up period
S: periodo de ajuste
F: période de réglage

linear analogue control
S: control analógico lineal
F: synchronisation analogique linéaire

lines spacing
S: espaciamiento de líneas
F: espacement-ligne; espacement entre lignes

link; transmission link
S: enlace; enlace de transmisión
F: liaison; liaison de transmission

link; international link
S: enlace internacional
F: liaison internationale

link (in the crossbar system)
S: enlace (en el sistema de barras cruzadas)
F: maillon (dans le système automatique crossbar)

link (in programming)
S: enlace en programación; vinculación
F: lien (en programmation)

link-by-link signalling
S: señalización enlace por enlace
F: signalisation section par section

link state control (LSC)
S: control del estado del enlace (CEE)
F: supervision de l'état du canal sémaphore (SET)

link status signal unit (LSSU)
S: unidad de señalización del estado del enlace (UEE)
F: trame sémaphore d'état du canal sémaphore (TSE)

linked operation
S: operación enlazada; operación vinculada
F: opération liée

lip plane
S: plano de labios; posición equivalente de los labios
F: plan des lèvres; position équivalente des lèvres

lip ring
S: anillo de labios
F: anneau de garde (pour les lèvres)

list
S: lista
F: listage

list abstract-operation
S: operación abstracta de listar
F: list-abstract-operation; opération abstraite listage

listed
S: listado
F: listed; liste

listener echo; receive end echo
S: eco para el oyente; eco en la recepción
F: écho à la réception

listener echo loss; receive echo loss
S: atenuación del eco para el oyente; atenuación de eco en la recepción
F: affaiblissement de l'écho à la réception

listener sidetone rating (LSTR)
S: índice de efecto local para el oyente (IELO)
F: affaiblissement d'effet local pour la personne qui écoute (AELE)

literal
S: literal
F: littéral

load
S: carga
F: charge

load capacity
S: capacidad de carga
F: capacité de charge

load carrying capacity
S: capacidad de transportar carga
F: capacité d'acheminement de charge

load sharing (general)
S: compartición de carga (en general)
F: partage de la charge (en général)

load transfer
S: transferencia de tráfico
F: transfert de la charge

load-transfer-acknowledgement signal
S: señal de acuse de recibo de transferencia de tráfico
F: signal d'accusé de réception du transfert de la charge

load transfer signal
S: señal de transferencia de tráfico
F: signal de transfert de la charge

loading coil
S: bobina de carga
F: bobine de charge

local communication network (LCN)
S: red local de comunicaciones (RLC)
F: réseau de communication local (RCL)

local conductor
S: director local
F: président de séance

local end (with its termination)
S: extremo local (con su terminación)
F: ensemble terminal

local exchange
S: central local
F: central urbain; central local

local exchange call request delay (originating outgoing and internal traffic connections)
S: retardo de petición de llamada de central local (conexiones de tráfico saliente de origen e interno)
F: délai de demande d'appel du commutateur local (connexions du trafic interne et de départ)

local line
S: línea local
F: ligne locale

local line distribution network
S: red de distribución de líneas locales
F: réseau de distribution de lignes locales

local line network
S: red local de líneas (telefónicas)
F: réseau local de lignes (téléphoniques)

local matter
S: asunto local
F: initiative locale

local mode
S: modo local
F: mode local

local node
S: nodo local
F: nœud local

local number
S: número local
F: numéro local

local postal attributes
S: atributos postales locales
F: attributs postaux locaux

local record
S: registro local
F: contrôle local

local reference
S: referencia local
F: référence locale

local reference number (source/destination)
S: número de referencia local (origen/destino)
F: numéro de référence locale (de l'origine ou de la destination)

local scope
S: ámbito local
F: portée locale

local (telephone) system; local (telephone) circuit
S: sistema (telefónico) local
F: système (téléphonique) local; circuit (téléphonique) local

local telex number
S: número de télex local
F: numéro télex local

local test methods
S: métodos de prueba local
F: méthode de test locale

local-title
S: título local
F: appellation locale

local variable
S: variable local
F: variable locale

locality name
S: nombre de localidad
F: nom de localité

location
S: lugar (ubicación)
F: localisation

location area
S: zona de posición
F: zone de localisation

location area identification
S: identificación de la zona de posición
F: identification de la zone de localisation

location information
S: información de posición
F: information de localisation

location register
S: registro de posiciones
F: enregistreur de localisation (EL)

logical channel
S: canal lógico
F: voie logique

logical loopback
S: bucle lógico
F: bouclage logique; mise en boucle logique

logical object
S: objeto lógico
F: objet logique

logical object class
S: clase de objeto lógico
F: classe d'objets logiques

logical signalling channel
S: canal lógico de señalización
F: voie logique de signalisation

logical source
S: fuente lógica
F: source logique

logical structure
S: estructura lógica
F: structure logique

logical structure editing process
S: proceso de edición de estructura lógica
F: processus d'édition d'une structure logique

logically separate (C-plane information)
S: separado lógicamente (información del plano C)
F: séparé logiquement (information de plan C)

logistic delay
S: retardo logístico; demora logística
F: délai logistique

lone signal unit (LSU)
S: unidad aislada de señalización (UAS)
F: unité de signalisation solitaire (LSU)

loop back acknowledgement message (LPA)
S: mensaje de acuse de establecimiento de bucle (AEB)
F: message d'accusé de réception de bouclage (BOA) (utilisation nationale)

loopback
S: bucle; conexión en bucle
F: bouclage; mise en boucle

loopback application
S: aplicación de bucle
F: application de bouclage; application de la mise en boucle

loopback control mechanism
S: mecanismo de control de bucle
F: mécanisme de commande de bouclage; mécanisme de commande de mise en boucle

loopback control point
S: punto de control de bucle
F: point de commande de bouclage; point de commande de mise en boucle

loopback point
S: punto de bucle
F: point de bouclage; point de mise en boucle

loopback requesting point
S: punto de petición de bucles
F: point de demande de bouclage; point de demande de mise en boucle

loopback test pattern
S: secuencia de prueba de bucle
F: séquence d'essai de bouclage; signal destiné à l'essai de mise en boucle

loopback type
S: tipo de bucle
F: type de bouclage

loop/disconnect signalling
S: señalización por interrupción del bucle
F: signalisation par ouverture de boucle

loss distortion with frequency
S: distorsión de atenuación en función de la frecuencia
F: distorsion affaiblissement/fréquence

loss of frame alignment detector
S: detector de pérdida de alineación de trama
F: détecteur de perte de verrouillage de trame

lost call
S: llamada perdida
F: appel perdu

lost frames
S: trama perdida
F: trames perdues

lost time
S: tiempo muerto
F: temps mort

lost traffic; abandoned traffic
S: tráfico perdido; tráfico abandonado
F: trafic perdu; trafic abandonné

loudness rating
S: índice de sonoridad
F: équivalent pour la sonie

loudspeaking (telephone) set
S: aparato telefónico con altavoz; teléfono de altavoz
F: poste (téléphonique) à écoute ou à réception amplifiée sur haut-parleur

low layer compatibility information
S: información de compatibilidad de capa inferior
F: information concernant la compatibilité de couches inférieures

low level language
S: lenguaje de bajo nivel
F: langage lié au calculateur

low rate encoding (LRE)
S: codificación a baja velocidad (CBV)
F: codage à débit réduit (CDR); codage à faible débit (CFD)

lower tester
S: probador inferior
F: testeur inférieur

lower window edge
S: borde inferior de ventana
F: limite inférieure de fenêtre

LRE gain; DSI gain; DCME gain
S: ganancia de CBV; ganancia de IDP; ganancia de EDMC
F: gain de CFD; gain de CNP; gain d'EMCN

M

m : n pattern
S: secuencia m : n
F: séquence m : n

macro
S: macro
F: macro

macro call
S: llamada a macro; llamada de macro
F: appel de macro

macro definition
S: definición de macro
F: définition de macro

macro diagram
S: diagrama de macro
F: diagramme de macro

macroinstruction; macro (instruction)
S: macroinstrucción
F: macro-instruction

main cable
S: cable principal
F: câble principal

main distribution frame
S: repartidor principal
F: répartiteur d'entrée

main-entry
S: inscripción principal
F: main-entry; entrée principale

main repeater station
S: estación principal de repetidores
F: station principale de répéteurs

main section
S: sección principal
F: section principale

maintainability
S: mantenibilidad
F: maintenabilité

maintainability allocation; maintainability apportionment
S: distribución de la mantenibilidad; asignación de la mantenibilidad
F: répartition de la maintenabilité

maintainability demonstration
S: demostración de la mantenibilidad
F: vérification expérimentale de maintenabilité

maintainability model
S: modelo de mantenibilidad
F: modèle de maintenabilité

maintainability performance
S: mantenibilidad
F: maintenabilité

maintainability prediction
S: previsión de la mantenibilidad; predicción de la mantenibilidad
F: prévision de maintenabilité; prédiction de maintenabilité

maintainability programme
S: programa de mantenibilidad
F: programme de maintenabilité

maintainability verification
S: verificación de la mantenibilidad
F: vérification de la maintenabilité

maintenance
S: mantenimiento
F: maintenance

maintenance action; maintenance task
S: acción de mantenimiento; tarea de mantenimiento
F: opération de maintenance; tâche de maintenance

maintenance centre
S: centro de mantenimiento
F: centre de maintenance

maintenance echelon; line of maintenance
S: escalón de mantenimiento; línea de mantenimiento
F: échelon de maintenance

maintenance entity (ME)
S: entidad de mantenimiento (EM); célula de mantenimiento
F: entité de maintenance (EM); cellule de maintenance

maintenance entity assembly (MEA)
S: conjunto de entidades de mantenimiento
F: assemblage d'entités de maintenance (AEM)

maintenance event information (MEI)
S: información de evento de mantenimiento (IEM)
F: information sur les événements de maintenance (IEM)

maintenance man-hours (MMH)
S: duración equivalente de mantenimiento; horas-hombre de mantenimiento
F: durée équivalente de maintenance

maintenance philosophy
S: filosofía de mantenimiento
F: philosophie de maintenance

maintenance policy
S: política de mantenimiento
F: politique de maintenance

maintenance service provider (MSP)
S: proveedor de servicio de mantenimiento (PSM)
F: prestataire de service de maintenance (PSM)

maintenance strategy
S: estrategia de mantenimiento
F: stratégie de maintenance

maintenance sub-entity (MSE)
S: subentidad de mantenimiento (SEM)
F: sous-entité de maintenance (SEM)

maintenance support performance
S: logística de mantenimiento
F: logistique de maintenance

maintenance time
S: tiempo de mantenimiento
F: temps de maintenance

maintenance tree
S: árbol de mantenimiento
F: arbre de maintenance

major defect
S: defecto mayor
F: défaut majeur

major defective item
S: elemento defectuoso mayor
F: défectueux majeur

major fault
S: avería mayor
F: panne majeure

make!
S: hacer!; make!
F: make!

malicious call identification request indicator
S: indicador de petición de identificación de llamada maliciosa
F: indicateur de demande d'identification d'appel malveillant (utilisation nationale)

malicious call identification services
S: servicio de identificación de llamadas maliciosas
F: service d'identification d'appels malveillants

man-machine communication
S: comunicación hombre-máquina
F: communication homme-machine

man-machine interface
S: interfaz hombre-máquina
F: interface homme-machine

man-machine language (MML)
S: lenguaje hombre-máquina (LHM)
F: langage homme-machine (LHM)

man-machine terminal
S: terminal hombre-máquina
F: terminal homme-machine

managed object
S: objeto gestionado
F: objet géré

management domain (MD)
S: dominio de gestión (DG)
F: domaine de gestion (DG)

management domain name
S: nombre de dominio de gestión
F: nom d'un domaine de gestion

management entities
S: entidad de gestión
F: entités de gestion

management inhibiting
S: inhabilitación; inhibición (en gestión de tráfico de señalización)
F: inhibition par la gestion

management signals
S: señales de gestión
F: signaux de gestion

mandatory attribute
S: atributo obligatorio
F: attribut obligatoire

mandatory M component
S: componente obligatorio (O)
F: mandatory M component; élément obligatoire (O)

mandatory fixed part
S: parte obligatoria fija
F: partie obligatoire de longueur fixe

mandatory variable part
S: parte obligatoria variable
F: partie obligatoire de longueur variable

manual answering
S: respuesta manual
F: réponse manuelle

manual-changeover-acknowledgement signal
S: señal de acuse de recibo de paso manual a un enlace de reserva
F: signal d'accusé de réception de commutation manuelle sur liaison de réserve

manual-changeover signal
S: señal de paso manual a un enlace de reserva
F: signal de commutation manuelle sur liaison de réserve

manual observation
S: observación manual
F: observation manuelle

manual response
S: respuesta manual
F: réponse manuelle

manufacturing defect
S: defecto de fabricación
F: défaut de fabrication

manufacturing failure
S: fallo de fabricación
F: défaillance de fabrication

manufacturing fault
S: avería de fabricación
F: panne de fabrication

margin (of a receiver or terminal)
S: margen (de un receptor o terminal)
F: marge (d'un récepteur ou terminal)

margin (of a start-stop apparatus)
S: margen (de un aparato arrítmico)
F: marge (d'un appareil arythmique)

margin of a synchronous receiver
S: margen de un receptor síncrono
F: marge d'un récepteur synchrone

maritime account
S: cuenta radiomarítima
F: compte maritime

maritime assistance (prefix 39)
S: asistencia marítima (prefijo 39)
F: assistance maritime (préfixe 39)

maritime centre
S: centro marítimo; estación terrena costera
F: centre maritime; station terrienne côtière

maritime enquiries (prefix 31)
S: peticiones de información marítima (prefijo 31)
F: renseignements maritimes (préfixe 31)

maritime local circuit
S: circuito local marítimo
F: circuit maritime local

maritime local system
S: sistema marítimo local
F: système local maritime

Maritime Mobile-Satellite Service
S: servicio móvil marítimo por satélite
F: service mobile maritime par satellite

maritime mobile satellite system; maritime system
S: sistema móvil marítimo por satélite; sistema marítimo
F: système mobile maritime à satellites; système maritime

Maritime Mobile (Terrestrial) Service
S: servicio móvil marítimo (terrenal)
F: service mobile maritime (de Terre)

maritime satellite circuit
S: circuito marítimo por satélite
F: circuit maritime par satellite

maritime satellite message transmission system
S: sistema de transmisión de mensajes marítimo por satélite
F: système de transmission de messages maritime par satellite

maritime-satellite store-and-forward unit (MSSFU)
S: unidad de almacenamiento y retransmisión marítima por satélite (UARMS)
F: unité d'enregistrement et retransmission du service maritime par satellite (UERSMS); unité d'enregistrement et de retransmission maritime par satellite (UERMS)

maritime satellite system
S: sistema marítimo por satélite
F: système maritime à satellites

maritime terminal
S: terminal marítimo
F: terminal maritime

maritime terrestrial circuit
S: circuito terrenal marítimo; circuito marítimo terrenal
F: circuit maritime terrestre; circuit terrestre du système maritime

maritime test terminal (MTT)
S: terminal marítimo de pruebas (TMP)
F: terminal d'essai maritime (TEM)

mark; space; marking; spacing
S: trabajo; reposo
F: travail; repos

mark condition (in Morse code only)
S: trabajo (en código Morse)
F: travail (en code Morse)

marker
S: marcador
F: marqueur; point repère

master clock
S: reloj maestro
F: horloge maîtresse

mastergroup
S: grupo terciario
F: groupe tertiaire

mastergroup link
S: enlace en grupo terciario
F: liaison en groupe tertiaire

mastergroup section
S: sección de grupo terciario
F: section de groupe tertiaire

matching
S: concordancia
F: matching; concordance

maximum justification rate
S: velocidad máxima de justificación
F: débit maximal de justification

maximum theoretical numerical aperture
S: máxima apertura numérica teórica
F: ouverture numérique théorique maximale

mean ...; average ... (deprecated)
S: ... medio (adjetivo)
F: ... moyen (adjectif)

mean access delay
S: retardo medio de acceso; demora media de acceso
F: durée moyenne d'accès

mean accumulated down time (MADT)
S: tiempo medio acumulado de indisponibilidad (TMAI)
F: durée cumulée moyenne d'indisponibilité

mean active repair time (MART)
S: tiempo medio de reparación activa
F: durée moyenne de réparation active

mean administrative delay (MAD)
S: retardo medio administrativo; demora media administrativa
F: durée moyenne du délai administratif

mean availability $\overline{A}(t_1, t_2)$
S: disponibilidad media $\overline{A}(t_1, t_2)$
F: disponibilité moyenne $\overline{A}(t_1, t_2)$

mean down time (MDT)
S: tiempo medio de indisponibilidad (TMI)
F: temps moyen d'indisponibilité; durée moyenne d'indisponibilité (TMI)

mean dynamic frequency
S: frecuencia dinámica media
F: fréquence dynamique moyenne

mean exchange service inaccessibility
S: inaccesibilidad media al servicio de una central
F: inaccessibilité moyenne au service du central

mean failure intensity $\overline{Z}(t_1, t_2)$
S: intensidad media de fallos $\overline{Z}(t_1, t_2)$
F: intensité moyenne de défaillance $\overline{Z}(t_1, t_2)$

mean failure rate $\overline{\lambda}(t_1, t_2)$
S: tasa media de fallos $\overline{\lambda}(t_1, t_2)$
F: taux moyen de défaillance; densité (temporelle) moyenne de défaillance $\overline{\lambda}(t_1, t_2)$

mean holding time per seizure
S: tiempo medio de ocupación por toma
F: durée d'occupation moyenne par prise

mean interruption duration (MID)
S: duración media de una interrupción
F: durée moyenne d'une interruption (DMI)

mean logistic delay (MLD)
S: retardo medio logístico; demora media logística
F: durée moyenne du délai logistique

mean maintenance man-hours
S: duración media equivalente de mantenimiento; media de horas-hombre de mantenimiento
F: durée moyenne équivalente de maintenance

mean one-way propagation time
S: tiempo medio de propagación en un sentido
F: temps de propagation moyen dans un sens

mean repair rate $\overline{\mu}(t_1, t_2)$
S: tasa media de reparaciones $\overline{\mu}(t_1, t_2)$
F: densité (temporelle) moyenne de réparation $\overline{\mu}(t_1, t_2)$

mean repair time (MRT)
S: tiempo medio de reparación
F: durée moyenne de réparation

mean service access delay
S: retardo medio de acceso a un servicio; demora media de acceso a un servicio
F: durée moyenne d'accès

mean service provisioning time
S: tiempo medio de espera (para la prestación de un servicio)
F: délai moyen pour la fourniture d'un service

mean static frequency
S: frecuencia estática media
F: fréquence statique moyenne

mean time between failures (MTBF)
S: tiempo medio entre fallos (MTBF)
F: moyenne des temps entre défaillances (MTBF)

mean time between interruptions (MTBI)
S: tiempo medio entre interrupciones
F: durée moyenne entre interruptions (DMEI)

mean time between service outages
S: tiempo medio entre interrupciones del servicio
F: temps moyen entre les interruptions du service

mean time to failure (MTTF)
S: tiempo medio hasta el fallo (MTTF)
F: durée moyenne de fonctionnement avant défaillance (MTTF)

mean time to first failure (MTTFF)
S: tiempo medio hasta el primer fallo (MTTFF)
F: durée moyenne de fonctionnement avant la première **défaillance (MTTFF)**

mean time to restoration (MTTR); mean time to recovery; mean time to repair (deprecated)
S: tiempo medio hasta el restablecimiento (MTTR)
F: durée moyenne de panne; moyenne des temps pour la tâche de réparation (MTTR)

mean time to service restoral (MTTSR)
S: tiempo medio hasta el restablecimiento del servicio
F: temps moyen de rétablissement du service (MTTSR)

mean unavailability $\overline{U}(t_1, t_2)$
S: indisponibilidad media $\overline{U}(t_1, t_2)$
F: indisponibilité moyenne $\overline{U}(t_1, t_2)$

mean up time (MUT)
S: tiempo medio de disponibilidad (TMD)
F: temps moyen de disponibilité; durée moyenne de disponibilité (TMD)

measure (as applied in the study of reliability performance and related areas)
S: medida (aplicada en estudios de fiabilidad y de aspectos conexos)
F: caractéristique (probabilité); mesure (en fiabilité et domaines connexes)

measurement
S: medida; medición
F: mesure

measurement of the amount of traffic carried
S: medida del volumen de tráfico cursado
F: mesure du volume de trafic acheminé

measurement of the number of bids
S: medida del número de tentativas de toma
F: mesure du nombre de tentatives de prise

measurement signal (MS)
S: señal de medida (SM)
F: signal de mesure (SM)

mediation device (MD)
S: dispositivo de mediación (DM)
F: dispositif de médiation (DM)

mediation function (MF) block
S: bloque de funciones de mediación (FM)
F: bloc de fonction de médiation (FM)

medical advice (prefix 32)
S: consulta médica (prefijo 32)
F: avis médicaux (préfixe 32)

medical assistance (prefix 38)
S: asistencia médica (prefijo 38)
F: assistance médicale (préfixe 38)

medium type
S: tipo de medio (de presentación)
F: type de support

meeting
S: reunión
F: réunion

meeting location
S: lugar de reunión
F: lieu de réunion

member
S: miembro
F: membre

member recipient
S: destinatario miembro
F: destinataire membre

menu
S: menú
F: menu

menu identity
S: identidad de menú
F: identité de menu

menu item
S: elemento de menú
F: rubrique de menu

menu-item selection
S: selección de elemento de menú
F: sélection en mode menu

menu output
S: salida de menú
F: sortie de menu

merge area
S: área de fusión
F: zone de fusion

message
S: mensaje
F: message

(signal) message
S: mensaje (de señalización)
F: message (de signalisation)

message block
S: bloque de mensaje
F: bloc message

message deposit/message delivery; text deposit/delivery
S: depósito de mensaje/entrega de mensaje; depósito/entrega de texto
F: dépôt du message/remise du message; dépôt du texte/remise

message discrimination
S: discriminación de mensajes
F: discrimination des messages (de signalisation)

message distribution
S: distribución de mensajes
F: distribution des messages (de signalisation)

message group
S: grupo de mensajes
F: groupe de messages

message handling (MH)
S: tratamiento de mensajes (TM)
F: messagerie; traitement des messages (M)

message handling environment
S: entorno de tratamiento de mensajes
F: environnement de traitement de messages

message handling service
S: servicio de tratamiento de mensajes
F: service de messagerie

message handling system (MHS)
S: sistema de tratamiento de mensajes (STM)
F: système de messagerie (STM)

message priority
S: prioridad de los mensajes
F: priorité des messages

message-refusal signal
S: señal de mensaje rechazado
F: signal de refus de message

message relay service
S: servicio de retransmisión de mensajes; servicio de mensaje diferido
F: service de transmission de messages

message retrieval service element (MRSE)
S: elemento de servicio de extracción de mensaje (ESRM)
F: message retrieval service element (MRSE); élément de service recherche de message

message routing
S: encaminamiento de mensajes
F: acheminement des messages

message routing (signalling-)
S: encaminamiento de mensajes (de señalización)
F: route de message (de signalisation)

message sequencing
S: secuenciación de mensajes
F: mise en séquence des messages

message signal unit (MSU)
S: unidad de señalización de mensaje (USM)
F: trame sémaphore de message (TSM)

message spacing
S: separación de los mensajes
F: espacement des messages

message storage
S: almacenamiento de mensajes
F: mémorisation des messages

message store (MS)
S: memoria de mensajes (MM); almacenador de mensajes (AM)
F: mémoire des messages (MM)

message-submission abstract-operation
S: operación abstracta de depósito de mensajes
F: message-submission abstract-operation; opération abstraite dépôt de message

message suffix
S: sufijo de mensaje
F: suffixe de message

message switching; store-and-forward switching
S: conmutación de mensajes; conmutación con almacenamiento y reenvío
F: commutation de messages; commutation avec enregistrement et retransmission

message switching; store and forward switching
S: conmutación de mensajes; conmutación en el servicio de almacenamiento y retransmisión
F: commutation de messages; messagerie

message switching exchange; switch (message)
S: centro de conmutación de mensajes; conmutador (de mensajes)
F: commutateur de messages

message transfer (MT)
S: transferencia de mensajes (TRM)
F: transfert de messages (TM)

message transfer agent (MTA)
S: agente de transferencia de mensajes (ATM)
F: agent de transfert de messages (ATM)

Message Transfer Part (MTP)
S: parte transferencia de mensajes (PTM)
F: Sous-Système Transport de Messages (SSTM)

message transfer part receiving time (T_{mr})
S: tiempo de recepción de la parte de transferencia de mensajes (T_{mr})
F: temps de réception du Sous-Système Transport de messages (T_{mr})

message transfer part sending time (T_{ms})
S: tiempo de emisión de la parte de transferencia de mensajes (T_{ms})
F: temps d'émission du Sous-Système Transport de Messages (T_{ms})

message transfer service
S: servicio de transferencia de mensajes
F: service de transfert de messages

message transfer system (MTS)
S: sistema de transferencia de mensajes (STRM)
F: système de transfert de messages (système TM)

message transfer time at signalling transfer points (T_{cs})
S: tiempo de transferencia de mensajes en los puntos de transferencia de señalización (T_{cs})
F: temps de transfert des messages aux points de transfert sémaphores (T_{cs})

message transfer unit (MXU)
S: unidad de transferencia de mensajes (UTM)
F: unité de transfert de messages (UTM)

message waiting indication
S: indicación de mensaje en espera
F: indication de message en instance

messaging service
S: servicio de mensajería
F: service de messagerie

messaging system
S: sistema de mensajería
F: système de messagerie

Meta IV
S: Meta IV
F: Meta IV

meta-language
S: metalenguaje
F: métalangage

meteorological reports (prefix 41)
S: información meteorológica (prefijo 41)
F: bulletins météorologiques (préfixe 41)

methodology (for the specification of the man-machine interface)
S: metodología (para la especificación del interfaz hombre-máquina)
F: méthodologie (pour la spécification de l'interface homme-machine)

microinstruction
S: microinstrucción
F: micro-instruction

microprogram
S: microprograma
F: microprogramme

minor defect; imperfection
S: defecto menor; imperfección
F: défaut mineur; imperfection

minor defective item
S: elemento defectuoso menor
F: défectueux mineur

minor fault
S: avería menor
F: panne mineure

misdelivered frames
S: trama mal entregada
F: trames mal remises

mishandling failure
S: fallo por manejo incorrecto
F: défaillance par fausse manœuvre

mishandling fault
S: avería por manejo incorrecto
F: panne par fausse manœuvre

misrouting probability
S: probabilidad de encaminamiento erróneo
F: probabilité d'acheminement erroné

mistake; error (deprecated in this sense)
S: equivocación; error (desaconsejado en este sentido)
F: erreur (humaine); faute

misuse failure
S: fallo por uso incorrecto
F: défaillance par mauvaise utilisation

misuse fault
S: avería por uso incorrecto
F: panne par mauvaise utilisation

mixed analogue/digital channel
S: canal mixto analógico/digital
F: voie mixte analogique/numérique

mixed document
S: documento mixto
F: document mixte

mixed mode (MM)
S: modo mixto (MM)
F: mode mixte

mixed mode of operation
S: modo mixto de explotación
F: mode d'exploitation mixte

CCITT MML
S: LHM del CCITT
F: langage homme-machine du CCITT

MML function decomposition
S: descomposición de función LHM
F: subdivision de fonction LHM

MML function semantics
S: semántica de función LHM
F: sémantique de fonction LHM

MML syntax and dialogue procedures meta-language
S: metalenguaje de sintaxis y de procedimientos de diálogo del LHM
F: syntaxe et métalangage de procédure de dialogue LHM

mnemonic abbreviation
S: abreviatura nemotécnica
F: abréviation mnémonique

mnemonic O/R address
S: dirección O/D nemotécnica
F: adresse mnémonique E/D

Mobile Application Part (MAP)
S: parte aplicación móvil (PAM)
F: Sous-Système Application Mobile (SSAM)

mobile country code (MCC)
S: indicativo de país para el servicio móvil (IPM); indicativo de país de la estación móvil (IPM)
F: indicatif de pays de la station mobile (IPSM)

mobile earth station
S: estación terrena móvil
F: station terrienne mobile

mobile local circuit
S: circuito móvil local
F: circuit mobile local

mobile network code (MNC)
S: indicativo de red para el servicio móvil (IRM); indicativo de red móvil (IRM)
F: code de réseau mobile (CRM); indicatif de réseau mobile (IRM)

mobile satellite circuit
S: circuito móvil por satélite
F: circuit mobile par satellite

mobile satellite data switching exchange (MSDSE)
S: central de conmutación de datos del servicio móvil por satélite (CCDMS)
F: centre de commutation de données mobile par satellite (CCDMS)

mobile satellite data transmission system
S: sistema de transmisión de datos móvil por satélite
F: système de transmission de données mobile par satellite

mobile satellite switching centre (MSSC)
S: centro de conmutación del servicio móvil por satélite (CCMS); centro de conmutación móvil por satélite (CCMS)
F: centre de commutation du service mobile par satellite (CCMS)

mobile service switching centre-A (MSC-A) (controlling MSC)
S: centro de conmutación de los servicios móviles (CCM-A); CCM de control
F: centre de commutation pour les services mobiles (CCM-A); CCM de commande; CCM de supervision

mobile service switching centre-B' (MSC-B')
S: centro de conmutación de los servicios móviles (CCM-B')
F: centre de commutation pour les services mobiles (CCM-B'); CCM-B'

mobile services switching centre
S: centro de conmutación de servicios móviles (CCM); centro de conmutación de los servicios móviles (CCM)
F: centre de commutation pour les services mobiles (CCM)

mobile services switching centre (MSC) area
S: zona de centro de conmutación de los servicios móviles
F: zone du centre de commutation pour les services mobiles; zone du CCM

mobile station (MS)
S: estación móvil (EM)
F: station mobile (SM)

mobile station charge
S: tasa de estación móvil
F: taxe de station mobile

mobile station identification number (MSIN)
S: número de identificación de estación móvil (NIEM)
F: numéro d'identification de la station mobile (NISM)

mobile station roaming number
S: número itinerante de estación móvil; número de estación móvil itinerante
F: numéro itinérant de la station mobile; adresse de la station mobile itinérante

mobile subscriber international ISDN number
S: número RDSI internacional de abonado móvil
F: numéro RNIS international d'un abonné mobile

mobile terrestrial circuit
S: circuito móvil terrenal
F: circuit mobile terrestre

modal distance
S: distancia modal
F: distance modale

modal gauge
S: calibre modal
F: jauge modale

modal position
S: posición modal
F: position modale

mode
S: modo
F: mode

mode field
S: campo modal
F: champ de mode

mode field centre
S: centro del campo modal
F: centre du champ de mode

mode field concentricity error
S: error de concentricidad del campo modal
F: erreur de concentricité du champ de mode

mode field diameter
S: diámetro del campo modal (DCM)
F: diamètre du champ de mode

mode field non-circularity
S: no circularidad del campo modal
F: non-circularité du champ de mode

mode filter
S: filtro de modos
F: filtre de mode

mode of operation
S: modo de operación
F: mode d'exploitation

mode or type of communication identification
S: identificación del tipo o del modo de la comunicación
F: identification du type ou du mode de la communication

mode scrambler; mode mixer
S: mezclador de modos
F: brasseur de modes; mélangeur de modes

model
S: modelo
F: modèle

modification (of an item)
S: modificación (de un elemento)
F: modification (d'une entité)

modification indicator
S: indicador de modificación
F: indicateur de modification

modified alternate mark inversion code
S: código de inversión de marcas alternada modificado
F: code bipolaire alternant modifié

modify
S: modificar
F: modification

modify!
S: modificar!; modify!
F: modify!

modify operations
S: operaciones de modificar
F: opérations de modification

modulation converter
S: convertidor de modulación
F: translation convertisseuse de modulation

modulation rate
S: velocidad de modulación
F: rapidité de modulation

module
S: módulo
F: module

monarchic network; monarchic synchronized network
S: red despótica; red con sincronización despótica
F: réseau despotique; réseau à synchronisation despotique

monitor
S: monitor
F: moniteur

monologue interaction
S: interacción monólogo
F: interaction monologue

monologue output
S: salida de monólogo
F: sortie de monologue

Morse code
S: código Morse
F: code Morse

mouth reference point (MRP)
S: punto de referencia boca (PRB)
F: point de référence bouche (PRB)

MS abstract-service
S: servicio abstracto AM
F: MS abstract-service; service abstrait MS

MS abstract-service-provider
S: proveedor del servicio abstracto AM
F: MS abstract-service-provider; prestataire du service abstrait MS

MS abstract-service-user
S: usuario del servicio abstracto AM
F: MS abstract-service-user; usager du service abstrait MS

MS channel configuration
S: configuración de canal de estación móvil (EM)
F: configuration de canal de station mobile (SM)

MS registered/deregistered
S: EM registrada/no registrada
F: SM enregistrée; non enregistrée

MS-user
S: usuario AM
F: MS-user; usager MS

MSC area
S: zona de CCM
F: zone du CCM

MTP overall transfer time
S: tiempo de transferencia global de la PTM
F: temps total de transfert SSTM

MTP routing verification test (MRVT)
S: prueba de verificación de encaminamiento por la PTM (PVEM)
F: essai pour la vérification de l'acheminement dans le SSTM (EATP)

mu/A law converter
S: convertidor de ley μ/A
F: convertisseur loi μ/loi A

muldex
S: múldex
F: muldex

muldex/concentrator
S: múldex/concentrador dúplex
F: muldex-concentrateur

multi-address call
S: comunicación multidireccional
F: communication à destinations multiples

multi-block
S: multibloque
F: multibloc

multi-block acknowledgement signal
S: señal de acuse de recibo de multibloque
F: signal d'accusé de réception des multiblocs

multi-block monitoring signal
S: señal de supervisión de multibloque
F: signal de surveillance des multiblocs

multi-block synchronizationsignal unit (MSB)
S: unidad de señalización de sincronización de multibloque (SMB)
F: unité de signalisation de synchronisation des multiblocs (MBS)

multicasting
S: multidistribución; difusión
F: procédure de distinction multiple; multireport

multi-channel voice-frequency telegraphy (MCVFT)
S: telegrafía armónica multicanal (TAMC)
F: télégraphie harmonique

multi-clique mode
S: modo multihaz
F: mode multiclique

multi-clique working (point-to-multipoint operation)
S: funcionamiento multigrupo (operación punto a multipunto)
F: fonctionnement multi-groupements (exploitation point à multipoint)

multi-connection-endpoint-identifier
S: identificador de punto extremo múltiple de conexión
F: identificateur d'extrémité de connexion multipoint

multi-destination mode
S: modo multidestino
F: mode multidestination

multi-destination operation
S: operación multidestino
F: fonctionnement à destinations multiples

multi-endpoint-connection
S: conexión de puntos extremos múltiples
F: connexion multipoint

multiframe
S: multitrama
F: multitrame

multi-frequency code (MFC) signalling; MFC signalling
S: señalización en código multifrecuencia; señalización CMF
F: signalisation multifréquences; signalisation MF

multi-layer testing
S: prueba multicapa
F: test multicouche

multi-line (subscriber line)
S: línea de abonado multilínea
F: multiligne (ligne d'abonné); ligne d'abonné avec lignes multiples

multiple
S: múltiple
F: multiplage

multiple channel
S: multicanal
F: multivoie

multiple-destination transmissions
S: transmisiones a destinos múltiples
F: transmissions à destinations multiples

multiple subscriber number (MSN)
S: números múltiples de abonado (NMA)
F: numéro d'abonné multiple (NAM)

multiplex; digital multiplex equipment
S: múltiplex; equipo múltiplex digital
F: multiplex; équipement multiplex numérique

multiplex interface
S: interfaz múltiplex
F: interface multiplex

multiplex link
S: enlace multiplexado
F: liaison multiplex

multiplexer
S: multiplexor
F: multiplexeur

multiplexing
S: multiplexación; multiplexión
F: multiplexage

multipoint
S: multipunto
F: multipoint

multipoint access
S: acceso multipunto
F: accès multipoint

multipoint communication
S: comunicación multipunto
F: communication multipoint

multipoint connection
S: conexión multipunto
F: connexion multipoint; liaison multipoint

multipoint control unit (MCU)
S: unidad de control de conferencia multipunto (UCM)
F: unité de contrôle multipoint (UCM)

multi-processor exchange
S: central multiprocesadora
F: commutateur à plusieurs processeurs

multislot connection
S: conexión multiintervalo
F: connexion à intervalles de temps multiples

multi-station teletex installation
S: instalación teletex multiestación
F: installation télétex à postes multiples

multiterminal service circuit
S: circuito de servicio multiterminal
F: circuit de service multiterminal

multi-unit message (MUM)
S: mensaje múltiple (MMU)
F: message multiple (MUM)

multi-valued attribute
S: atributo de múltiples valores
F: multi-valued-attribute; attribut à plusieurs valeurs

mutilation
S: mutilación
F: mutilation

mutually synchronized network
S: red mutuamente sincronizada
F: réseau à synchronisation mutuelle

N

(N)-address; (N)-service-access-point-address
S: dirección (N); dirección de punto de acceso al servicio (N)
F: adresse (N); adresse de point d'accès à des services /N)

(N)-address-mapping
S: relación de correspondencia de dirección (N)
F: N)/mise en correspondance d'adresse (N)/N)

n-ary digital group
S: grupo digital n-ario
F: groupe numérique n-aire

n-ary digital signal
S: señal digital n-aria
F: signal numérique n-aire

(N)-connection
S: conexión (N)
F: N)/connexion (N)/N)

(N)-connection-endpoint
S: punto extremo de conexión (N)
F: N)/extrémité de connexion (N)/N)

(N)-connection-endpoint-identifier
S: identificador de punto extremo de conexión (N)
F: identificateur d'extrémité de connexion /N)/identificateur d'extrémité de connexion (N)

(N)-connection-endpoint-suffix
S: sufijo de punto extremo de conexión (N)
F: suffixe d'extrémité de connexion (N)

(N)-data-communication
S: comunicación de datos (N)
F: communication de données /N)

(N)-data-sink
S: sumidero de datos (N)
F: collecteur de données /N)

(N)-data-source
S: fuente de datos (N)
F: source de données /N)

(N)-data-transmission
S: transmisión de datos (N)
F: N)/transmission de données (N)/N)

(N)-directory
S: guía de direcciones (N)
F: N)/répertoire (N)/N)

(N)-duplex-transmission
S: transmisión dúplex (N)
F: N)/transmission duplex (N)/N)

(N)-entity
S: entidad (N)
F: entité (N)

(N)-facility
S: facilidad (N)
F: facilité (N)

(N)-function
S: función (N)
F: fonction (N)

(N)-half-duplex-transmission
S: transmisión semidúplex (N)
F: transmission semi-duplex /N)

(N)-interface-control-information
S: información de control de interfaz (N)
F: informations de contrôle de l'interface /N)/informations de contrôle de l'interface (N)

(N)-interface-data
S: datos de interfaz (N)
F: données de l'interface /N)

(N)-interface-data-unit
S: unidad de datos de interfaz (N)
F: N)/unité de données de l'interface (N)/N)

(N)-layer
S: capa (N)
F: couche (N)

(N)-mandatory-service
S: servicio obligatorio (N)
F: service obligatoire (N)

(N)-one-way communication
S: comunicación unidireccional (N)
F: communication unilatérale /N)

(N)-protocol
S: protocolo (N)
F: N)/protocole (N)/N)

(N)-protocol-connection-identifier
S: identificador de conexión de protocolo (N)
F: identificateur de connexion pour le protocole /N)/identificateur de connexion pour le protocole (N)

(N)-protocol-control-information
S: información de control de protocolo (N)
F: informations de contrôle du protocole /N)/informations de contrôle du protocole (N)

(N)-protocol-data-unit
S: unidad de datos de protocolo (N)
F: N)/unité de données de protocole (N)/N)

(N)-protocol-identifier
S: identificador de protocolo (N)
F: identificateur du protocole /N)/identificateur du protocole (N)

(N)-provider-optional-service
S: servicio opcional de proveedor (N)
F: service optionnel pour le fournisseur (N)

(N)-relay
S: retransmisión (N)
F: relais /N)/relais (N)

(N)-service
S: servicio (N)
F: service (N)

(N)-service-access-point
S: punto de acceso al servicio (N)
F: point d'accès à des services (N)

(N)-service-connection-identifier
S: identificador de conexión del servicio (N)
F: identificateur de connexion pour le service /N)/identificateur de connexion pour le service (N)

(N)-service-data-unit
S: unidad de datos del servicio (N)
F: N)/unité de données de service (N)/N)

(N)-simplex-transmission
S: transmisión símplex (N)
F: transmission simplex /N)

(N)-subsystem
S: subsistema (N)
F: sous-système (N)

(N)-suffix
S: sufijo (N)
F: N)/suffixe (N)/N)

(N)-two-way alternate communication
S: comunicación bidireccional alternada (N)
F: communication bilatérale à l'alternat /N)

(N)-two-way-simultaneous-communication
S: comunicación bidireccional simultánea (N)
F: communication bilatérale simultanée /N)

n-unit code
S: código de n unidades; código de n elementos unitarios
F: code à n moments; code à n éléments (unitaires)

n-unit code alphabet
S: alfabeto de código de n unidades
F: alphabet d'un code à n moments

(N)-user-data
S: datos de usuario (N)
F: données d'utilisateur (N)

(N)-user-optional-service
S: servicio opcional de usuario (N)
F: service optionnel pour l'utilisateur (N)

name
S: nombre
F: nom

name resolution
S: resolución de nombre
F: résolution du nom

named-defined parameter
S: parámetro definido por el nombre
F: paramètre défini par nom

naming authority
S: autoridad de denominación; autoridad denominadora
F: autorité responsable de l'appellation; autorité d'appellation; autorité de désignation

naming context
S: contexto de denominación
F: contexte de dénomination

naming domain
S: dominio de denominación
F: domaine d'appellation

national/international call indicator
S: indicador de llamada nacional/internacional
F: indicateur d'appel national/international

national circuit
S: circuito nacional
F: circuit national

national destination code (NDC)
S: indicativo nacional de destino (IND)
F: indicatif national de destination (IND)

national exchange
S: central nacional
F: centre national

national extension
S: prolongación nacional
F: prolongement national

national information service (prefix 14)
S: servicio de información nacional (prefijo 14)
F: service des renseignements nationaux (préfixe 14)

national line
S: línea nacional
F: ligne nationale

national main section
S: sección principal nacional
F: section nationale principale

national (significant) mobile number
S: número móvil nacional (significativo)
F: numéro national (significatif) de la station mobile

national mobile station identity (NMSI)
S: identidad nacional de estación móvil (INEM)
F: identité nationale de la station mobile (INSM)

national-network-congestion signal
S: señal de congestión en la red nacional
F: signal d'encombrement sur le réseau national

national (significant) number
S: número nacional (significativo)
F: numéro national (significatif)

national operator (prefix 13)
S: operador(a) nacional (prefijo 13)
F: opérateur national (préfixe 13)

national portion call set-up delay
S: tiempo de establecimiento de la llamada del tramo nacional
F: temps d'établissement d'une communication dans une partie nationale

national portion clear indication delay
S: retardo de indicación de liberación de un tramo nacional
F: temps d'indication de libération dans une partie nationale

national portion data packet transfer delay
S: tiempo de transferencia de paquetes de datos en un tramo nacional
F: temps de transfert des paquets de données dans une partie nationale

national portion of an international virtual connection
S: tramo nacional de una conexión virtual internacional
F: partie nationale d'une connexion virtuelle internationale

national (trunk) prefix
S: prefijo (interurbano) nacional; prefijo nacional; prefijo interurbano
F: préfixe interurbain national

national section
S: sección nacional
F: section nationale

national signalling network
S: red de señalización nacional
F: réseau sémaphore national

national signalling point (NSP)
S: punto se señalización nacional (PSN)
F: point sémaphore national (PSN)

national sound-programme centre (NSPC)
S: centro radiofónico nacional (CRN)
F: centre radiophonique national (CRN)

national subscriber's telex number
S: número télex nacional de abonado
F: numéro télex national d'abonné

national system
S: sistema nacional
F: système national

national telemessage distribution office
S: oficina nacional de distribución de telemensajes
F: bureau national de distribution de télémessages

national telemessage input centre
S: centro nacional de depósito de telemensajes
F: centre national d'introduction des télémessages

national telephone system
S: sistema telefónico nacional
F: systèmes téléphoniques nationaux

national television centre (NTC)
S: centro nacional de televisión (CNT)
F: centre télévisuel national (CTN)

natural
S: natural
F: naturel

natural language description
S: descripción en lenguaje natural
F: description en langage naturel

nature of address indicator
S: indicador de la naturaleza del número
F: indicateur de la nature de l'adresse

nature-of-circuit indicator
S: indicador de la naturaleza del circuito
F: indicateur de la nature du circuit

nature of circuit indicators (sent in the forward direction)
S: indicadores de la naturaleza del circuito (transmitida hacia adelante)
F: indicateurs de nature du circuit (émis dans le sens: vers l'avant)

navigational reports from ships (prefix 42)
S: peligros y avisos para la navegación (prefijo 42)
F: rapports de navigation en provenance de navires (préfixe 42)

near-end crosstalk (NEXT)
S: paradiafonía (NEXT)
F: paradiaphonie (NEXT)

negative acknowledgement (NACK)
S: acuse de recibo negativo (RN)
F: accusé de réception négatif (ACN)

negative indication tone
S: tono de indicación negativo
F: tonalité d'indication négative

negative justification
S: justificación negativa
F: justification négative

negotiation
S: negociación
F: négociation

net margin
S: margen neto
F: marge nette

network; telecommunication network
S: red; red de telecomunicación
F: réseau; réseau de télécommunications

network
S: red
F: réseau

network accessibility
S: accesibilidad (de una red)
F: accessibilité (d'un réseau)

network address
S: dirección de red
F: adresse réseau

network addressing authority
S: autoridad de direccionamiento de red
F: autorité d'adressage de réseau

network addressing domain
S: dominio de direccionamiento de red
F: domaine d'adressage du réseau

network analysis point
S: punto de análisis de la red
F: centre d'analyse du réseau

network clear indication delay (NCID)
S: retardo de indicación de liberación por la red (RILR)
F: temps d'indication de libération dans le réseau

network cluster
S: agrupación de haces
F: faisceau de faisceaux

network coordination station (NCS)
S: estación de coordinación de la red (ECR)
F: station de coordination du réseau (SCR)

network element (NE)
S: elemento de red (ER)
F: élément de réseau (ER)

network element function (NEF) block
S: bloque de funciones de elementos de red (FER)
F: bloc de fonction d'élément de réseau (FER)

network failure
S: fallo de red; avería en la red
F: défaillance du réseau

network group
S: grupo de redes
F: groupe de réseaux

network image
S: imagen de la red
F: image du réseau

network indicator
S: indicador de red
F: indicateur de réseau

network-maintenance signals
S: señales de mantenimiento de red
F: signaux de maintenance du réseau

network management action
S: acción de gestión de red
F: action de gestion du réseau

network management boundary
S: frontera de gestión de la red
F: limite de la zone de gestion du réseau

network management centre
S: centro de gestión de red
F: centre de gestion du réseau

network management control
S: control de gestión de red
F: commande de gestion du réseau

network management data
S: datos de gestión de red
F: données de gestion du réseau

network management indicator
S: indicador de gestión de red
F: indicateur de gestion du réseau

network management information
S: información de gestión de red
F: information de gestion du réseau

network management object
S: objeto de gestión de red
F: objet de gestion du réseau

network management parameters
S: parámetros de gestión de red
F: paramètres de gestion du réseau

network-management signals
S: señales de gestión de red
F: signaux de gestion du réseau

network management system
S: sistema de gestión de red
F: système de gestion du réseau

network node interface (NNI)
S: interfaz de nodo de red (INR)
F: interface de nœud du réseau (INR)

network performance (NP)
S: calidad de funcionamiento de la red (CFUR)
F: performance de réseau (PDR); qualité technique du réseau

network problem identity
S: identidad de problema de red
F: identité du problème concernant le réseau; identité de problème du réseau

network protocol address information
S: información de dirección de protocolo de red
F: information d'adresse de protocole de réseau

network raw data
S: datos de red en bruto; datos de red sin procesar
F: données brutes du réseau

network recall
S: rellamada a la red
F: rappel du réseau

network reference data
S: datos de referencia de la red
F: données de référence du réseau

network section
S: sección de red
F: section de réseau

Network Service Part (NSP)
S: parte servicio de red (PSR)
F: Sous-Système Service Réseau (SSSR)

network service provider
S: proveedor del servicio de red
F: fournisseur du service de réseau

network termination (NT)
S: terminación de red (TR)
F: terminaison de réseau (TR)

network transfer delay
S: tiempo de transferencia de la red
F: temps de propagation sur le réseau

network utility
S: servicio interredes
F: service inter-réseaux

network utility field
S: campo de servicios interredes
F: champ des services inter-réseaux

new
S: nuevo
F: new; nouveau

new layout object
S: nuevo objeto de disposición
F: nouvel objet physique; nouvel objet de mise en page

newtype
S: neotipo
F: nouveau type (newtype)

next transmitted bit
S: bit siguiente transmitido
F: bit suivant transmis

no tone probability
S: probabilidad de ausencia de tono
F: probabilité de non tonalité

node; switching node
S: nodo; nodo de conmutación
F: nœud; nœud de commutation

nominal alternating discharge current
S: corriente alterna nominal de descarga
F: courant alternatif de décharge nominal

nominal black (white)
S: negro nominal; blanco nominal
F: noir nominal; blanc nominal

nominal d.c. spark-over voltage
S: tensión continua nominal de cebado
F: tension continue nominale d'amorçage

nominal impulse discharge current
S: corriente nominal de choque de descarga
F: courant nominal de choc de décharge

nominal justification rate
S: velocidad nominal de justificación
F: débit nominal de justification

nominal justification ratio
S: relación nominal de justificación
F: taux nominal de justification

nominal loudness ratings of the national systems
S: índices de sonoridad (IS) nominales de los sistemas nacionales
F: équivalents pour la sonie (ES) nominaux des systèmes nationaux

nominal margin (of a type of apparatus)
S: margen nominal (de un tipo de aparato)
F: marge nominale (d'un type d'appareil)

nominal page
S: página nominal
F: page nominale

nominal relative levels at exchange boundaries
S: niveles relativos nominales en las fronteras de la central
F: niveaux relatifs nominaux aux limites du commutateur

nominal relative levels at virtual analogue switching points
S: niveles relativos nominales en los extremos virtuales analógicos
F: niveaux relatifs nominaux aux extrémités analogiques virtuelles de commutation

nominal transmission loss
S: pérdida de transmisión nominal; atenuación de transmisión nominal
F: affaiblissement de transmission nominal

nominal transmission loss
S: pérdida de transmisión nominal
F: affaiblissement de transmission nominal

nominated reserved circuit
S: circuito de reserva especializado
F: circuit de secours (pour la télégraphie harmonique)

non-adjacent signalling points
S: puntos de señalización no adyacentes
F: points sémaphores non adjacents

non-associated mode of operation
S: modo de explotación no asociado
F: modes d'exploitation «non associés»

non-associated mode (of signalling)
S: modo (de señalización) no asociado
F: mode (de signalisation)non associé

non-associated signalling
S: señalización no asociada
F: signalisation non associée

non-basic
S: no básico
F: non essentiel

non-circularity of core; non-circularity of cladding
S: no circularidad del núcleo; no circularidad de la superficie del revestimiento
F: non-circularité du cœur; non circularité de la surface de la gaine

non-circularity of the cladding surface
S: no circularidad de la superficie del revestimiento
F: non-circularité de la surface de la gaine

non-conducted conference
S: conferencia no dirigida
F: conférence non dirigée

non-critical defect
S: defecto no crítico
F: défaut non critique

non-critical failure
S: fallo no crítico
F: défaillance non critique

non-critical fault
S: avería no crítica
F: panne non critique

non-decimal numeral
S: numeral no decimal
F: numéral non décimal

non-delivery
S: no entrega
F: non-remise

non-delivery notification (NDN)
S: notificación de no entrega (NNE)
F: notification de non-remise (NNR)

non-delivery notification (NDN) / positive delivery notification (PDN)
S: notificación de no entrega (NDN)/notificación de entrega positiva (PDN)
F: avis de non-remise (NDN)/avis de remise positive (PDN)

non-delivery report
S: informe de no entrega
F: rapport de non-remise

non-designation method
S: método sin designación
F: méthode sans désignation

non-destructive
S: no destructivo
F: non destructif

nonlinear processing loss (A_{NLP})
S: atenuación por procesamiento no lineal; atenuación por tratamiento no lineal (A_{PNL})
F: affaiblissement par traitement non linéaire (A_{TNL})

nonlinear processor (NLP)
S: procesador no lineal (PNL)
F: processeur non linéaire (PNL)

non-mandatory attribute
S: atributo no obligatorio
F: attribut non obligatoire

non-operating state
S: estado de no funcionamiento
F: (état de) non-fonctionnement

non-operating time
S: tiempo de no funcionamiento
F: temps de non-fonctionnement

non-print cycle
S: ciclo sin impresión
F: cycle sans impression

non-registered access
S: acceso no registrado
F: accès non homologué

non-relevant failure
S: fallo no pertinente; fallo irrelevante
F: défaillance non pertinente; défaillance à ne pas prendre en compte

non-repaired item
S: elemento no reparado
F: entité non réparée

non-required time
S: periodo no requerido
F: période non requise

non-specific subordinate reference
S: referencia subordinada no específica
F: référence subordonnée non spécifique

non-switched connection
S: conexión no conmutada
F: connexion non commutée

non-switched connection element; non-switched ISDN connection element
S: elemento de conexión no conmutada; elemento de conexión no conmutada de RDSI
F: élément de connexion non commuté; élément de connexion RNIS non commutée

non-synchronized network
S: red no sincronizada
F: réseau non synchronisé

non-synchronous
S: no-síncrono
F: non synchrone

non-terminal symbol
S: símbolo no terminal
F: symbole non terminal

non-transparent loopback
S: bucle no transparente
F: bouclage non transparent; boucle non transparente

non-uniform encoding
S: codificación no uniforme
F: codage non uniforme

non-uniform quantizing
S: cuantificación no uniforme
F: quantification non uniforme

normal mode
S: modo normal
F: mode normal

normal (traffic) routing
S: encaminamiento normal (de tráfico)
F: acheminement normal

normal routing of (signalling)
S: encaminamiento normal (de señalización)
F: acheminement normal (de signalisation)

normal transmission link/equipment; normal digital block, group, supergroup, etc.
S: enlace normal; equipo normal; bloque digital, grupo (primario, secundario, etc.) normales
F: liaison normale; équipement normal; bloc numérique, groupe (primaire, secondaire, etc.) normal

normalized free-field response (at a given point)
S: respuesta normalizada en campo libre (en un punto dado)
F: réponse normalisée en champ libre (en un point donné)

normalized obstacle diffraction
S: difracción por obstáculo normalizada
F: diffraction normalisée occasionnée par l'obstacle de référence

the not-ready condition of the telex terminal
S: condición no preparado del terminal télex
F: état non prêt du terminal télex

note
S: nota
F: note

notification
S: notificación
F: notification

novel services
S: servicios nuevos
F: services nouveaux

NSAP address (OSI-)
S: dirección PASR (de la ISA)
F: adresse NSAP (OSI)

null
S: null; nulo
F: null

null hypothesis H_0
S: hipótesis nula H_0
F: hypothèse nulle H_0

null type
S: tipo null; tipo nulo
F: type Vide

number of discarded pels
S: número de pels descartados
F: nombre d'éléments d'image rejetés

number of lines
S: número de líneas
F: nombre de lignes

number of pels per line
S: número de pels por línea
F: nombre d'éléments d'image par ligne

number of significant conditions
S: valencia (número de estados significativos)
F: valence

number-received signal (sent in the backward direction)
S: señal de número recibido (transmitida hacia atrás)
F: signal de numéro reçu (émis dans le sens en arrière)

number repetition service
S: servicio de repetición del último número marcado
F: service de répétition de numéro

numbering plan
S: plan de numeración
F: plan de numérotage

numbering plan indicator
S: indicador de plan de numeración
F: indicateur de plan de numérotage

numbering plan interworking
S: interfuncionamiento de planes de numeración
F: interfonctionnement des plans de numérotage

numbering system
S: sistema de numeración
F: système de numération

numeral
S: numeral
F: numéral

numeric O/R address
S: dirección O/D numérica
F: adresse numérique E/D

numeric user identifier
S: identificador de usuario numérico
F: identificateur numérique d'utilisateur

numerical aperture
S: apertura numérica
F: ouverture numérique

numerical signal (sent in the forward direction)
S: señal de numeración (transmitida hacia adelante)
F: signal de numérotation (émis dans le sens en avant)

O

object
S: objeto
F: objet

object (of interest)
S: objeto (de interés)
F: objet (d'intérêt)

object class
S: clase de objeto; clases de objeto
F: classe d'objets; catégorie d'objets

object class description
S: descripción de clase de objeto
F: description de classe d'objets

object class identifier
S: identificador de clase de objeto
F: identificateur de classe d'objet

object description
S: descripción de objeto
F: description d'objet

object descriptor type
S: tipo object descriptor; tipo descriptor de objeto
F: type Descripteur d'objet

object entry
S: inserción de objeto; asiento de objeto
F: entrée d'objet

object identifier
S: identificador de objeto
F: identificateur d'objet

object identifier type
S: tipo object identifier; tipo identificador de objeto
F: type Identificateur d'objet

object language; target language
S: lenguaje objeto; lenguaje resultante
F: langage résultant; langage-objet

object type
S: tipo de objeto
F: type d'objet

objective loudness rating (OLR)
S: indice de sonoridad objetivo (ISO)
F: équivalent objectif pour la sonie (EOS)

observed data
S: datos observados; valores observados
F: valeur observée; donnée observée

observed traffic
S: tráfico observado
F: trafic observé

observed value (in statistics)
S: valor observado (en estadística)
F: valeur observée (en statistique)

obstacle effect (obstruction effect)
S: efecto de obstáculo; efecto de obstrucción
F: effet d'obstacle; effet d'obstruction

occasional transmissions
S: transmisiones ocasionales
F: transmissions occasionnelles

occlusion effect
S: efecto de oclusión
F: effet d'occlusion

occupancy
S: ocupación
F: occupation

octal numeral
S: número octal; numeral octal
F: nombre octal; numéral octal

octet
S: octeto
F: octet

octet sequence integrity
S: integridad de la secuencia de octetos
F: intégrité de la suite des octets

octetstring type
S: tipo octetstring; tipo cadena de octetos
F: type Chaîne d'octets

Odd/even indicator
S: indicador par/impar
F: indicateur de parité

offset
S: desplazamiento (distancias a los bordes)
F: décalage

off-site maintenance
S: mantenimiento no local
F: maintenance déportée

OFFSPRING
S: OFFSPRING; VÁSTAGO
F: DESCENDANT (OFFSPRING)

oganizational unit name
S: nombre de la unidad organizadora
F: nom d'une unité d'organisation

old serving MSC
S: antiguo CCM sirviente
F: CCM serveur antérieur

oligarchic network; oligarchic synchronized network
S: red oligárquica; red con sincronización oligárquica
F: réseau oligarchique; réseau à synchronisation oligarchique

omnibus service circuit
S: circuito de servicio ómnibus
F: circuit de service omnibus

on-line delivery acknowledgement (ODA)
S: acuse de recibo de entrega en línea (ODA)
F: avis de remise en ligne

on-line documentation
S: documentación en líneas
F: documentation en ligne

on-off transmission
S: transmisión cerrado-abierto
F: transmission par tout ou rien

on-site maintenance; in situ maintenance; field maintenance
S: mantenimiento local; mantenimiento sobre el terreno
F: maintenance in situ

one point five (1.5)/two (2) Mbit/s multiplex system coversion (1.5/2 Mbit/s MSC)
S: conversión de sistemas múltiplex 1,5/2 Mbit/s (CSM 1,5/2 Mbit/s)
F: conversion de système multiplex à 1,5/2 Mbit/s (CSM à 1,5/2 Mbit/s)

one-sided test
S: prueba unilateral
F: test unilatéral

one-stage/two-stage selection procedure for telex to teletex direction of interworking
S: procedimientos con marcación mono o bietapa para el interfuncionamiento de télex a teletex
F: procédures avec la sélection en une ou deux étapes pour l'interfonctionnement dans le sens télex vers télétex; procédure de numérotation en une étape ou en deux étapes pour l'interfonctionnement dans le sens télex vers télétex

one-step activation
S: activación en una etapa; activación monoetapa
F: activation en une seule étape

one-step deactivation
S: desactivación en una etapa; desactivación monoetapa
F: désactivation en une seule étape

one-to-one (1 : 1) reversals
S: alternancias 1 : 1
F: alternance 1/1

one-unit message
S: mensaje simple
F: message simple

one way; unidirectional
S: en un solo sentido; unidireccional
F: à sens unique; unidirectionnel

one way communication (OWC)
S: comunicación unidireccional (UND)
F: échange unidirectionnel (UND)

one-way function
S: función unidireccional
F: fonction à une voie

one-way interaction
S: interacción unidireccional
F: interaction unidirectionnelle

open-circuit working
S: funcionamiento en circuito abierto
F: transmission par ouverture (rupture) de circuit ou par interruption de courant continu (par batterie centrale)

open-loop loss (OLL)
S: atenuación en bucle abierto (ABA)
F: affaiblissement en boucle ouverte

open system
S: sistema abierto
F: système ouvert

open wire
S: hilo desnudo
F: fils nus

operating characteristic curve; OC curve (for a statistical test plan)
S: curva característica de funcionamiento (para un plan de prueba estadística)
F: courbe d'efficacité (d'un plan de test)

operating state
S: estado de funcionamiento; estado operacional
F: (état de) fonctionnement

operating system
S: sistema operativo
F: système d'exploitation

operating time
S: tiempo de funcionamiento
F: temps de fonctionnement

operation
S: explotación; operación
F: exploitation; opération

operation (TC-)
S: operación (CT)
F: opération (GT)

operation, administration and maintenance centre (OAMC)
S: centro de operación, administración y mantenimiento (COAM)
F: centre de gestion, d'exploitation et de maintenance (CGEM)

operation and maintenance centre (OMC)
S: centro de operación y mantenimiento (COM)
F: centre d'exploitation et de maintenance (CEM)

operation and maintenance centre processor
S: procesador de centro de operación y mantenimiento
F: processeur de centre d'exploitation et de maintenance

operation and maintenance system
S: sistema de operación y mantenimiento
F: système d'exploitation et de maintenance

operation-interface
S: interfaz de operaciones
F: interface d'opération

operation progress
S: progresión de la operación
F: avancement de l'opération

Operation, Maintenance and Administration Part (OMAP)
S: parte operaciones, mantenimiento y administración (POMA)
F: Sous-Système pour l'Exploitation, la Maintenance et la gestion **(SSEM)**

operational ...
S: ... operacional
F: ... opérationnel

operational coordination (prefix 95)
S: coordinación operacional (prefijo 95)
F: coordination opérationnelle (préfixe 95)

operational procedure
S: procedimiento operacional
F: procédure d'exploitation

operations system (OS)
S: sistemas de operaciones (SO)
F: système d'exploitation (SE)

operations system function (OSF) block
S: bloque de funciones de sistema de operaciones (FSO)
F: bloc de fonction de système d'exploitation (FSE)

operator
S: operador
F: opérateur

operator signature
S: signatura de operador
F: signature d'opérateur

opinion score (in telephony)
S: nota de opinión (en telefonía)
F: note d'opinion (en téléphonie)

option
S: opción
F: option

optional O component
S: componente facultativo (F)
F: optional O component; élément facultatif (F)

optional part
S: parte opcional; parte facultativa
F: partie facultative

optional user facilities
S: facilidades facultativas de usuario
F: services complémentaires offerts en option à l'utilisateur; services complémentaires facultatifs offert aux usagers

O/R address
S: dirección O/D
F: adresse E/D

O/R name
S: nombre O/D
F: nom E/D

ordering operators
S: operadores de ordenación
F: opérateurs de relation d'ordre

ordinary private telex calls
S: comunicaciones télex privadas ordinarias
F: communications télex privées ordinaires

organization name
S: nombre de la organización
F: nom d'organisation

organization unit name
S: nombre de unidad organizacional
F: nom de l'unité de l'organisation

origin
S: origen
F: origine

origin country (or Administration)
S: país (o Administración) de origen
F: pays (ou Administration) d'origine

original activity identifier
S: identificador de actividad original
F: identificateur initial d'activité

original called number
S: número llamado inicialmente
F: numéro demandé initial

original-EITs
S: TIC originales
F: original-EITs; EIT d'origine

original redirection reason
S: motivo de redireccionamiento inicial
F: indicateur de raison du renvoi initial

originating connection
S: conexión de origen
F: connexion de départ

originating node
S: nodo origen
F: nœud d'origine

originating PDN
S: RPD de origen
F: RPD d'origine

originating point (signalling-)
S: punto de origen (de la señalización)
F: point (sémaphore) d'origine

originating point code (OPC)
S: código del punto de origen (CPO)
F: code du point d'origine (CPO)

originating SFU
S: UAR de origen
F: UER d'origine

originating TA
S: AT originador
F: TA de départ

originating traffic
S: tráfico de origen
F: trafic de départ

originator
S: originador
F: expéditeur

originator-specified alternate recipient
S: destinatario alternativo especificado por el originador
F: destinataire suppléant spécifié par l'expéditeur

orphan
S: huérfano
F: orpheline

orphan size
S: tamaño huérfano
F: taille orphelin

orthotelephonic acoustic reference gain
S: ganancia de referencia acústica ortotelefónica
F: gain de référence acoustique orthotéléphonique

orthotelephonic reference condition
S: condición de referencia ortotelefónica
F: condition de référence orthotéléphonique

OSI resources
S: recursos ISA
F: ressources OSI

other information
S: otra información
F: autre information

out-band parameter exchange
S: intercambio de parámetros fuera de banda
F: échange de paramètres hors bande

out-band signalling
S: señalización fuera de banda
F: signalisation hors bande

out connector
S: conector de salida
F: connecteur de sortie

out-of-band signalling
S: señalización fuera de banda
F: signalisation hors bande

out-of-frame alignment time
S: duración de la pérdida de la alineación de trama
F: durée de perte du verrouillage de trame

out of sequence probability
S: probabilidad de secuencia incorrecta
F: probabilité de remise hors séquence par le SSSR

out of sequence probability for DT messages
S: probabilidad de pérdida de secuencia de mensajes DT
F: probabilité de remise hors séquence de messages DT

out-slot signalling
S: señalización fuera del intervalo
F: signalisation hors créneau temporel; signalisation hors intervalle de temps

outcome
S: resultado
F: résultats

outgoing only terminal
S: terminal de salida solamente
F: terminal spécialisé en départ

outgoing traffic
S: tráfico saliente
F: trafic sortant

outlet
S: salida (en conmutación); acceso de salida
F: accès de départ; accès sortant

OUTPUT
S: EXTRAER (OUTPUT)
F: SORTIE

output
S: salida; extraer
F: sortie

output and input window area
S: zona de ventana de salida y de entrada
F: sous-fenêtre de sortie et d'entrée

output area
S: área de salida
F: zone de sortie

output connection
S: conexión de salida
F: connexion de sortie

output outside dialogue
S: salida fuera de diálogo
F: sortie hors dialogue

output parameters
S: parámetros de salida
F: paramètres de sortie

overall objective loudness rating (OOLR)
S: índice de sonoridad objetivo global (ISOG)
F: équivalent objectif global pour la sonie (EOGS)

overall transit time of DT messages
S: tiempo de tránsito global de los mensajes DT
F: temps total de transit de message DT

overcharging probability
S: probabilidad de sobretarificación
F: probabilité de surtaxation

overflow (in telegraphy)
S: desbordamiento (en telegrafía)
F: débordement (en télégraphie)

overflow position (in a private network)
S: posición de desbordamiento (en una red privada)
F: poste principal d'un réseau privé

overflow traffic
S: tráfico de desbordamiento
F: trafic de débordement

overhang
S: preinicio (de una línea)
F: renfoncement; saillie

overlap address signalling
S: señalización de dirección con superposición
F: signalisation d'adresse à recouvrement

overlap line signalling
S: señalización de línea con superposición
F: signalisation de ligne à recouvrement

overline service
S: servicio de líneas agrupadas
F: groupement de lignes

overload
S: sobrecarga
F: surcharge

overload channels
S: canales de sobrecarga
F: voies de surcharge

overload message (OLM)
S: mensaje de sobrecarga (MSC)
F: message de surcharge (SUR) (utilisation nationale)

overload point
S: nivel de saturación; nivel de saturación de un amplificador
F: niveau de saturation

override
S: contraorden
F: override; surclassement

owner
S: propietario
F: propriétaire

owner (of a network connection)
S: propietaria (de una conexión de red)
F: propriétaire (d'une connexion de réseau)

owner (of a token)
S: poseedor (de un testigo)
F: détenteur (d'un jeton)

P

p-fractile ...
S: cuantil-p de . . .
F: ... quantile-p

p-fractile access delay
S: cuantil-p del retardo de acceso; cuantil-p de la demora de acceso
F: quantile-p de la durée d'accès

p-fractile active repair time
S: cuantil-p del tiempo de reparación activa
F: quantile-p de la durée de réparation active

p-fractile administrative delay
S: cuantil-p del retardo administrativo; cuantil-p de la demora administrativa
F: quantile-p du délai administratif

p-fractile logistic delay
S: cuantil-p del retardo logístico; cuantil-p de la demora logística
F: quantile-p du délai logistique

p-fractile repair time
S: cuantil-p del tiempo de reparación
F: quantile-p de la durée de réparation

p-quantile (of a probability distribution)
S: cuantil de orden p (de una ley de distribución de probabilidades)
F: quantile-p (d'une loi de probabilité)

PABX internal dial tone
S: tono de invitación a marcar interno de centralitas privadas automáticas conectadas a la red pública; tono de marcar interno de centralita privada automática, CPA
F: tonalité interne de numérotation des commutateurs privés

packet
S: paquete
F: paquet

packet assembly/disassembly (PAD)
S: empaquetado/desempaquetado de datos (EDD); ensamblado/desensamblado de paquetes
F: assemblage-désassemblage de paquets (ADP)

packet entry event
S: suceso de entrada de paquete
F: événement d'entrée d'un paquet

packet exit event
S: suceso de salida de paquete
F: événement de sortie d'un paquet

packet handling
S: manejo de paquetes; tratamiento de paquetes
F: traitement des paquets

packet layer reference event
S: suceso de referencia de la capa paquete
F: événement de référence de la couche paquets

packet mode operation
S: funcionamiento en modo paquete; operación en modo paquete
F: fonctionnement en mode paquet

packet mode operation (in switching applications)
S: funcionamiento en modo paquete; operación en modo paquete (en aplicaciones de conmutación)
F: fonctionnement en mode paquet (dans les applications de commutation)

packet switched data transmission service
S: servicio de transmisión de datos con conmutación de paquetes
F: service de transmission de données à commutation par paquets

packet switching
S: conmutación de paquetes
F: commutation par paquets

packet transfer mode
S: modo de transferencia paquete; modo de transferencia por paquetes
F: mode de transfert par paquet

page
S: página
F: page

page coordinate system
S: sistema de coordenadas de página
F: système de coordonnées de page

page position
S: posición de página
F: position de page

page set
S: conjunto de páginas
F: ensemble de pages

page teleprinter
S: teleimpresor en página
F: téléimprimeur à (impression sur) page

page wait
S: espera de página
F: page en attente

paired-disparity code
S: código con disparidad compensada
F: code à disparité compensée

pairwise kerning
S: distanciamiento variable (por emparejamiento de salientes)
F: crénage en paire; crénage couplé

parallel annotation
S: anotación paralela
F: annotation parallèle

parallel automatic calling
S: llamada automática paralelo; llamada automática en modo paralelo
F: appel automatique en mode parallèle

parallel connection
S: conexión en paralelo
F: connexion parallèle

parallel to serial converter; serializer
S: convertidor paralelo/serie
F: convertisseur parallèle/série

parallel transmission
S: transmisión paralelo
F: transmission parallèle

parameter
S: parámetro
F: paramètre

parameter argument
S: argumento de parámetro
F: argument de paramètre

parameter block
S: bloque de parámetros
F: bloc de paramètres

parameter block entry sequence
S: secuencia de introducción de bloque de parámetros
F: séquence d'introduction d'un bloc de paramètres

parameter block request indication
S: indicación de petición de bloque de parámetros
F: indication de demande de bloc de paramètres

parameter field
S: campo de parámetro
F: champ de paramètre

parameter group identifier (PGI)
S: identificador de grupo de parámetros (IGP)
F: identificateur de groupe de paramètres (IGP)

parameter identifier (PI)
S: identificador de parámetro (IP)
F: identificateur de paramètre (IP)

parameter identity
S: identidad de parámetro
F: identité de paramètre

parameter information
S: información de parámetros
F: information sur les paramètres

parameter label
S: etiqueta de parámetro
F: étiquette de paramètre

parameter name
S: nombre de parámetro
F: nom de paramètre

parameter position
S: posición de parámetro
F: position de paramètre

parameter value (PV)
S: valor de parámetro (VP)
F: valeur de paramètre (VP)

parameter value input field
S: campo de entrada de valor de parámetro
F: champ d'entrée de valeur de paramètre

parameterized abstract test case
S: caso de prueba abstracta parametrizada
F: test élémentaire abstrait paramétré

parameterized abstract test suite
S: serie de pruebas abstractas parametrizadas
F: suite de tests abstraite paramétrée

parameterized executable test case
S: caso de prueba ejecutable parametrizada
F: test élémentaire exécutable paramétré

parameterized executable test suite
S: serie de pruebas ejecutables parametrizadas
F: suite de tests exécutable paramétrée

PARENT
S: PARENT; PROGENITOR
F: PARENT

parent-entry
S: inscripción progenitora
F: parent-entry; entrée maîtresse

parent-operation
S: operación progenitora
F: opération mère

parent-sequence-number
S: número secuencial de progenitor
F: parent-sequence-number; numéro d'ordre d'entrée maîtresse

parent type (of a subtype)
S: tipo progenitor (de un subtipo)
F: type parent (d'un sous-type)

parity function
S: función de paridad
F: fonction de parité

partial-attribute-request
S: petición de atributo parcial
F: partial-attribute-request; demande partielle de valeurs d'attribut

partial break-in
S: intervención parcial
F: intervention partielle

partial break-in echo suppressor
S: supresor de eco con intervención parcial
F: suppresseur d'écho à intervention partielle

partial break-in operate time
S: tiempo de funcionamiento para la intervención parcial
F: temps de fonctionnement pour l'intervention partielle

partial fault
S: avería parcial
F: panne partielle

partial generator set
S: conjunto generador parcial
F: ensemble générateur partiel

partial loopback
S: bucle parcial
F: bouclage partiel

partial refund
S: reembolso parcial
F: remboursement partiel

partial type definition
S: definición parcial de tipo
F: définition partielle de type

partially closed user group
S: grupo de usuarios parcialmente cerrado
F: groupe partiellement fermé d'usagers

partitioning
S: partición
F: subdivision

pass-along message (PAM)
S: mensaje de paso de largo (MDP)
F: message à faire-passer (FAP)

pass along method
S: método de paso de largo
F: méthode du «faire passer»

"pass" verdict
S: veredicto de «favorable»
F: verdict «succès»

passive testing
S: prueba pasiva
F: tests passifs

password
S: contraseña
F: mot de passe

path
S: trayecto
F: chemin; conduit

pay tone
S: tono de pago
F: tonalité de paiement

payload module
S: módulo de carga neta; módulo de carga útil; módulo neto
F: module de charge utile

payphone recognition tone
S: tono de identificación de teléfono de previo pago
F: tonalité d'identification de publiphone

payphone service
S: servicio telefónico de previo pago
F: service publiphone

PBX line hunting services
S: servicio de captura de línea (líneas de salto)
F: service de recherche de ligne libre dans un commutateur privé

PCM binary code
S: código binario MIC
F: code binaire MIC

PCM digital reference sequence (DRS)
S: secuencia de referencia digital MIC (SRD)
F: séquence numérique de référence MIC (SNR)

PCM multiplex equipment
S: equipo múltiplex MIC
F: équipement de multiplexage MIC

peak amplitude of an elementary echo
S: amplitud de cresta de un eco elemental
F: amplitude de crête d'un écho élémentaire

peak limiting; peak limiting in quantizing
S: limitación de cresta (en cuantificación)
F: écrêtage

peaked traffic
S: tráfico con distribución en pico
F: trafic survariant

peakedness factor
S: factor de irregularidad
F: facteur d'irrégularité

peer control
S: control entre (entidades) pares
F: commande homologue

peer entities
S: entidades pares
F: entités homologues

peer protocol
S: protocolo para entidades pares
F: protocole homologue

pel
S: pel; elemento de imagen
F: pixel; élément d'image

pel array
S: formación de pels
F: tableau d'éléments d'image

pel path
S: trayecto de pels
F: trajet d'éléments d'image

pel spacing
S: espaciamiento de pels
F: espacement entre éléments d'image; espacement des éléments d'image

pel transmission density
S: densidad de transmisión de pels
F: densité de transmission des éléments d'image

per word tariff system
S: sistema de tarificación por palabra
F: système de tarification par mot

percentage overflow (% OFL)
S: porcentaje de desbordamiento (% DBM)
F: pourcentage de débordement (% DBM)

perfect signal
S: señal perfecta
F: signal parfait

perforated-tape retransmitter
S: retransmisor de cinta perforada
F: réémetteur à bande perforée

performance monitoring (PM)
S: monitorización de la calidad del funcionamiento (MCF)
F: surveillance de la qualité de fonctionnement (SQF)

performance monitoring attributes
S: atributos de la monitorización de la calidad de funcionamiento
F: attributs de surveillance de la qualité de fonctionnement

performance objective
S: objetivo de calidad de funcionamiento
F: objectif pour la qualité de fonctionnement

performing-application-entity; performer
S: entidad de aplicación realizadora; realizador
F: entité exécutrice de l'application; exécutant

periodic frame
S: trama periódica
F: trame périodique

periodicity pattern
S: esquema de periodicidad
F: schéma de périodicité

permanent (communication)
S: permanente (comunicación)
F: permanente (communication)

permanent (connection)
S: permanente (conexión)
F: permanente (connexion)

permanent activation
S: activación permanente
F: activation permanente

permanent circuit service; permanent circuit telecommunication service
S: servicio de circuito permanente; servicio de telecomunicación de circuito permanente
F: service de circuit permanent; service de circuit de télécommunications permanent

permanent virtual circuit
S: circuito virtual permanente
F: circuit virtuel permanent

permissions
S: permisos
F: permission

permitted categories
S: categorías permitidas
F: catégories permises

permitted maximum signal (PMS)
S: señal máxima permitida (SMP)
F: signal maximal permis (SMP)

persistent fault; permanent fault; solid fault
S: avería permanente
F: panne permanente

person-to-person call (prefix 34)
S: llamada de persona a persona (prefijo 34)
F: communications personnelles (préfixe 34)

personal name
S: nombre personal
F: nom personnel

PGI unit
S: unidad de IGP
F: unité de PGI

phantom circuit
S: circuito fantasma
F: circuit fantôme

phase
S: fase
F: phase

phase shift keying (PSK); phase shift modulation
S: modulación por desplazamiento de fase
F: modulation par déplacement de phase (MDP)

phasing
S: puesta en fase
F: mise en phase

phasing signal
S: señal de puesta en fase
F: signal de mise en phase

phototelegraphy
S: telefotografía
F: phototélégraphie

physical configuration attributes
S: atributos de la configuración física
F: attributs de configuration physique

physical delivery (PD)
S: entrega física (EF)
F: remise physique (RP)

physical delivery access unit (PDAU)
S: unidad de acceso de entrega física (UAEF)
F: unité d'accès de remise physique (UARP)

physical delivery address components
S: componentes de dirección de entrega física
F: composants d'une adresse de remise physique

physical delivery country name
S: nombre de país de entrega física
F: nom du pays de remise physique

physical delivery domain
S: dominio de entrega física
F: domaine de remise physique

physical delivery office address components
S: componentes de dirección de oficina de entrega física
F: composants d'une adresse de bureau de remise physique

physical delivery office name
S: nombre de oficina de entrega física
F: nom du bureau de remise physique

physical delivery office number
S: número de oficina de entrega física
F: numéro du bureau de remise physique

physical delivery organization name
S: nombre de la organización de entrega física
F: nom d'organisation de remise physique

physical delivery personal name
S: nombre personal de entrega física
F: nom personnel de remise physique

physical delivery service
S: servicio de entrega física
F: service de remise physique

physical delivery service name
S: nombre del servicio de entrega física
F: nom du service de remise physique

physical delivery system (PDS)
S: sistema de entrega física (SEF)
F: système de remise physique (SRP)

physical frame
S: trama física
F: trame physique

physical interface
S: interfaz físico
F: interface physique

physical interface specification
S: especificación de interfaz físico
F: spécification d'interface physique

physical message
S: mensaje físico
F: message physique

physical rendition
S: reproducción física
F: conversion physique

physical signalling channel
S: canal físico de señalización
F: voie physique de signalisation

PI unit
S: unidad de IP
F: unité d'identification de paramètre; unité de PI

pick-up facility service
S: servicio de facilidad de telecaptura
F: service de prise d'une communication établie

PICS proforma
S: proforma del ECRP
F: formulaire PICS

pictograms
S: pictogramas
F: pictogrammes

pictorial element (PE)
S: elemento pictográfico (EP)
F: élément graphique (EG)

picture element (pel)
S: elemento de imagen; pel (picture element)
F: surface élémentaire d'image; élément d'image; pixel

PId
S: PId
F: Pid

pilot
S: piloto
F: onde pilote

PIXIT proforma
S: proforma de la ISRPP
F: formulaire PIXIT

plain language
S: lenguaje claro
F: langage clair

planning equivalent
S: equivalente de planificación
F: équivalent de planification

plesiochronous
S: plesiócrono
F: plésiochrone

point
S: punto
F: point

point code
S: código de punto
F: code de point

point of control and observation (PCO)
S: punto de control y observación (PCO)
F: point de contrôle et d'observation (PCO)

point-to-multipoint ISDN connection
S: conexión de RDSI punto a multipunto
F: connexion RNIS point-multipoints

point-to-point communication
S: comunicación punto a punto
F: communication point-à-point

point-to-point connection
S: conexión punto a punto
F: connexion point-à-point; liaison point à point

point-to-point ISDN connection
S: conexión de RDSI punto a punto
F: connexion RNIS point-à-point

pointer
S: puntero
F: pointeur

points of international connection at baseband frequencies of a radio-relay system
S: puntos de interconexión internacional en la banda de base de un sistema de relevadores radioeléctricos
F: points d'interconnexion internationale dans la bande de base d'un faisceau hertzien

poisson traffic; pure chance traffic
S: tráfico poissoniano
F: trafic poissonnien; trafic de pur hasard

(terminal) port
S: puerto; acceso
F: accès

portion boundary
S: frontera de tramo
F: limite de partie

position
S: posición
F: position

position A; position Z
S: posición A; posición Z
F: position A; position Z

position-defined parameter
S: parámetro definido por la posición
F: paramètre défini par position

position point
S: punto de posición
F: point de position

positioned channel
S: canal posicionado; canal localizado
F: voie identifiée par sa position

positioned interface structure
S: estructura de interfaz posicionado
F: structure d'interface positionnée

positioning area
S: zona de posicionamiento
F: zone de positionnement

positive acknowledgement
S: acuse de recibo positivo
F: accusé de réception positif

positive indication tone
S: tono de indicación positivo
F: tonalité d'indication positive

positive justification
S: justificación positiva
F: justification positive

positive/zero/negative justification
S: justificación positiva/nula/negativa
F: justification positive/nulle/négative

possible crosstalk components
S: componentes posibles de diafonía
F: composantes possibles de diaphonie

post-dialling delay
S: demora después de marcar; periodo de espera después de marcar
F: attente après numérotation; délai d'attente après numérotation

post office box
S: casilla postal
F: boîte postale

post office box address (P.O. box address)
S: dirección-apartado de correos
F: adresse de case postale

post-production processing
S: tratamiento de posproducción
F: post-production (traitement après production)

post restante address
S: dirección-lista de correos
F: adresse poste restante

post-selection delay
S: demora después de seleccionar; demora de postselección
F: délai de postsélection

post-selection time
S: periodo de espera después de marcar
F: temps de sélection

post-signal
S: postseñal
F: postsignal

postal address
S: dirección postal
F: adresse postale

postal Administration
S: Administración postal
F: Administration postale

postal code
S: código postal
F: code postal

postal O/R address
S: dirección postal O/D
F: adresse postale E/D

postal O/R address components
S: componentes de dirección postal O/D
F: composants d'une adresse postale E/D

postamble
S: epílogo
F: épilogue

potential recipient
S: destinatario potencial
F: destinataire potentiel

power feeding (repeater) station
S: estación de telealimentación; estación de alimentación
F: station d'alimentation; station d'alimentation de répéteurs

power of the test
S: potencia de la prueba
F: puissance du test

powerset
S: conjuntista
F: mode ensembliste

PQ_{DCN}
S: PQ_{RCD}
F: PQ_{RCD}

PQ_{LCN}
S: PQ_{RLC}
F: PQ_{RCL}

preamble
S: prólogo
F: préambule

precorrection
S: precorrección
F: précorrection

predefined data
S: datos predefinidos
F: données prédéfinies

predicted ...
S: ... previsto; ... predicho
F: ... prédit; ... prévu

prediction
S: previsión; predicción
F: prévision; prédiction

predictor
S: predictor
F: prédicteur

preference
S: preferencia
F: préférence

preferred class
S: clase preferida
F: classe préférée

preferred delivery method
S: método de entrega preferido
F: méthode préférée de remise

preferred recipient
S: receptor preferido
F: destinataire préféré

prefix
S: prefijo
F: préfixe

prefix giving access to the intercontinental automatic transit telex network
S: prefijo de acceso a la red télex intercontinental automática de tránsito
F: préfixe d'accès au réseau télex de transit intercontinental automatique

prefix giving access to the intercontinental telex network
S: prefijo de acceso a la red télex intercontinental
F: préfixe d'accès à l'intercontinental

prefix giving access to the international automatic telex network
S: prefijo de acceso a la red télex internacional automática
F: préfixe d'accès au réseau télex international automatique

prefix giving access to the long-distance automatic telex network
S: prefijo de acceso a la red télex interurbana automática
F: préfixe d'accès au réseau interurbain automatique

prefix giving access to the long distance telex network
S: prefijo de acceso a la red télex de larga distancia
F: préfixe d'accès à grande distance

premature disconnect probability
S: probabilidad de desconexión prematura
F: probabilité de déconnexion prématurée

premature disconnect stimulus probability
S: probabilidad de estímulo de desconexión prematura
F: probabilité de signal de déconnexion prématurée

premature disconnect stimulus probability of a section at a boundary
S: probabilidad de estímulo de desconexión prematura de una sección en una frontera
F: probabilité de signal de déconnexion prématurée d'une section à une limite

premature release probability; cut-off call probability
S: probabilidad de liberación prematura; probabilidad de corte de una llamada
F: probabilité de libération prématurée

prematurely released telephone connection
S: conexión telefónica liberada prematuramente
F: libération prématurée d'une communication téléphonique

prepaid card
S: tarjeta preabonada
F: télécarte

preparation of plans and data management
S: preparación de planos y gestión de datos
F: établissement des plans et gestion de l'information

preparation operating
S: explotación con preparación
F: exploitation avec préparation

preparatory period
S: periodo preparatorio
F: période préparatoire

pre-selection delay
S: tiempo de preselección
F: temps de présélection

pre-selection delay (overlap sending)
S: demora antes de seleccionar; demora de preselección (envío con superposición)
F: délai de présélection (transmission à recouvrement)

presentation
S: presentación
F: présentation

presentation address
S: dirección de presentación
F: adresse de présentation

presentation attributes
S: atributos de presentación
F: attributs de présentation

presentation context
S: contexto de presentación
F: contexte de présentation

presentation context identification
S: identificación del contexto de presentación
F: identification de contexte de présentation

presentation context identifier
S: identificador del contexto de presentación
F: identificateur de contexte de présentation

presentation control functions
S: funciones de control de la presentación
F: fonctions de commande pour la présentation

presentation data value
S: valor de los datos de presentación
F: valeur de données de présentation

presentation element
S: elemento de presentación
F: élément de présentation

presentation medium
S: medio de presentación
F: support de présentation

presentation style
S: estilo de presentación
F: style de présentation

presentation style identifier
S: identificador de estilo de presentación
F: identificateur de style de présentation

presentation surface
S: superficie de presentación
F: surface de présentation

pre-signal
S: preseñal
F: présignal

preventive cyclic retransmission (error control) method
S: método de protección contra errores por retransmisión cíclica preventiva
F: méthode (de correction d'erreur) avec retransmission cyclique préventive

preventive maintenance
S: mantenimiento preventivo
F: maintenance préventive; entretien

preventive maintenance time
S: tiempo de mantenimiento preventivo
F: temps de maintenance préventive

primary block; digroup
S: bloque primario
F: bloc primaire

primary digital group
S: grupo digital primario
F: groupe numérique primaire

primary failure
S: fallo primario
F: défaillance primaire

primary muldex
S: múldex primario
F: muldex primaire

primary PCM group
S: grupo primario MIC
F: groupe primaire MIC

primary performance parameter
S: parámetro primario de calidad de funcionamiento
F: paramètre de performance primaire

primary rate access
S: acceso a velocidad primaria
F: accès au débit primaire; accès primaire RNIS

primary reference clock
S: reloj de referencia primario
F: horloge de référence primaire

primary route
S: ruta primaria
F: voie d'acheminement primaire; voies primaires

primitive encoding
S: codificación primitiva
F: codage primitif

printable area
S: zona imprimible
F: zone imprimable

printed record of duration and charge of calls service
S: servicio de registro impreso de la duración y la tasa de las comunicaciones
F: service d'enregistrement écrit des éléments de taxation

printing perforator
S: perforador impresor
F: perforateur imprimeur

printing reperforator
S: reperforador impresor
F: récepteur-perforateur imprimeur

printing station
S: estación impresora
F: poste d'impression

priority
S: prioridad relativa; prioridad
F: priorité relative; priorité

priority for called subscriber
S: prioridad del abonado llamado
F: abonné prioritaire en demandé

priority service
S: servicio de prioridad
F: service de priorité

private data network
S: red privada de datos
F: réseau privé pour données

private directory management domain (PRDMD)
S: dominio de gestión de guía privado (DGGPR)
F: domaine de gestion privé d'annuaire (PRDMD); domaine de gestion d'annuaire privé (PRDMD)

private domain name
S: nombre de dominio privado
F: nom d'un domaine privé

private key
S: clave privada
F: clé privée

private management domain (PRMD)
S: dominio de gestión privado (DGPR)
F: domaine de gestion privé (DGPR)

private network (in telegraphy)
S: red privada (en telegrafía)
F: réseau privé (en télégraphie)

private number ringing signal
S: servicio de señal de llamada individualizada
F: service de signal d'appel d'un numéro particulier

private (telephone) installation
S: instalación telefónica privada
F: installation (téléphonique) intérieure

private use option
S: opción de uso privado
F: option à usage privé

probability
S: probabilidad
F: probabilité

probability density function
S: función densidad de probabilidad
F: densité de probabilité

probability of acceptance
S: probabilidad de aceptación
F: probabilité d'acceptation

probability of end-to-end blocking
S: probabilidad de bloqueo de extremo a extremo
F: probabilité de blocage de bout en bout

probability of rejection
S: probabilidad de rechazo
F: probabilité de rejet

probability of successful service completion
S: probabilidad de prestación satisfactoria de un servicio
F: probabilité d'exécution correcte du service

probe
S: sonda
F: essai

procedure
S: procedimiento
F: procédure

procedure body
S: cuerpo de procedimiento
F: corps de procédure

procedure call
S: llamada a procedimiento; llamada de procedimiento
F: appel de procédure

procedure call area
S: área de llamada a procedimiento; área de llamada de procedimiento
F: zone d'appel de procédure

procedure definition
S: definición de procedimiento
F: définition de procédure

procedure description
S: descripción de procedimiento
F: description de procédure

procedure diagram
S: diagrama de procedimiento
F: diagramme de procédure

procedure epilogue
S: epílogo de procedimiento
F: épilogue de procédure

procedure graph
S: gráfico de procedimiento
F: graphe de procédure

procedure prologue
S: prólogo de procedimiento
F: prologue de procédure

proceed-to-select signal
S: señal de invitación a marcar
F: signal d'invitation à numéroter

proceed-to-send signal (sent in the backward direction)
S: señal de invitación a transmitir (hacia atrás)
F: signal d'invitation à transmettre (émis dans le sens en arrière)

process
S: proceso
F: processus

process (in a data processing system)
S: proceso (en un sistema de procesamiento de datos)
F: processus (dans un traitement de l'information)

process (in SDL)
S: proceso (en LED)
F: processus (en LDS)

process area
S: área de proceso
F: zone de processus

process definition
S: definición de proceso
F: définition de processus

process diagram
S: diagrama de proceso
F: diagramme de processus

process graph
S: gráfico de proceso
F: graphe de processus

process instance
S: instancia de proceso
F: instance de processus

processable form
S: forma procesable
F: forme retraitable

processable mode number one (PM1)
S: modo procesable N.° 1 (MP1)
F: mode retraitable n° 1 (PM1)

processed
S: procesado
F: processed; traité

processing
S: procesamiento
F: traitement

processing capacity
S: capacidad de procesamiento
F: capacité de traitement

processor
S: procesador
F: processeur

processor outage
S: interrupción del procesador
F: processeur hors service

producer's risk (point)
S: (punto de) riesgo del proveedor
F: (point du) risque du fournisseur

production
S: producción
F: production

programme booking centre (PBC)
S: centro de reserva de programas (CRP)
F: service centralisateur

programme originator
S: originador del programa
F: expéditeur de programmes

programme-sensitive fault
S: avería dependiente del programa
F: panne mise en évidence par le programme

programming system
S: sistema de programación
F: système de programmation

progress indicator
S: indicador de progresión
F: indicateur de progression

prompt maintenance alarm (PMA)
S: alarma de mantenimiento inmediato (AMI)
F: alarme de maintenance immédiate (AMI)

prompting
S: sugerencia
F: proposition

promption output
S: salida de sugerencia
F: sortie de proposition

propagated error
S: error propagado
F: erreur propagée

propagation performance
S: característica de propagación
F: caractéristiques de propagation

proportional line spacing
S: espaciamiento de líneas proporcional
F: espacement entre lignes proportionnel

proposed class
S: clase propuesta
F: classe proposée

proposed parameter
S: parámetro propuesto
F: paramètre proposé

protected monitoring point (PMP)
S: punto de monitorización protegido (PMP)
F: point de contrôle protégé (PCP); point de surveillance protégé

protection
S: protección
F: protection

protection switching
S: conmutación de protección
F: commutation sur liaison de réserve

protocol
S: protocolo
F: protocole

protocol class
S: clase de protocolo
F: classe de protocole

protocol conformance test report (PCTR)
S: informe de prueba de conformidad de protocolo (IPCP)
F: rapport de test de conformité au protocole (PCTR)

protocol control indicator
S: indicador de control de protocolo
F: indicateur de commande de protocole

protocol data unit error (ERR)
S: error en unidad de datos de protocolo (ERR)
F: erreur (ERR)

protocol error
S: error de protocolo
F: erreur de protocole

protocol identifier
S: identificador de protocolo
F: identificateur de protocoles

protocol implementation conformance statement (PICS)
S: enunciado de conformidad de realización de protocolo (ECRP)
F: déclaration de conformité d'une mise en œuvre de protocole (PICS)

protocol implementation extra information for testing (PIXIT)
S: información suplementaria sobre realización de protocolo para pruebas (ISRPP)
F: informations complémentaires sur la mise en œuvre du protocole destinées au test (PIXIT)

protocol selection attributes
S: atributos de selección de protocolos
F: attributs de sélection de protocole

provider-intitiated-service
S: servicio iniciado por el proveedor
F: service engendré par le fournisseur

pseudo n-ary signal
S: señal seudo-n-aria
F: signal pseudo n-aire

psophometric power
S: potencia sofométrica
F: puissance psophométrique

PTLXAU answerback
S: distintivo UATLXP
F: indicatif UATLXP

PTLXAU identification
S: identificación de la UATLXP
F: identification de l'UATLXP

public data network
S: red pública de datos
F: réseau public pour données

public data transmission service
S: servicio público de transmisión de datos
F: service public de transmission de données

public directory service
S: servicio público de guías
F: service public d'annuaire

public facsimile bureau
S: oficina facsímil pública
F: bureau public de télécopie

public facsimile service
S: servicio público facsímil
F: service public de télécopie

public facsimile station
S: estación facsímil pública
F: poste public de télécopie

public key
S: clave pública
F: clé publique

public land mobile network (PLMN)
S: red móvil terrestre pública (RMTP)
F: réseau mobile terrestre public (RMTP)

public land mobile services
S: servicios móviles terrestres públicos
F: services mobiles terrestres publics

public message handling service
S: servicio público de tratamiento de mensajes
F: service public de messagerie

public recorded information service
S: servicio de información pública grabada
F: service public d'information enregistrée

public services
S: servicios públicos
F: services publics

public telefax station
S: estación telefax pública
F: poste téléfax public

public telegram service
S: servicio público de telegramas
F: service public des télégrammes

public telegraph network
S: red telegráfica pública
F: réseau télégraphique public

public telex access unit (PTLXAU)
S: unidad de acceso al télex público (UATLXP)
F: Unité d'accès télex public UATLXP

public telex booth
S: cabina télex pública
F: cabine publique télex

pulse code
S: código de impulsos
F: code d'impulsions; code de modulation d'impulsions

pulse code modulation (PCM)
S: modulación por impulsos codificados (MIC)
F: modulation par impulsions et codage (MIC)

pulse density requirement (PDR) at 1544 kbit/s
S: requisito de densidad de impulsos a 1544 kbit/s
F: densité d'impulsions minimale (DIM) à 1544 kbit/s

pulse duration
S: duración del impulso
F: durée d'une impulsion

pulse echo meter
S: ecómetro de impulsos
F: échomètre à impulsions

pulse echo return loss; pulse echo attenuation
S: pérdida de retorno para el eco; atenuación de eco
F: affaiblissement d'écho

purported name
S: nombre contemplado
F: nom visé

Q

Q interface
S: interfaz Q
F: interface Q

q reference points
S: puntos de referencia q
F: points de référence q

qualifier
S: calificador
F: partie qualificative (qualificatif)

quality of service (QOS)
S: calidad de servicio (CDS)
F: qualité de service (QDS)

quality of service (QOS)-parameter set
S: conjunto de parámetros de calidad del servicio (CDS)
F: jeu de paramètres qualité de service

quality of service variable
S: variable de la calidad de servicio
F: variable de qualité de service

quantized value
S: valor cuantificado
F: valeur quantifiée

quantizing
S: cuantificación
F: quantification

quantizing distortion
S: distorsión de cuantificación
F: distorsion de quantification

quantizing distortion power
S: potencia de la distorsión de cuantificación
F: puissance de distorsion de quantification

quantizing interval
S: intervalo de cuantificación
F: intervalle de quantification

quarantine service
S: servicio de cuarentena
F: service de mise en quarantaine

quasi-associated mode of operation
S: modo de explotación cuasiasociado
F: mode d'exploitation «quasi associé»

quasi-associated mode (of signalling)
S: modo (de señalización) cuasiasociado
F: mode (de signalisation)quasi associé

quasi-associated signalling
S: señalización cuasiasociada
F: signalisation quasi associée

queueing delay
S: demora de espera
F: retard dû à la formation de queues

queuing
S: disposición en cola
F: file d'attente

quiet code
S: código de calma
F: code silencieux

R

R25 equivalent
S: equivalente R25
F: équivalent R25

R or T pads (in telephone extension)
S: atenuadores R o T (en la prolongación telefónica)
F: compléments de ligne R ou T (dans un système national)

radio control path
S: radiotrayecto de control
F: canal radioélectrique de signalisation

radio paging service
S: servicio móvil de aviso a personas; servicio de radiobúsqueda
F: service radioélectrique d'appel unidirectionnel

radio traffic path
S: radiotrayecto de tráfico
F: canal radioélectrique de trafic

radiomaritime telex letter
S: carta télex radiomarítima
F: télex postal radiomaritime

radiotelegram service (prefix 15)
S: servicio de radiotelegramas (prefijo 15)
F: service radiotélégraphique public (préfixe 15)

radiotelexogram
S: radiotelexograma
F: radiotélexogramme

random errors
S: errores aleatorios
F: erreurs aléatoires

random process
S: proceso aleatorio; proceso estocástico
F: processus aléatoire; processus stochastique

random variable; variate
S: variable aleatoria
F: variable aléatoire

range
S: gama
F: range; portée; domaine d'application

raster graphics element
S: elemento gráfico por puntos
F: élément graphique en points

ratio of compression
S: relación de compresión
F: taux de compression

ratio of expansion
S: relación de expansión
F: taux d'extension

read operation
S: operación leer
F: opération de lecture

ready indication
S: indicación de preparado
F: indication «prêt»

ready indicator
S: indicador de preparado
F: indicateur prêt

real
S: real
F: réel

real application relay system
S: sistema de relevo de aplicación real
F: système relais d'application réel

real end system
S: sistema de extremo real
F: système d'extrémité réel

real open system
S: sistema real abierto
F: système ouvert réel

real system
S: sistema real
F: système réel

real tester
S: probador real
F: testeur réel

real-time
S: en tiempo real (adjetivo)
F: en temps réel

real time call establishment
S: establecimiento de la comunicación en tiempo real
F: établissement de la communication en temps réel

real-time conferencing
S: conferencia en tiempo real
F: conférence en temps réel

real-time conversion facility (real-time interworking)
S: unidad de conversión en tiempo real (interfuncionamiento en tiempo real)
F: unité de conversion en temps réel (interfonctionnement en temps réel)

real type
S: tipo real
F: type Réel

reanswer signals
S: señales de repetición de respuesta
F: signaux de nouvelle réponse

reasonableness check
S: prueba de racionabilidad; de racionalidad
F: contrôle de vraisemblance

reasonableness check tables
S: cuadros de prueba de racionalidad
F: tableaux de contrôle de vraisemblance

reassembling
S: reensamblado
F: réassemblage

receipt
S: recepción
F: réception

receive channel
S: canal de recepción
F: voie de réception

receive loss
S: atenuación en la recepción
F: affaiblissement à la réception

receive sequence number
S: número secuencial en recepción
F: numéro de séquence en réception

receiver
S: receptor
F: destinataire

receiving a TS-user
S: usuario ST receptor
F: utilisateur du service de transport destinataire

receiving-application-entity; receiver
S: entidad de aplicación receptora; receptor
F: entité d'application réceptrice; destinataire

receiving objective loudness rating (ROLR)
S: índice de sonoridad objetivo en recepción (ISOR)
F: équivalent objectif pour la sonie à la réception (EOSR)

receiving-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable receptora
F: machine protocole de transfert fiable récepteur

receiving SPM
S: MPS receptora
F: SPM destinataire

receiving SS-user
S: usuario SS receptor
F: utilisateur du service de session destinataire

receiving time of a CC message by the SCCP
S: tiempo de recepción de un mensaje CC por la PCCS
F: temps de réception d'un message CCO par le SSCS

receiving time of a CR message by the SCCP
S: tiempo de recepción de un mensaje PC por la PCCS
F: temps de réception d'un message DCO par le SSCS

receiving time of a DT message by the SCCP
S: tiempo de recepción de un mensaje DT por la PCCS
F: temps de réception d'un message DT par le SSCS

receiving time of a UDT message by the SCCP
S: tiempo de recepción por la PCCS de un mensaje DTU
F: temps de réception d'un message DSC par le SSCS

receiving transport entity
S: entidad de transporte receptora
F: entité de transport destinataire

recipient-assigned alternate recipient
S: destinatario alternativo designado por el destinatario
F: destinataire suppléant désigné par le destinataire

recombining
S: recombinación
F: recombinaison

Recommendation indicator
S: indicador de Recomendación
F: indicateur de Recommandation

reconstructed sample
S: muestra reconstruida
F: échantillon reconstitué

record
S: registro
F: enregistrement

record tone
S: tono de grabación
F: tonalité d'enregistrement

recorded announcement
S: anuncio grabado
F: annonce enregistrée

recorded message
S: mensaje registrado
F: réponse par message enregistré

recording
S: registro
F: enregistrement

recording day
S: día de registro
F: jour d'enregistrement

recording period
S: periodo de registro
F: période d'enregistrement

recovery time, T_5
S: tiempo de recuperación, T_5
F: temps de reprise, T_5

recursion
S: repetición
F: récursivité

recursive definitions
S: definiciones recurrentes
F: définitions récursives

redirecting indicator
S: indicador de redireccionamiento
F: indicateur de renvoi

redirecting number
S: número redireccionante
F: numéro renvoyant l'appel

redirecting reason
S: motivo de redireccionamiento
F: raison du renvoi

redirection
S: redireccionamiento
F: réacheminement

redirection address
S: dirección de redireccionamiento
F: adresse de réacheminement

redirection counter
S: contador de redireccionamientos
F: compteur de renvois

redirection number
S: número de redireccionamiento
F: numéro de renvoi

redundancy
S: redundancia
F: redondance

redundancy; standby
S: redundancia pasiva; redundancia de reserva
F: redondance en attente; redondance passive; redondance en secours

redundant code
S: código redundante
F: code redondant

redundant digital signal
S: señal digital redundante
F: signal numérique redondant

redundant line code
S: código de línea redundante
F: code en ligne redondant

redundant n-ary signal
S: señal n-aria redundante
F: signal n-aire redondant

reentrant program; reentrant routine; reentrant subroutine; reenterable routine; reenterable subroutine
S: programa reentrante; programa reintroducible
F: programme; routine rentrante; sous-programme rentrant

reentrant trunking
S: enlace reentrante
F: jonction réentrante

reference area
S: zona de referencia
F: zone de référence

reference axis
S: eje de referencia
F: axe de référence

reference clock
S: reloj de referencia
F: horloge de référence

reference configuration
S: configuración de referencia
F: configuration de référence

reference data
S: datos de referencia; valores de referencia
F: valeur de référence; données de référence

reference equivalent
S: equivalente de referencia
F: équivalent de référence

reference frequency
S: frecuencia de referencia
F: fréquence de référence

reference line
S: línea de referencia
F: ligne de référence

reference obstacle
S: obstáculo de referencia
F: obstacle de référence

reference path
S: trayecto de referencia
F: chemin de référence

reference point
S: punto de referencia
F: point de référence

reference surface
S: superficie de referencia
F: surface de référence

reference system
S: sistema de referencia
F: système de référence

reference test method (RTM)
S: método de prueba de referencia (MPR)
F: méthode de mesure de référence (RTM)

referral
S: referimiento; remisión
F: référence; renvoi de référence

refinement
S: refinamiento
F: raffinement

reformatting
S: reformatación
F: reformatage

(refractive) index profile
S: perfil del índice; perfil del índice de refracción
F: profil de l'indice; profil de l'indice de réfraction

refusal cause
S: causa de rechazo
F: raison du refus

regeneration
S: regeneración
F: régénération

regenerative repeater
S: repetidor regenerativo
F: répéteur régénérateur

regenerator
S: regenerador
F: régénérateur

region of interest
S: región de interés
F: région d'intérêt

register
S: registrador
F: enregistreur

register function
S: función de registrador; función de registro
F: fonction d'enregistreur

register-MS abstract-operation
S: operación abstracta registro-AM
F: register-MS abstract-operation; opération abstraite enregistrement MS

register signalling (Signalling System R1)
S: señalización entre registradores (sistema de señalización R1)
F: signalisation entre enregistreurs (système de signalisation R1)

registered access
S: acceso registrado
F: accès homologué

registered address
S: dirección registrada
F: adresse enregistrée

registered IPMS user
S: usuario SMIP inscrito
F: usager du service MPP enregistré

registration
S: registro
F: registration; enregistrement

registration-identifier
S: identificador de registro
F: registration-identifier; identificateur d'enregistrement

registration of incoming calls service
S: servicio de registro de llamadas entrantes
F: service d'enregistrement de communications d'arrivée

regular signalling link
S: enlace de señalización regular
F: canal sémaphore normal; liaison de signalisation régulière

regular transmissions
S: transmisiones regulares
F: transmissions périodiques

regularity loss
S: pérdida de retorno por irregularidades
F: affaiblissement de l'onde réfléchie sur les irrégularités

regulated line section (symmetric pairs, coaxial pairs or radio-relay links, etc.)
S: sección de regulación de línea de pares simétricos o coaxiales, o por radioenlaces, etc.
F: section de régulation de ligne (à paires symétriques ou coaxiales ou sur faisceau hertzien, etc.)

rejection output
S: salida de rechazo
F: sortie de rejet

relation
S: relación
F: relation

(telex) relation
S: relación (télex)
F: relation (télex)

relational operator
S: operador relacional
F: opérateur de relation

relative amplitude of an elementary echo
S: amplitud relativa de un eco elemental
F: amplitude relative d'un écho élémentaire

relative distinguished name (RDN)
S: nombre distinguido relativo (NDR)
F: nom distinctif relatif (RDN)

relative distinguished name (RDN)
S: nombre distinguido relativo (NDR)
F: nom spécifique relatif (RDN)

relative frequency
S: frecuencia relativa
F: fréquence (statistique)

relative (power) level
S: nivel relativo (de potencia)
F: niveau relatif de puissance

relative level (at a point on a circuit)
S: nivel relativo (en un punto de un circuito)
F: niveau relatif (en un point d'un circuit)

relative level (dBr)
S: nivel relativo (dBr)
F: niveau relatif (dBr)

relative time interval error
S: error de intervalo de tiempo relativo
F: dérive temporelle relative

relay point
S: punto de relevo
F: point relais

relay point with coupling
S: punto de relevo con acoplamiento
F: point relais avec mise en relation

relay point without coupling
S: punto de relevo sin acoplamiento
F: point relais sans mise en relation

release
S: liberación
F: libération

release cause
S: causa de liberación
F: raison de la déconnexion

release complete (RLC)
S: liberación completa (LIC)
F: confirmation de déconnexion (CDC)

release complete message (RLC)
S: mensaje de liberación completa (LIC)
F: message de libération terminée (LIT)

release delay
S: retardo de liberación
F: temps de libération

release failure probability
S: probabilidad de fallo de liberación
F: probabilité de non-libération

release-guard signal
S: señal de liberación de guarda
F: signal de libération de garde

release-guard signal (sent in the backward direction)
S: señal de liberación de guarda (transmitida hacia atrás)
F: signal de libération de garde (émis dans le sens en arrière); signal de libération de garde (émis dans le sens: vers l'arrière)

release message (REL)
S: mensaje de liberación (LIB)
F: message de libération (LIB)

released (RLSD)
S: liberado (LIDO)
F: demande de déconnexion (DDC)

relevant failure
S: fallo pertinente; fallo relevante
F: défaillance pertinente; défaillance à prendre en compte

reliability R
S: fiabilidad R
F: fiabilité R

reliability block diagram
S: diagrama de bloques de fiabilidad
F: diagramme de fiabilité

reliability growth
S: crecimiento de la fiabilidad; incremento de la fiabilidad
F: croissance de la fiabilité

reliability improvement
S: mejora de la fiabilidad
F: amélioration de fiabilité

reliability in analogue cable transmission systems
S: fiabilidad de los sistemas de transmisión analógica por cable
F: fiabilité des systèmes de transmission analogique par câbles

reliability model
S: modelo de fiabilidad
F: modèle de fiabilité

reliability performance
S: fiabilidad
F: fiabilité

reliable transfer
S: transferencia fiable
F: transfert fiable

reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable
F: machine protocole de transfert fiable

reliable transfer service element
S: elemento de servicio de transferencia fiable
F: élément du service de transfert fiable

relocatable address
S: dirección reubicable
F: adresse translatable

remote access; remote access connection element
S: acceso distante; elemento de conexión de acceso distante
F: accès distant; élément de connexion d'accès distant

remote call forwarding service
S: servicio de teletransferencia de llamadas
F: service de réacheminement des appels

remote definition
S: definición remota
F: définition distante

remote document access
S: acceso de documento a distancia
F: accès du document distant

remote document management
S: gestión de documento a distancia
F: gestion de document distante

remote exchange concentrator
S: concentrador de central distante
F: concentrateur de central distant

remote maintenance
S: mantenimiento remoto; telemantenimiento
F: télémaintenance

remote-operation-protocol-machine
S: máquina de protocolo de operaciones a distancia
F: machine protocole d'opération distante

remote operation service element
S: elemento de servicio de operaciones a distancia
F: élément du service d'opérations distantes

remote operations
S: operaciones a distancia
F: opérations distantes

remote switching stage
S: etapa de conmutación distante
F: étage de commutation distant

remote test method
S: método de prueba (a distancia)
F: méthode de test à distance

remotely controlled exchange
S: central controlada a distancia; central telecontrolada
F: centre télécommandé

REMOVE
S: RETIRAR
F: RETRAIT

remove
S: retirar
F: retirer

remuneration for exclusive use of circuits
S: remuneración por utilización exclusiva de los circuitos
F: rémunération pour utilisation exclusive des circuits

remuneration for shared use of circuits and equipment
S: remuneración por utilización compartida de los circuitos y de las instalaciones
F: rémunération pour utilisation en commun des circuits et des installations

rental
S: tarifa de arriendo (alquiler)
F: redevance

repair coverage
S: cobertura de reparaciones
F: couverture des réparations

repair time; corrective maintenance time
S: tiempo de reparación; tiempo de mantenimiento correctivo
F: temps de réparation; temps de maintenance corrective

repaired item
S: elemento reparado
F: entité réparée

repeat (RPT)
S: repetición (RPT)
F: répétition (RPT)

repeatability (of results)
S: repetibilidad (de resultados)
F: reproductibilité (des résultats)

repeated call attempt; reattempt
S: tentativa de llamada repetida
F: tentative d'appel répétée

repeater
S: repetidor
F: répéteur

reperforator; receiving perforator
S: reperforador; receptor-perforador
F: récepteur-perforateur

reperforator switching
S: conmutación con retransmisión por cinta perforada
F: commutation avec retransmission par bande perforée

repetition cycle
S: ciclo de repetición
F: cycle de répétition

reply
S: respuesta
F: réponse

report
S: informe
F: rapport

reproduction ratio
S: relación de reproducción
F: rapport de reproduction

request
S: petición
F: demande

request (primitive)
S: petición (primitiva)
F: demande (primitive)

request decomposition
S: desglose de una petición
F: décomposition de demande

request output
S: salida de petición
F: sortie de demande

requesting association control protocol machine
S: máquina de protocolo de control de asociación solicitante
F: machine protocole de contrôle d'association demandeur

requesting-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable solicitante
F: machine protocole de transfert fiable demandeur

requesting-remote-operation-protocol-machine
S: máquina de protocolo de operaciones a distancia solicitante
F: machine protocole d'opération distante demandeur

requestor
S: solicitante
F: demandeur

requestor; requesting SS-user
S: peticionario; usuario SS peticionante
F: demandeur; utilisateur du service de session demandeur

required function
S: función requerida
F: fonction requise

required time
S: periodo requerido
F: période requise

rerouting
S: reencaminamiento
F: réacheminement

reselection
S: reselección
F: resélection

reservation office
S: oficina de reserva
F: bureau de réservation

reserve signalling link
S: enlace de señalización de reserva
F: canal sémaphore de secours; liaison de signalisation de réserve

reserved (communication)
S: reservada (comunicación)
F: réservée (communication)

reserved circuit service; reserved circuit telecommunication service
S: servicio de circuito reservado; servicio de telecomunicación de circuito reservado
F: service de circuit réservé; service de circuit de télécommunications réservé

reset
S: reiniciación; reponer
F: réinitialisation

reset (SCCP)
S: reinicialización (PCCS)
F: acheminement dans le SSCS

reset-band-acknowledgement signal
S: señal de acuse de recibo de reiniciación de banda
F: signal d'accusé de réception de réinitialisation de bande

reset-band-acknowledgement signal, all circuits idle
S: señal de acuse de recibo de reiniciación de banda, todos los circuitos en reposo
F: signal d'accusé de réception de réintialisation de bande, tous circuits au repos

reset-band signal
S: señal de reiniciación de banda
F: signal de réinitialisation de bande

reset cause
S: causa de reinicialización
F: raison de la réinitialisation

reset circuit message (RSC)
S: mensaje de reinicialización de circuito (RCI)
F: message de remise à zéro de circuit (RZC)

reset-circuit signal
S: señal de reiniciación de circuito
F: signal de réinitialisation du circuit

reset confirm (RSC)
S: confirmación de reinicialización (CRI)
F: confirmation de réinitialisation (CRI)

reset probability
S: probabilidad de reiniciación
F: probabilité de réinitialisation

reset request (RSR)
S: petición de reinicialización (PRI)
F: demande de réinitialisation (DRI)

reset stimulus probability
S: probabilidad de estímulo de reiniciación
F: probabilité de signal de réinitialisation

reset stimulus probability of a section at a boundary
S: probabilidad de estímulo de reiniciación de una sección en una frontera
F: probabilité de signal de réinitialisation d'une section à une limite

residual echo level (L_{RES})
S: nivel de eco residual (N_{RES})
F: niveau d'écho résiduel (N_{RES})

residual error probability
S: probabilidad de errores residuales
F: probabilité d'erreur résiduelle

residual error rate
S: tasa de error residual
F: taux d'erreur résiduel

residual error rate for DT messages
S: tasa de errores residuales para mensajes DT
F: taux d'erreurs résiduelles pour des messages DT

resolution
S: resolución
F: résolution

resource
S: órgano; recurso
F: ressource

(network) resource(s)
S: recurso (de la red); órgano de la red
F: ressource (du réseau)

resource document
S: documento recurso
F: document ressource

responder
S: respondedor; contestadora
F: appelé; entité appelée; SPM appelée

response
S: respuesta
F: réponse

response (in a transaction)
S: respuesta (en una transacción)
F: réponse (dans une transaction)

response (primitive)
S: respuesta (primitiva)
F: réponse (primitive)

response output
S: salida de respuesta
F: sortie de réponse

restart (SCCP)
S: rearranque (PCCS)
F: redémarrage (SSCS)

restitution
S: restitución
F: restitution

restitution delay
S: retardo de restitución; retardo en la restitución
F: délai de restitution

restoral rate (μ)
S: tasa de restablecimiento (μ)
F: taux de rétablissement (μ)

restoration; recovery
S: restablecimiento; restauración
F: rétablissement

restoration algorithm
S: algoritmo de rutas de establecimiento
F: algorithme de routage

restoration control centre
S: centro de control del restablecimiento
F: centre de commande de rétablissement

restoration control point (RCP)
S: punto de control del restablecimiento (PCR)
F: centre de commande de rétablissement du service (CCR)

restoration control program
S: programa de control de restablecimiento
F: programme de commande de rétablissement

restoration link; restoration equipment
S: enlace de restablecimiento; equipo de restablecimiento
F: liaison de rétablissement; équipement de rétablissement

restoration network
S: red de restablecimiento
F: réseau de rétablissement

restoration procedure time, T_3
S: tiempo de procedimiento de restablecimiento, T_3
F: temps de procédure de rétablissement, T_3

restoration time, T_r
S: tiempo de restablecimiento T_r
F: temps de rétablissement, T_r

restoration transfer time, T_4
S: tiempo de transferencia del restablecimiento, T_4
F: temps de transfert de rétablissement, T_4

restoration unit
S: unidad de restablecimiento
F: unité de rétablissement

RESTORE
S: RESTABLECER
F: RÉTABLISSEMENT

restore
S: restablecer
F: rétablir

restricted conference call
S: comunicación conferencia restringida
F: conférence restreinte

restricted differential time delay (RDTD)
S: retardo diferencial restringido (RDR)
F: temps de propagation différentiel restreint (TPDR)

restricted service
S: servicio restringido
F: service restreint

restriction in the outgoing direction service
S: servicio de restricción de llamadas salientes
F: service de limitation des communications de départ

result
S: porción componente
F: résultat

results accumulation period
S: periodo de acumulación de resultados
F: période d'accumulation des résultats

results output routing
S: encaminamiento de salida de resultados
F: acheminement de sortie des résultats

results output schedule
S: calendario de salida de resultados
F: calendrier de sortie des résultats

RESUME
S: REANUDAR
F: REPRISE

resume message (RES)
S: mensaje de reanudación (REA)
F: message de reprise (RPR)

retainability of an established connection
S: retenibilidad de una conexión establecida
F: continuabilité d'une communication établie

retained signal
S: señal retenida
F: signal retenu

retained TPDU
S: UDPT retenida
F: TPDU retenue

retiming
S: reajuste de la temporización
F: réajustement du rythme

retransmission buffer (RTB)
S: memoria tampón de retransmisión MTR
F: tampon de retransmission (TRT)

retrieval
S: recuperación
F: extraction; récupération; recherche

retrieval of stored call content
S: consulta del contenido almacenado de las comunicaciones
F: consultation d'archivage

retrieval port
S: puerto de recuperación
F: retrieval port; accès pour recherche

retrieval service
S: servicio de consulta
F: service de consultation

retrieval services
S: servicios de consulta
F: services de consultation

return; procedure return
S: retorno; retorno de procedimiento
F: retour; retour de procédure

return cause
S: causa de devolución
F: raison du renvoi

return loss
S: pérdida de retorno
F: affaiblissement d'adaptation

return switching signal
S: señal de conmutación hacia atrás
F: signal (de commutation) vers l'arrière

returned-content entry
S: inscripción de contenido devuelto
F: returned-content-entry; entrée contenu renvoyé

returned echo level (L_{RET})
S: nivel del eco devuelto (N_{DEV})
F: niveau de retour d'écho (N_{RET})

reusable program; routine
S: programa reutilizable
F: programme réutilisable;

reveal attribute
S: atributo revelado
F: attribut d'exposition

reversals
S: alternancias
F: alternance

right hand edge
S: borde derecho
F: limite droite; bord droit

ring-forward signal; forward-transfert signal (sent in the forward direction)
S: señal de intervención (transmitida hacia adelante)
F: signal de rappel [intervention] (émis dans le sens: vers l'avant)

ringing tone; ringback tone
S: tono de llamada
F: tonalité de retour d'appel

ringing tripping delay (internal and terminating traffic connections)
S: retardo de supresión de la señal de llamada (conexiones de tráfico internas y terminales)
F: délai d'arrêt de sonnerie (connexions du trafic interne et d'arrivée)

RO-notation
S: notación OD
F: notation RO

role occupant
S: ocupante de rol
F: occupant du rôle

root context
S: contexto de raíz
F: contexte de racine

ROSE-provider
S: proveedor ESOD
F: fournisseur de ROSE

ROSE-user
S: usuario ESOD
F: utilisateur de ROSE

route
S: ruta
F: voie d'acheminement; route

ROUTE
S: ENCAMINAR
F: ACHEMINEMENT

route
S: encaminar
F: acheminement

route group
S: grupo de rutas
F: groupe de routes; groupe de voies (d'acheminement)

route set congestion control
S: control de la congestión de un conjunto de rutas
F: contrôle d'encombrement de faisceau de routes sémaphores

routine
S: rutina
F: routine

routine or periodic testing
S: pruebas periódicas; pruebas de rutina
F: essai de routine ou périodique

routing
S: encaminamiento
F: acheminement; routage

routing label
S: etiqueta de encaminamiento
F: étiquette d'acheminement

RQ cycle; request cycle
S: ciclo RQ; ciclo de petición
F: cycle RQ; cycle de demande

RTSE-provider
S: proveedor ESTF
F: fournisseur de RTSE

RTSE-user
S: usuario ESTF
F: utilisateur de RTSE

S

safety of life telex calls
S: comunicaciones télex relativas a la seguridad de la vida humana
F: communications télex relatives à la sécurité de la vie humaine

same layout object
S: mismo objeto de disposición
F: même objet physique; même objet de mise en page

sample
S: muestra
F: échantillon

sampling
S: muestreo
F: échantillonnage

sampling rate
S: velocidad de muestreo
F: fréquence d'échantillonnage

satellite exchange
S: central satélite
F: centre satellite

satellite indicator
S: indicador de satélite
F: indicateur de satellite

save
S: conservación
F: mise en réserve

save (in SDL)
S: conservación; salvaguarda (en LED)
F: mise en réserve (en LDS)

save area
S: área de conservación
F: zone de mise en réserve

save signal set
S: conjunto de señales de conservación
F: ensemble de signaux de mise en réserve

scaled measurement unit (SMU)
S: unidad de medida en escala (UME)
F: unité de mesure pondérée (SMU)

scanning density
S: densidad de exploración
F: finesse d'exploration

scanning line
S: línea de exploración
F: ligne d'exploration

scanning pitch
S: paso de exploración
F: pas d'exploration

SCCP component of the signalling connection establishment time
S: componente de la PCCS del tiempo de establecimiento de la conexión de señalización
F: composant SSCS du temps d'établissement de connexion sémaphore

SCCP method indicator
S: indicador de método de la PCCS
F: indicateur de méthode SSCS

SCCP relation
S: relación PCCS
F: relation de SSCS

SCCP relay function
S: función de relevo PCCS
F: fonction relais du SSCS

SCCP route
S: ruta PCCS
F: route SSCS

SCCP routing verification test (SRVT)
S: prueba de verificación del encaminamiento PCCS (PVES)
F: essai pour la vérification de l'acheminement dans le SSCS (EACP)

SCCP user
S: usuario PCCS
F: utilisateur du SSCS

scheduled maintenance
S: mantenimiento programado
F: maintenance programmée; entretien systématique

scheduled service time for a virtual connection section
S: tiempo de servicio estipulado para una sección de la conexión virtual
F: horaire de service prévu pour une section de connexion virtuelle

scheduling
S: plan; calendario
F: programmation

scope unit
S: unidad de ámbito
F: unité de portée

scrambler
S: aleatorizador
F: embrouilleur

screening indicator
S: indicador de cribado
F: indicateur de contrôle

screening test
S: prueba de selección
F: essai de sélection

scrolling
S: desplazamiento vertical
F: défilement

SDL/GR
S: LED/GR
F: LDS/GR

SDL/PE
S: LED/EP
F: LDS/PE

SDL/PR
S: LED/PR
F: LDS/PR

search guide
S: guía de búsqueda
F: guide de recherche

search operation
S: operación buscar
F: opération de recherche

second dial tone
S: segundo tono de invitación a marcar
F: seconde tonalité de numérotation

second-order digital transmission hierarchy
S: jerarquía de transmisión digital de segundo orden
F: hiérarchie de transmission numérique du deuxième ordre

second-order multiplexes signals; second-order multiplexed signals
S: múltiplex de segundo orden; señales multiplexadas de segundo orden
F: multiplex du deuxième ordre;

secondary failure
S: fallo secundario
F: défaillance secondaire

secondary routes
S: rutas secundarias
F: voies secondaires

secret language
S: lenguaje secreto
F: langage secret

section boundary; boundary
S: frontera de sección
F: limite de section; limite

section termination
S: extremo de sección
F: extrémité de section

security arrangements
S: disposiciones de seguridad
F: sécurité de fonctionnement

security capabilities
S: capacidades de seguridad
F: capacité de sécurité

security policy
S: política de seguridad
F: politique de sécurité

see also
S: véase también
F: voir aussi

segment
S: segmento
F: segment

segmented encoding law
S: ley de codificación por segmentos
F: loi de quantification à segments

segmenting
S: segmentación
F: segmentation

segmenting/reassembling
S: segmentación/reensamblado
F: segmentation/réassemblage

seizing-acknowledgement signal (sent in backward direction)
S: señal de acuse de recibo de toma (transmitida hacia atrás)
F: signal d'accusé de réception de prise (émis dans le sens: vers l'arrière)

seizing signal (sent in the forward direction)
S: señal de toma (transmitida hacia adelante)
F: signal de prise (émis dans le sens en avant); signal de prise (émis dans le sens: vers l'avant)

seizure
S: toma
F: prise

seizures per circuit per hour (SCH)
S: tomas por circuito y por hora (TCH)
F: prises par circuit et par heure (PCH)

selected abstract test suite
S: serie de pruebas abstractas seleccionadas
F: suite de tests abstraite sélectionnée

selected class
S: clase seleccionada
F: classe adoptée

selected executable test suite
S: serie de pruebas ejecutables seleccionadas
F: suite de tests exécutable sélectionnée

selected parameter
S: parámetro seleccionado
F: paramètre adopté

selection
S: selección
F: sélection

selection (in a telegraph receiver)
S: selección (en un receptor telegráfico)
F: sélection (en réception télégraphique)

selection argument
S: argumento de selección
F: argument de sélection

selection identity
S: identidad de selección
F: identité de sélection

selection signals
S: señales de selección
F: séquence de sélection

selection stage
S: etapa de selección
F: étage de sélection

selection time
S: tiempo de selección; tiempo de marcación
F: temps de numérotation

selection type
S: tipo selection; tipo selección
F: type Sélection

selective accounting service
S: servicio de contabilidad selectiva
F: service de comptabilité sélective

selector
S: selector
F: selector; sélecteur

SELF
S: SELF; MISMO
F: SELF

self-delimiting
S: autodelimitador
F: autodélimitante

self-delineating block
S: bloque autodelimitado
F: bloc à auto-cadrage

self-delineating labelled interface
S: interfaz etiquetado autodelimitado
F: interface étiquetée à auto-cadrage

semantics
S: semántica
F: sémantique

sematememe (not used in English)
S: sematema
F: sématème (à l'émission)

semi-automatic observation
S: observación semiautomática
F: observation semi-automatique

semi-automatic system
S: sistema semiautomático
F: système semi-automatique

semi-permanent connection
S: conexión semipermanente
F: connexion semi-permanente

semi-permanent (connection)
S: semipermanente (conexión)
F: semi-permanente (connexion)

send reference station
S: estación de referencia para la emisión
F: station de référence à l'émission

send special information tone (sent in the backward direction)
S: envío de tono especial de información (transmitida hacia atrás)
F: envoyer la tonalité spéciale d'information (émis dans le sens: vers l'arrière)

send-special-information tone signal
S: señal de envío de tono de información especial
F: signal «envoyez la tonalité spéciale d'information»

sender
S: emisor
F: émetteur

SENDER
S: SENDER; EMISOR
F: SENDER (émetteur)

sending-application-entity; sender
S: entidad de aplicación emisora; emisor
F: entité d'application émettrice; expéditeur

sending-reliable-transfer-protocol-machine
S: máquina de protocolo de transferencia fiable emisora
F: machine protocole de transfert fiable émetteur

sending SPM
S: MPS emisora
F: SPM expéditrice

sending SS-user
S: usuario SS emisor
F: utilisateur du service de session expéditeur

sending time of a CC message by the SCCP
S: tiempo de envío de un mensaje CC por la PCCS
F: temps d'émission d'un message CCO par le SSCS

sending time of a CR message by the SCCP
S: tiempo de envío de un mensaje PC por la PCCS
F: temps d'émission d'un message DCO par le SSCS

sending time of a DT message by the SCCP
S: tiempo de envío de un mensaje DT por la PCCS
F: temps d'émission d'un message DT par le SSCS

sending time of a UDT message by the SCCP
S: tiempo de envío de un mensaje DTU por la PCCS
F: temps d'émission d'un message SSCS

sending transport entity
S: entidad de transporte remitente
F: entité de transport expéditrice

sending TS-user
S: usuario ST emisor
F: utilisateur du service de transport expéditeur

separation
S: separación
F: séparation

separator
S: separador
F: séparateur

separator (in MML)
S: separador (en LHM)
F: séparateur (en LHM)

sequence
S: secuencia
F: séquence

sequence number
S: número secuencial
F: numéro de séquence; numéro d'ordre

sequence numbering
S: numeración secuencial
F: numérotation des trames sémaphores

sequence of command octets
S: secuencia de octetos de instrucciones
F: séquence d'octets de commande

sequence-of type
S: tipo sequence-of; tipo secuencia-de
F: type Séquence-de

sequence type
S: tipo sequence; tipo secuencia
F: type Séquence

sequencing
S: secuenciamiento; secuenciación
F: maintien en séquence; mise en séquence

sequencing/segmenting
S: secuenciación/segmentación
F: séquencement/segmentation

sequential
S: secuencial
F: séquentielle

sequential layout order
S: orden de disposición secuencial
F: ordre physique séquentiel; ordre séquentiel de mise en page

sequential logical order
S: orden lógico secuencial
F: ordre logique séquentiel

sequential order
S: orden secuencial
F: ordre séquentiel

serial automatic calling
S: llamada automática serie; llamada automática en modo serie
F: appel automatique en mode série

serial number
S: número de serie
F: numéro de série

serial to parallel converter; deserializer
S: convertidor serie/paralelo
F: convertisseur série/parallèle

serial transmission
S: transmisión serie
F: transmission série

series of LOW-HIGH data octet pairs
S: Series de parejas de octetos de datos BAJO-ALTO
F: série de paires d'octets de données INFÉRIEUR-SUPÉRIEUR

serveability performance
S: servibilidad (de un servicio)
F: servibilité (d'un service)

service
S: servicio
F: service

service accessibility performance
S: accesibilidad (de un servicio)
F: accessibilité (d'un service)

service alarm (SA)
S: alarma de servicio (AS)
F: alarme de service (AS)

service area
S: zona de servicio
F: zone de service

service attribute; telecommunication service attribute
S: atributo de servicio; atributo de servicio de telecomunicación
F: attribut de service; attribut de service de télécommunications

service availability
S: disponibilidad del servicio
F: disponibilité du service

service code
S: código de servicio
F: code de service

service code prefix
S: prefijo de código de servicio
F: préfixe de code de service

service control
S: control de servicio
F: contrôle du service

service control point
S: punto de control de servicio
F: point de commande du service

service data unit integrity
S: integridad de la unidad de datos del servicio
F: intégrité de l'unité de données de service

service definition
S: definición de servicio
F: définition de service

service diagram
S: diagrama de servicio
F: diagramme de service

service digits
S: dígitos de servicio
F: éléments numériques de service

service element
S: elemento de servicio
F: élément de service

service identification
S: identificación de servicio
F: identification de service

service indicator (SI)
S: indicador de servicio (IS)
F: indicateur de service (utilisateur) (INS)

service information (octet) (SIO)
S: información de servicio (octeto de) (OIS)
F: octet de service (SER)

service integrity
S: integridad del servicio
F: intégrité de service

service interworking
S: interfuncionamiento de servicios
F: interfonctionnement de service/interfonctionnement de services

service message transfer unit (SMXU)
S: unidad de transferencia de mensajes de servicio (UTMS)
F: unité de transfert de messages de service (UTMS)

service observation
S: observación de la calidad de servicio
F: observation de la qualité de service

service operability performance
S: facilidad de utilización (de un servicio)
F: facilité d'utilisation (d'un service)

service primitive
S: primitiva de servicio
F: primitive de service

service profile
S: perfil de servicio
F: profil de service

service profile identifier (SPID)
S: identificador de perfil de servicio (IDPS)
F: identificateur de profil de service (SPID)

service-provider
S: proveedor del servicio
F: fournisseur de service

service retainability
S: retenibilidad (de un servicio)
F: continuabilité (d'un service)

service retainability performance
S: retenibilidad (de un servicio)
F: continuabilité (d'un service)

service signal
S: señal de servicio
F: signal de service

service support performance
S: logística del servicio
F: logistique de service

service telex calls
S: comunicaciones télex de servicio
F: communications télex de service

service-user
S: usuario del servicio
F: utilisateur de service

service user abandonment probability
S: probabilidad de abandono de un servicio por un usuario
F: probabilité d'abandon (d'accès à un service par un usager)

service user mistake probability
S: probabilidad de error de un usuario (de un servicio)
F: probabilité d'erreur d'un usager

serving MSC
S: CCM sirviente
F: CCM serveur

session
S: sesión
F: session

session-connection synchronization
S: sincronización de conexión de sesión
F: synchronisation de connexion de session

session protocol machine (SPM)
S: máquina de protocolo de sesión (MPS)
F: machine protocole de session (SPM)

session service user; SS-user
S: usuario de servicio de sesión; usuario SS
F: utilisateur du service de session

session status
S: estado de sesión
F: état de session

SET
S: PONER
F: POSITIONNEMENT

set
S: inicializar; poner
F: set (initialisation); positionnement

set of circuits; group of circuits
S: haz de circuitos; grupo de circuitos
F: faisceau de circuits

set-of type
S: tipo set-of; tipo conjunto-de
F: type Ensemble-de

set type
S: tipo set; tipo conjunto
F: type Ensemble

setting-up time
S: tiempo de establecimiento
F: durée d'établissement

seven (7) kHz audio
S: audio a 7 kHz
F: audiofréquence de 7 kHz

severely errored seconds (SES)
S: segundos con muchos errores (SME)
F: secondes gravement erronées (SGE)

severity
S: gravedad
F: gravité

shared terminal
S: terminal compartido
F: terminal partagé

ship earth station (SES)
S: estación terrena de barco
F: station terrienne de navire (STN)

ship position reports (prefix 43)
S: informes sobre la posición de los barcos (prefijo 43)
F: rapports sur la position des navires (préfixe 43)

ship station identity
S: identidad de estación de barco
F: identité de la station de navire

ship station number
S: número de estación de barco
F: numéro de station de navire

short transaction transmissions
S: transmisiones de transacciones de corta duración
F: transactions de courte durée

shorthand notation
S: notación taquigráfica; notación abreviada
F: notation abrégée

sidetone balance network
S: red equilibradora del efecto local
F: réseau d'équilibrage d'effet local

sidetone masking rating (STMR)
S: índice de enmascaramiento para el efecto local (IEEL)
F: affaiblissement d'effet local par la méthode de masquage (AELM)

sidetone of a telephone set
S: efecto local de un aparato telefónico
F: effet local d'un appareil téléphonique

sidetone path
S: trayecto de efecto local
F: trajet d'effet local

sidetone path loss
S: atenuación del trayecto de efecto local
F: affaiblissement du trajet d'effet local

SIG
S: SIG
F: SIG

signal
S: señal
F: signal

signal (general sense)
S: señal (sentido general)
F: signal (sens général)

signal (in signalling applications)
S: señal (en aplicaciones de señalización)
F: signal (applications concernant la signalisation)

signal (in SDL)
S: señal (en LED)
F: signal (en LDS)

signal definition
S: definición de señal
F: définition de signal

signal element
S: elemento de señal
F: élément de signal

signal imitation (in VF signalling)
S: imitación de señal (en señalización FV)
F: imitation de signaux (dans un système de signalisation à fréquences vocales)

signal list
S: lista de señales
F: liste de signaux

signal list area
S: área de lista de señales
F: zone de liste de signaux

signal repetition
S: señal de repetición
F: signal de répétition

signal route
S: ruta de señales
F: acheminement de signaux

signal spillover (in VF signalling)
S: rebasamiento de señal (en señalización FV)
F: partie débordante d'un signal (dans un système de signalisation à fréquences vocales)

signal transfer point
S: punto de transferencia de las señales
F: point de transfert des signaux

signal unit (SU)
S: unidad de señalización (US)
F: unité de signalisation; trame sémaphore (TS)

signal unit alignment
S: alineación de unidades de señalización
F: alignement des trames sémaphores

signal unit error rate monitoring
S: monitor de tasa de errores en las unidades de señalización
F: surveillance du taux d'erreur sur les trames sémaphores

signal unit sequence control
S: control de la secuencia de las unidades de señalización
F: contrôle de l'ordre des trames sémaphores

signalling
S: señalización
F: signalisation

signalling access protocol layer 1-3, information access protocol layer 1-3
S: protocolo de acceso a la señalización (capas 1 a 3); protocolo de acceso a la información (capas 1 a 3)
F: protocole d'accès à la signalisation (couches 1 à 3) protocole d'accès à l'information; (couches 1 à 3)

signalling area/network code (SANC)
S: código de área/red de señalización (CARS)
F: code de zone/réseau sémaphore (CZRS)

signalling channel (Signalling System No. 6)
S: canal de señalización (sistema de señalización N.° 6)
F: voie de signalisation (système de signalisation n° 6)

Signalling Connection Control Part (SCCP)
S: parte control de la conexión de señalización (PCCS)
F: Sous-Système Commande des connexions Sémaphores (SSCS)

signalling connection establishment failure probability
S: probabilidad de fallo del establecimiento de la conexión de señalización
F: probabilité d'échec d'établissement d'une connexion sémaphore

signalling connection establishment time
S: tiempo de establecimiento de una conexión de señalización
F: temps d'établissement d'une connexion sémaphore

signalling connection reset delay
S: tiempo de reinicialización de la conexión de señalización
F: temps de réinitialisation d'une connexion sémaphore

signalling connection unsolicited reset and premature release probability
S: probabilidad de reinicialización no solicitada y de liberación prematura de la conexión de señalización
F: probabilité de réinitialisation non demandée et de libération prématurée de connexion sémaphore

signalling data link
S: enlace de datos para la señalización; enlace de datos de señalización
F: liaison de données de signalisation; liaison sémaphore de données

(signalling) destination point
S: punto de destino (de la señalización)
F: point sémaphore de destination

signalling end point
S: punto extremo de señalización
F: point sémaphore terminal

signalling information
S: información de señalización
F: information de signalisation

signalling information (field) (SIF)
S: información de señalización (campo de) (CIS)
F: information de signalisation (domaine d') (INF)

signalling interworking
S: interfuncionamiento de la señalización
F: interfonctionnement de la signalisation

signalling link
S: enlace de señalización
F: canal sémaphore; liaison de signalisation

signalling link activation
S: activación de un enlace de señalización
F: activation d'un canal sémaphore

signalling link blocking
S: bloqueo de un enlace de señalización
F: blocage d'un canal sémaphore

signalling link code (SLC)
S: código de enlace de señalización (CES)
F: code de canal sémaphore (COC)

signalling link deactivation
S: desactivación de un enlace de señalización
F: désactivation d'un canal sémaphore

signalling link error monitoring
S: monitor de errores en el enlace de señalización
F: surveillance des erreurs sur un canal sémaphore

signalling link failure
S: avería del enlace de señalización; fallo del enlace de señalización
F: défaillance d'un canal sémaphore

signalling link group
S: grupo de enlaces de señalización; haz de enlaces de señalización
F: groupe de canaux sémaphores; faisceau de canaux sémaphores; faisceau de liaisons de signalisation

signalling link restoration
S: restauración de enlaces de señalización; restablecimiento de enlaces de señalización
F: rétablissement d'un canal sémaphore

signalling link selection field
S: campo de selección de enlace de señalización
F: domaine de sélection du canal sémaphore

signalling link set
S: conjunto de enlaces de señalización
F: faisceau de canaux sémaphores

signalling link unblocking
S: desbloqueo de un enlace de señalización
F: déblocage d'un canal sémaphore

signalling management application process (SMAP)
S: proceso de aplicación de gestión de señalización (PAGS)
F: processus d'application de gestion de signalisation (PAGS)

signalling message
S: mensaje de señalización
F: message (de signalisation)

signalling message handling functions
S: funciones de tratamiento de mensajes de señalización
F: fonctions d'orientation des messages de signalisation

(signalling) message route
S: ruta de mensajes (de señalización)
F: route de message (de signalisation)

signalling message transfer delay
S: retardo de transferencia de un mensaje de señalización; tiempo de transferencia de un mensage de señalización
F: temps de transfert d'un message sémaphore

signalling network
S: red de señalización
F: réseau sémaphore; réseau de signalisation

signalling network components
S: componentes de la red de señalización
F: composants du réseau sémaphore

signalling network functions
S: funciones de la red de señalización
F: fonctions du réseau sémaphore

signalling network management functions
S: funciones de gestión de la red de señalización
F: fonctions de gestion du réseau sémaphore

signalling-network-management signals
S: señales de gestión de la red de señalización
F: signaux de gestion du réseau de signalisation

(signalling) originating point
S: punto de origen (de la señalización)
F: point sémaphore d'origine

signalling point
S: punto de señalización
F: point sémaphore

signalling point code
S: código de punto de señalización
F: code d'un point sémaphore

signalling point numbering plan
S: plan de numeración de los puntos de señalización
F: plan de numérotage des points sémaphores

signalling point restart
S: rearranque de punto de señalización
F: redémarrage d'un point sémaphore

signalling point with SCCP relay function (SPR)
S: punto de señalización con funciones de relevo PCCS (PSR)
F: point sémaphore faisant fonction de relais dans le SSCS (PSR)

(signalling) protocol
S: protocolo (de señalización)
F: protocole (de signalisation)

signalling relation
S: relación de señalización
F: relation sémaphore

signalling route
S: ruta de señalización
F: route sémaphore

signalling route management functions
S: funciones de gestión de rutas de señalización
F: fonctions de gestion des routes sémaphores

signalling route set
S: conjunto de rutas de señalización
F: faisceau de routes sémaphores

signalling route-set-test procedure
S: procedimiento de prueba de conjunto de rutas de señalización
F: procédure de test de faisceau de routes sémaphores

signalling routing
S: encaminamiento de señalización
F: acheminement de la signalisation

signalling system
S: sistema de señalización
F: système de signalisation

signalling time-slot
S: intervalo de tiempo de señalización
F: créneau temporel de signalisation; intervalle de temps de signalisation

(signalling) traffic flow control
S: control del flujo del tráfico (de señalización)
F: contrôle de flux de trafic (sémaphore)

signalling traffic management functions
S: funciones de gestión del tráfico de señalización
F: fonctions de gestion du trafic sémaphore

signalling transfer delay
S: retardo de transferencia de señalización
F: délai de transfert de signalisation

signalling transfer point (STP)
S: punto de transferencia de señalización (PTS)
F: point de transfert sémaphore (PTS)

significance level (of a statistical test) α
S: nivel de significación (de una prueba estadística); umbral de significación α
F: niveau de signification (d'un test); seuil de signification α

significant condition
S: estado significativo; condición significativa
F: état significatif

significant instant; significant instant of a digital signal
S: instante significativo; instante significativo de una señal digital
F: instant significatif; instant significatif d'un signal numérique

significant points
S: puntos significativos
F: points significatifs

simple authentication
S: autenticación simple
F: authentification simple

simple connection
S: conexión simple
F: connexion simple

simple expression
S: expresión simple
F: expression simple

simple multipoint circuit
S: circuito multipunto simple
F: circuit multipoint simple

simple parameter argument
S: argumento de parámetro simple
F: argument de paramètre simple

simple transmissions
S: transmisiones simples
F: transmissions simples

simple type
S: tipo simple
F: type simple

simplex
S: símplex
F: simplex; à l'alternat

sine-squared pulse
S: impulso en seno cuadrado
F: impulsion en sinus carré

single channel voice-frequency telegraphy (SCVFT)
S: telegrafía armónica monocanal
F: télégraphie harmonique à une voie

single clique working (point-to-point operation)
S: funcionamiento monogrupo (operación punto a punto)
F: fonctionnement monogroupement (exploitation point à point)

single current transmission
S: transmisión a simple polaridad; transmisión por corriente simple
F: transmission par simple courant

single-ended synchronization
S: sincronización uniterminal
F: synchronisation locale

single-line subscriber line
S: línea de abonado unilínea; línea individual
F: ligne d'abonné avec ligne individuelle

single-valued attribute
S: atributo univaluado
F: single-valued attribute; attribut à valeur unique

sixty four (64) kbit/s connected ratio
S: tasa de conexión a 64 kbit/s
F: taux de connexions établies à 64 kbit/s

sixty four (64) kbit/s DLC – on-ratio
S: factor de actividad del control dinámico de carga (CDC) a 64 kbit/s
F: taux de CDC à 64 kbit/s

sixty four (64) kbit/s failed seizures ratio
S: tasa de tomas a 64 kbit/s no completodas
F: taux d'échec des prises à 64 kbit/s

sixty four (64) kbit/s unrestricted digital data ratio
S: relación de datos digitales a 64 kbit/s sin restricciones
F: taux de transmission de données numériques à 64 kbit/s sans restriction

size limit
S: límite de tamaño
F: limite de taille

skew
S: oblicuidad
F: obliquité

slave clock
S: reloj subordinado
F: horloge asservie

slip
S: deslizamiento
F: glissement

smooth traffic
S: tráfico con distribución uniforme
F: trafic régularisé

soft line terminator
S: terminador de línea móvil
F: fin de ligne logicielle; terminaison de ligne flottante

software
S: soporte lógico; software
F: logiciel

solicited guidance; on-line help
S: orientación solicitada; ayuda en línea
F: guidage sollicité; assistance en ligne

solicited information indicator
S: indicador de solicitud de información
F: indicateur d'information demandée

SORT
S: CLASIFICAR
F: TRI

sort
S: clasificar
F: trier

sort
S: género
F: sorte

sound- and television-programme connections
S: conexiones radiofónicas y de televisión
F: liaisons radiophoniques et télévisuelles

sound-programme circuit
S: circuito radiofónico
F: circuit radiophonique

sound-programme circuit section
S: sección de circuito radiofónico
F: section de circuit radiophonique

sound retrieval service
S: servicio de consulta de programas sonoros
F: service de consultation de programmes sonores

source identification
S: identificación de la fuente
F: identification de la source

source identifier
S: identificador de origen
F: identificateur d'origine

source language
S: lenguaje fuente
F: langage d'origine; langage-source

source/sink relationship
S: relación fuente/aceptor; relación fuente/sumidero
F: relation source/collecteur

space (between characters and words in Morse code)
S: espacio (entre caracteres y entre palabras, en código Morse)
F: espace (entre deux caractères, deux mots en code Morse)

space condition (in Morse code only)
S: reposo (en código Morse)
F: repos (en code Morse)

space division
S: división en el espacio; división espacial
F: répartition dans l'espace; répartition spatiale

space division switching
S: conmutación por división en el espacio; conmutación espacial
F: commutation par répartition dans l'espace; commutation spatiale

space signal
S: señal de espacio
F: signal d'espace

spacing ratio
S: relación de espaciamiento
F: rapport d'espacement

span
S: intervalo
F: span; portée

spark-over
S: cebado
F: amorçage

spark-over voltage
S: tensión de cebado
F: tension d'amorçage

spark-over voltage, a.c.
S: tensión alterna de cebado
F: tension alternative d'amorçage

spark-over voltage, d.c.
S: tensión continua de cebado
F: tension continue d'amorçage

spark-over voltage, impulse
S: tensión de cebado por choque
F: tension d'amorçage au choc

SPDU identifier (SI)
S: identificador de UDPS (IU)
F: identificateur de SPDU (SI)

special dial tone
S: tono especial de invitación a marcar
F: tonalité spéciale de numérotation

special information tone
S: tono especial de información
F: tonalité spéciale d'information

special keys and directives information window area
S: zona de ventana de información sobre teclas especiales y directrices
F: sous-fenêtre d'information sur les touches spéciales et les directives

specialized access
S: acceso especializado
F: accès spécialisé

specific layout structure
S: estructura de disposición específica
F: structure physique spécifique; structure de mise en page spécifique

specific logical structure
S: estructura lógica específica
F: structure logique spécifique

specific negative recorded announcement without supplementary information
S: anuncio grabado específico negativo sin información suplementaria
F: annonce enregistrée spécifique négative sans information supplémentaire

specific positive recorded announcement with supplementary information
S: anuncio grabado específico positivo con información suplementaria
F: annonce enregistrée spécifique positive avec information supplémentaire

specific positive recorded announcement without supplementary information
S: anuncio grabado específico positivo sin información suplementaria
F: annonce enregistrée spécifique positive sans information supplémentaire

specific recorded announcement
S: anuncio grabado específico
F: annonce enregistrée spécifique

specification (in SDL)
S: especificación (en LED)
F: spécification (en LDS)

specification and description language (SDL)
S: lenguaje de especificación y descripción (LED)
F: langage de spécification et de description (LDS)

speech
S: conversación
F: signaux de parole

speech activity factor
S: factor de actividad de las señales vocales
F: facteur d'activité vocale

speech digit signalling
S: señalización por dígitos de conversación
F: signalisation par éléments numériques vocaux

speech information transfer
S: transferencia de información de conversación
F: transfert de signaux de parole

speech level
S: nivel vocal
F: niveau vocal

speech plus duplex equipment; S + D equipment
S: equipo telefonía más dúplex; equipo T + D
F: équipement bivocal

speech plus simplex equipment; S + S equipment
S: equipo telefonía más símplex; equipo T + S
F: équipement univocal

speech volume penalty
S: penalización en volumen sonoro
F: pénalisation en volume sonore

speed conversion
S: conversión de velocidad
F: conversion de rapidité

speed converter concentrator
S: concentrador convertidor de velocidad
F: concentrateur-diffuseur

splitting
S: división
F: éclatement

splitting (in VF signalling)
S: desprendimiento (en señalización FV)
F: coupure (dans un système de signalisation à fréquences vocales)

spontaneous menu
S: menú espontáneo
F: menu spontané

spontaneous output
S: salida espontánea
F: sortie spontanée

ST signal; end-of-pulsing (sent in the forward direction)
S: señal ST; señal de numeración (transmitida hacia adelante)
F: signal ST; signal de fin de numérotation (émis dans le sens: vers l'avant)

stability loss
S: atenuación para la estabilidad
F: affaiblissement pour la stabilité

standard attribute
S: atributo normalizado
F: attribut normalisé

standard deviation δ
S: desviación típica δ
F: écart type δ

standard digital analyzer
S: analizador digital estándar
F: analyseur numérique normalisé

standard digital generator
S: generador digital estándar
F: générateur numérique normalisé

standardized option
S: opción normalizada
F: option normalisée

standby-ready-acknowledgement signal
S: señal de acuse de recibo de enlace de reserva preparado
F: signal d'accusé de réception de liaison de réserve prête

standby-ready signal
S: señal de enlace de reserva preparado
F: signal de liaison de réserve prête

standby redundancy
S: redundancia pasiva; redundancia de reserva
F: redondance en attente; redondance passive; redondance en secours

standby state
S: estado de espera (en reserva)
F: (état d') attente

stand-by time
S: tiempo de espera (en reserva)
F: période d'attente

START
S: COMENZAR
F: DÉBUT

start
S: arranque
F: départ

start-aligned
S: alineado al comienzo
F: alignement sur le début; aligné sur le début

start date
S: fecha de comienzo
F: date de début

start-dialling signal; proceed-to-send signal (sent in the backward direction)
S: señal de invitación a marcar; señal de invitación a transmitir (transmitida hacia atrás)
F: signal d'invitation à transmettre (émis dans le sens: vers l'arrière)

start edge
S: borde inicial
F: limite de début; bord de début

start element
S: elemento de arranque
F: élément de départ

start-of-pulsing signal (sent in the forward direction); KP signal (Signalling System No. 5)
S: señal de comienzo de numeración (transmitida hacia adelante); señal KP (sistema de señalización N.° 5)
F: signal de début de numérotation (émis dans le sens en avant) (système de signalisation no 5)

start signal
S: señal de arranque
F: signal de départ

start-stop apparatus
S: aparato arrítmico
F: appareil arythmique

start-stop telegraph signal
S: señal telegráfica arrítmica
F: signal télégraphique arythmique

start-stop transmission
S: transmisión arrítmica
F: transmission arythmique

start time
S: hora de comienzo
F: heure de début

starting signal
S: señal de comienzo
F: signal de démarrage

start/stop date
S: fecha de comienzo/fin
F: date de début/d'arrêt

start/stop time
S: momento de comienzo/fin
F: moment de début/d'arrêt

state
S: estado
F: état

state area
S: área de estado
F: zone d'état

state or province name
S: nombre de estado o provincia
F: nom d'Etat ou de province

state picture
S: pictograma de estado
F: représentation graphique d'état

state-transition diagram
S: diagrama de transición de estados
F: diagramme de transition

statement of call account
S: estado de cuentas de comunicaciones
F: décompte de taxes de communications

static conformance
S: conformidad estática
F: conformité statique

static conformance requirements
S: requisitos de conformidad estática
F: conditions de conformité statique

static conformance review
S: examen de conformidad estática
F: revue de conformité statique

static multiplex
S: múltiplex estático
F: multiplex statique

statistic
S: estadístico
F: statistique

statistical; ATM statistical transfer mode
S: estadístico; modo de transferencia estadístico MTA
F: statistique; mode de transfert asynchrone statistique

statistical test
S: prueba estadística
F: test (statistique)

statistical tolerance interval
S: intervalo estadístico de tolerancia
F: intervalle statistique de dispersion

statistics on request
S: estadísticas a petición
F: statistiques sur demande

status
S: estado
F: statut; état

status field (SF)
S: campo de estado (CE)
F: domaine d'état (ETC)

status report (SRPT)
S: informe de estado (IE)
F: rapport d'état (RE)

status request (SRQ)
S: petición de estado (PE)
F: demande de renseignements d'état (DRE)

status window area
S: zona de venta de estado
F: système; machine

steady-state throughput
S: caudal en régimen permanente
F: débit en régime permanent

step stress test
S: prueba de esfuerzo escalonado
F: essai sous contrainte échelonnée

STOP
S: TERMINAR
F: ARRÊT

stop
S: parada
F: arrêt

stop date
S: fecha de terminación
F: date d'arrêt; date de fin

stop element
S: elemento de parada
F: élément d'arrêt

stop signal
S: señal de parada
F: signal d'arrêt

stop time
S: hora de terminación
F: heure d'arrêt; heure de fin

storage and transfer system (ST/SYS)
S: sistema de almacenamiento y transferencia (ST/SYS)
F: système de mémorisation et de transfert (ST/SYS)

storage installation
S: instalación de almacenamiento
F: installation d'enregistrement

storage keyboard
S: teclado con almacenamiento
F: clavier à enregistreur

storage of call content
S: almacenamiento del contenido de las comunicaciones
F: archivage des messages

storage system (S/SYS)
S: sistema de almacenamiento (S/SYS)
F: système de mémorisation (S/SYS)

storage within the network
S: almacenamiento dentro de la red
F: stockage dans le réseau

store-and-forward
S: almacenamiento y retransmisión
F: enregistrement et retransmission

store-and-forward (international) (prefix 21)
S: almacenamiento y retransmisión (internacional) (prefijo 21)
F: enregistrement et retransmission (international) (préfixe 21)

store-and-forward (national) (prefix 22)
S: almacenamiento y retransmisión (nacional) (prefijo 22)
F: enregistrement et retransmission (national) (préfixe 22)

store-and-forward conversion facility (CF using store-and-forward principles)
S: unidad de conversión con almacenamiento y retransmisión (UC que utiliza los principios de almacenamiento y retransmisión)
F: unité de conversion avec enregistrement et retransmission (UC utilisant les principes d'enregistrement et retransmission)

store and forward unit (SFU)
S: unidad de almacenamiento y retransmisión (UAR)
F: unité d'enregistrement et retransmission (UER)

stored-messages
S: mensajes almacenados
F: stored-messages; messages enregistrés

stored program control (SPC)
S: control por programa almacenado (CPA)
F: commande par programme enregistré (SPC)

street address
S: dirección-calle
F: adresse de rue

stress analysis
S: análisis de esfuerzos
F: analyse de contraintes

stress model
S: modelo de esfuerzos
F: modèle de contraintes

stretching
S: prolongación
F: extension

string
S: cadena; string
F: chaîne (string)

strong authentication
S: autenticación fuerte
F: authentification poussée

structural element
S: elemento estructural
F: élément structurel

structure
S: estructura
F: structure

structured sort
S: género estructurado
F: sorte structurée

structured type
S: tipo estructurado
F: type structuré

subblock
S: subbloque
F: sous-bloc

sub-centre
S: subcentro
F: sous-centre

subchannel
S: subcanal
F: sous-voie; sous-canal

subclass
S: subclase
F: sous-classe; sous-catégorie

sub-control station
S: estación subdirectora
F: station sous-directrice

subdivision
S: subdivisión
F: subdivision

subframe
S: subtrama
F: sous-trame; secteur de trame

subject
S: asunto
F: objet

subject message
S: mensaje de asunto
F: message objet

subject probe
S: sonda de asunto
F: essai objet

sublayer
S: subcapa
F: sous-couche

submarine system/overland system interconnection point
S: punto de interconexión entre sistemas submarinos y sistemas terrestres
F: point d'interconnexion entre système en câble sous-marin et système terrestre

submission
S: depósito
F: dépôt

submultiplex
S: submúltiplex
F: sous-multiplex

subnetwork
S: subred
F: sous-réseau

subnetwork-connection
S: conexión de subred
F: connexion de sous-réseau

subnetwork functionality
S: funcionalidad de subred
F: éléments fonctionnels d'un sous-réseau

subnetwork point of attachment
S: punto de asociación de subred
F: point d'attache d'un sous-réseau

subnetwork point of attachment address
S: dirección de punto de asociación a subred
F: adresse du point d'attache d'un sous-réseau secondaire

subnetwork service
S: servicio de subred
F: service de sous-réseau

subnetwork type
S: tipo de subred
F: type de sous-réseau

subordinate reference
S: referencia subordinada
F: référence subordonnée

subordinate/inferior
S: subordinado/inferior
F: inférieur subordonné

subordinates
S: subordinados
F: subordonnés

subrequest
S: subpetición
F: sous-demande

subroutine
S: subrutina
F: sous-programme

subscriber
S: abonado
F: abonné

subscriber access maintenance center (SAMC)
S: centro de mantenimiento de accesos de abonado (CMAA)
F: centre de maintenance d'accès d'abonné (CMAA)

subscriber access maintenance entity (SAME)
S: entidad de mantenimiento de accesos de abonado (EMAA)
F: entité de maintenance d'accès d'abonné (EMAA)

subscriber-busy signal (electrical)
S: señal (eléctrica) de abonado ocupado
F: signal (électrique) d'abonné occupé

subscriber call charge meter service
S: servicio de contadores de tasas en el domicilio del abonado
F: service d'indicateur de taxe au domicile de l'abonné

subscriber channel in a multiplexed DTE/DCE interface
S: canal de abonado en un interfaz ETD/ETCD mútiplex
F: voie d'abonné à une interface multiplex ETTD/ETCD

subscriber data
S: datos de abonado
F: données d'abonné

subscriber installation maintenance entity (SIME)
S: entidad de mantenimiento de la instalación de abonado (EMIA)
F: entité de maintenance d'installation d'abonné (EMIA)

subscriber line busy (sent in the backward direction)
S: línea de abonado ocupado (transmitida hacia atrás)
F: signal d'abonné occupé (émis dans le sens: vers l'arrière)

subscriber line free, charge (sent in the backward direction)
S: abonado libre, con tasación (transmitida hacia atrás)
F: signal d'abonné libre, avec taxation (émis dans le sens: vers l'arrière)

subscriber line free, no charge (sent in the backward direction)
S: abonado libre, sin tasación (transmitida hacia atrás)
F: signal d'abonné libre, sans taxation (émis dans le sens: vers l'arrière)

subscriber line group
S: grupo de líneas de abonado
F: ligne groupée d'abonné; groupe de lignes d'abonné

subscriber line out of order (sent in the backward direction)
S: línea de abonado fuera de servicio (transmitida hacia atrás)
F: signal de ligne d'abonné en dérangement (émis dans le sens: vers l'arrière)

subscriber number
S: número de abonado
F: numéro d'abonné

subscriber serving exchange
S: central de servicio de abonados
F: commutateur de rattachement

subscriber system (in transmission planning)
S: sistema de abonado
F: système d'abonné

subscriber's alpha-numerical display
S: servicio de visualización alfanumérica en el aparato telefónico
F: service d'affichage alphanumérique de renseignements relatifs aux abonnés

subscriber's facsimile station
S: estación facsímil de abonado
F: poste d'abonné de télécopie

subscriber's installation
S: instalación de abonado
F: installation d'abonné

subscriber's line
S: línea de abonado
F: ligne d'abonné

subscriber's line; subscriber loop
S: línea de abonado; bucle de abonado
F: ligne d'abonné; ligne de rattachement

subscriber's national telex number
S: número télex nacional de un abonado
F: numéro télex national d'un abonné

subscriber's (telephone) line; subscriber loop (in telephony)
S: línea (telefónica) de abonado; bucle de abonado (en telefonía)
F: ligne (téléphonique) d'abonné; ligne (de) réseau

subscription
S: abono
F: subscription; abonnement

subsequent address message (SAM)
S: mensaje subsiguiente de dirección
F: message d'adresse subséquent (SAM); message subséquent d'adresse (MSA)

subsequent address message with one signal
S: mensaje subsiguiente de dirección con una señal
F: message subséquent d'adresse à un seul signal

subsequent handover procedure
S: procedimiento de traspaso subsiguiente
F: procédure de transfert subséquent

subsequent signal unit (SSU)
S: unidad subsiguiente de señalización (USS)
F: unité de signalisation subséquente (SSU)

subservice field (SSF)
S: campo de subservicio (CSS)
F: domaine de sous-service (DSS)

subsignal
S: subseñal
F: sous-signal

substitute recipient
S: destinatario sustituto
F: destinataire substitut

substring
S: subcadena
F: substring; chaîne secondaire

subsystem
S: subsistema
F: Sous-Système (utilisateur du SSCS)

subsystem-allowed (SSA)
S: subsistema autorizado (SSA)
F: Sous-Système Autorisé (SSA)

subsystem multiplicity indicator
S: indicador de multiplicidad de subsistema
F: indicateur de multiplicité d'un sous-système

subsystem number (SSN)
S: número de subsistema (NSS)
F: numéro de Sous-système (NSS)

subsystem-out-of-service-grant (SOG)
S: concesión de subsistema fuera de servicio (CSF)
F: mise hors service d'un sous-système acceptée (HSA)

subsystem-out-of-service-request (SOR)
S: petición de subsistema fuera de servicio (PSF)
F: demande de mise hors service d'un Sous-Système (DHS)

subsystem-prohibited (SSP)
S: subsistema prohibido (SSP)
F: Sous-Système Interdit (SSI)

subsystem-status-test (SST)
S: prueba de estado de subsistema (PESS)
F: test d'état d'un Sous-Système (TES)

subtelephone telegraphy
S: telegrafía infratelefónica; telegrafía infraacústica
F: télégraphie infra-téléphonique

subtype (of a parent type)
S: subtipo (de un tipo progenitor)
F: sous-type (d'un type parent)

subtype specification
S: especificación de subtipo
F: spécification d'un sous-type

subtype value set
S: conjunto de valores de un subtipo
F: ensemble des valeurs d'un sous-type

successful call
S: llamada fructuosa
F: appel ayant abouti

successful call attempt; fully routed call attempt
S: tentativa de llamada fructuosa; tentativa de llamada totalmente encaminada
F: tentative d'appel acheminée

successive phases of a call
S: fases sucesivas de una comunicación
F: phases successives d'une communication

sudden failure
S: fallo repentino
F: défaillance soudaine

summarize abstract-operation
S: operación abstracta de resumir
F: summarize abstract-operation; opération abstraite résumé

superclass
S: superclase
F: superclasse; supercatégorie

supergroup
S: grupo secundario
F: groupe secondaire

supergroup link
S: enlace en grupo secundario
F: liaison en groupe secondaire

supergroup section
S: sección de grupo secundario
F: section de groupe secondaire

superior
S: superior
F: supérieur

superior reference
S: referencia superior
F: référence supérieure

supermastergroup
S: grupo cuaternario
F: groupe quaternaire

supermastergroup link
S: enlace en grupo cuaternario
F: liaison en groupe quaternaire

supermastergroup section
S: sección de grupo cuaternario
F: section de groupe quaternaire

super-telephone telegraphy
S: telegrafía supratelefónica; telegrafía supraacústica
F: télégraphie supra-téléphonique

supervision
S: supervisión
F: surveillance; supervision

supervisory signal
S: señal de supervisión
F: signal de contrôle

supplementary information
S: información suplementaria
F: information supplémentaire

supplementary information (of internal automatic observations)
S: información suplementaria (de las observaciones automáticas internas)
F: informations supplémentaires (des observations automatiques internes)

supplementary service
S: servicio suplementario
F: service supplémentaire

supplementary services provided
S: servicios suplementarios prestados
F: services supplémentaires fournis

supplementary telephone service
S: servicio telefónico suplementario
F: service téléphonique supplémentaire

supported application context
S: contexto de aplicación admitido
F: contexte d'application

suppressed traffic
S: tráfico suprimido
F: trafic non exprimé; trafic supprimé

suppression hangover time
S: tiempo de bloqueo para la supresión
F: temps de maintien pour le blocage

suppression loss
S: atenuación para la supresión
F: affaiblissement de blocage

suppression operate time
S: tiempo de funcionamiento para la supresión
F: temps de fonctionnement pour le blocage

surname
S: apellido
F: nom

SUSPEND
S: SUSPENDER
F: SUSPENSION

suspend message (SUS)
S: mensaje de suspensión (SUS)
F: message de suspension (SUS)

suspend/resume indicator
S: indicador de suspender/reanudar
F: indicateur de suspension/reprise

switched connection
S: conexión conmutada
F: connexion commutée

switched connection element; switched ISDN connection element
S: elemento de conexión conmutada; elemento de conexión conmutada de RDSI
F: élément de connexion commutée; élément de connexion RNIS commutée

switched-transit country
S: país de tránsito con conmutación
F: pays de transit en commutation

switching
S: conmutación
F: commutation

switching delay; processing time; handling time
S: tiempo de conmutación; (tiempo de proceso; tiempo de tratamiento)
F: temps de commutation; (temps de traitement de la commutation

switching-equipment-congestion signal
S: señal de congestión en el equipo de conmutación
F: signal d'encombrement de l'équipement de commutation

switching matrix
S: matriz de conmutación
F: matrice de commutation

switching network
S: red de conmutación
F: réseau de commutation

switching node
S: nodo de conmutación
F: nœud de commutation

switching signal
S: señal de conmutación
F: signal de commutation

switching signal telex-data
S: señal de conmutación télex-datos
F: signal de commutation télex-données

switching stage
S: etapa de conmutación
F: étage de commutation

symbol
S: símbolo
F: symbole

symbolic name
S: nombre simbólico
F: nom symbolique

symmetric
S: simétrico
F: symétrique

symmetrical binary code
S: código binario simétrico
F: code binaire symétrique

symmetrical through-connection
S: transconexión simétrica
F: transfert symétrique

symmetry
S: simetría
F: symétrie

symmetry and/or topology change
S: cambio de simetría y/o topología
F: changement de symétrie et (ou) de topologie

synchronization
S: sincronización
F: synchronisation

synchronization bit
S: bit de sincronización; bit de sincronismo
F: bit de synchronisation

synchronization frame
S: trama de sincronización
F: trame de synchronisation

synchronization information
S: información de sincronización
F: information de synchronisation

synchronization link
S: enlace de sincronización
F: liaison de synchronisation

synchronization network
S: red de sincronización
F: réseau de synchronisation

synchronization node
S: nodo de sincronización
F: nœud de synchronisation

synchronization signal
S: señal de sincronización
F: signal de synchronisation

synchronization signal unit (SYU)
S: unidad de señalización de sincronización (USIN)
F: unité de signalisation de synchronisation (SYU)

synchronization word
S: palabra de sincronización
F: mot de synchronisation

synchronized network
S: red sincronizada
F: réseau synchronisé

synchronous
S: síncrono
F: synchrone

synchronous network node
S: nodo de red síncrona
F: nœud de réseau synchrone

synchronous (start-stop) margin
S: margen de sincronismo (de un aparato arrítmico)
F: marge au synchronisme (d'un appareil arythmique)

synchronous system
S: sistema síncrono
F: télégraphie synchrone

synchronous time division multiplexing
S: multiplexación síncrona por división en el tiempo
F: multiplexage temporel synchrone

synchronous transfer mode (STM)
S: modo de transferencia síncrono (MTS)
F: mode de transfert (temporel) synchrone (MTS)

synchronous transmission
S: transmisión síncrona
F: transmission synchrone

syncpoint identifier
S: identificador del punto de sincronización
F: identificateur de point de synchronisation

synonym
S: sinónimo
F: synonyme

synopsis
S: sinopsis
F: synopsis

syntactically invalid test event
S: suceso de prueba sintácticamente inválido
F: événement de test syntaxiquement non valide

syntax
S: sintaxis
F: syntaxe

syntax diagram
S: diagrama sintáctico
F: diagramme syntaxique; diagramme de syntaxe

syntax-matching services
S: servicios de concordancia de sintaxis
F: services d'adaptation de syntaxe

syntype
S: sintipo
F: syntype

system
S: sistema
F: système

system area
S: zona de sistema
F: zone de couverture du système; zone du système

system availability information point
S: punto de información sobre disponibilidad del sistema
F: service collectant les informations relatives à la disponibilité des systèmes

system conformance statement
S: enunciado de conformidad de sistema
F: déclaration de conformité d'un système

system conformance test report (SCTR)
S: informe de prueba de conformidad de sistema (IPCS)
F: rapport de test de conformité du système (SCTR)

system control signal unit (SCU)
S: unidad de señalización para el control del sistema de señalización (USCS)
F: unité de signalisation pour la commande du système (de signalisation) (SCU)

system control station
S: estación directora de sistema; estación de control del sistema
F: station directrice (dans un système); centre directeur

system definition
S: definición de sistema
F: définition de système

system diagram
S: diagrama de sistema
F: diagramme de système

system information
S: información del sistema
F: information du système

system management application entity (SMAE)
S: entidad de aplicación de gestión de sistema (EAGS)
F: entité d'application de gestion du système (SMAE)

System No. 6 exchange
S: central del sistema N.º 6
F: centre nº 6

System No. 6 exchange, first
S: central del sistema N.º 6, primera
F: centre nº 6, premier

System No. 6 exchange, intermediate
S: central del sistema N.° 6, intermedia
F: centre n° 6,intermédiaire

System No. 6 exchange, last
S: central del sistema N.°6, última
F: centre n° 6, dernier

system under test (SUT)
S: sistema sometido a prueba (SSP)
F: système à tester (SUT)

systematic failure; reproducible failure; deterministic failure
S: fallo sistemático; fallo reproducible; fallo determinístico
F: défaillance systématique; défaillance reproductible

systematic fault
S: avería sistemática
F: panne systématique

systems-management
S: gestión de sistemas
F: gestion de systèmes

systems-management-application-entity
S: entidad de aplicación de gestión de sistemas
F: entité d'application de gestion de systèmes

T

TA
S: AT
F: TA

table
S: tabla; cuadro
F: tableau

tabulation alignment
S: alineación de tabulación
F: alignement de tabulation

tabulation stop
S: tope de tabulación
F: arrêt de tabulation

tag
S: rótulo
F: étiquette

tag (key) (label)
S: rótulo; etiiqueta
F: étiquette (SSGT)

tagged type
S: tipo tagged; tipo rotulado
F: type Etiqueté

tagging
S: rotulación
F: étiquetage

take-up factor
S: factor de cableado
F: facteur de câblage

talker echo
S: eco para el hablante
F: écho pour la personne qui parle

talker echo loudness rating (of an international connection)
S: índice de sonoridad del eco para el hablante (en una conexión internacional)
F: équivalent à la sonie pour l'écho pour la personne qui parle (d'une communication internationale)

talking resistance
S: resistencia de conversación
F: résistance de conversation

tandem connection
S: conexión en cascada
F: connexion en cascade

(tape) perforator
S: perforador (de cinta); perforadora
F: perforateur (de bande); perforatrice

tape printer
S: lector impresor
F: lecteur imprimeur

tape-reading head; tape-reader
S: lector de cinta
F: lecteur de bande

tape teleprinter
S: teleimpresor en cinta
F: téléimprimeur à (impression sur) bande

target MSC
S: CCM objetivo
F: CCM cible

target program; object program
S: programa objeto; programa resultante
F: programme résultant; programme-objet

task
S: tarea
F: tâche

task area
S: área de tarea
F: zone de tâche

technical assistance (prefix 33)
S: asistencia técnica (prefijo 33)
F: assistance technique (préfixe 33)

technical delay
S: retardo técnico; demora técnica
F: délai technique

teleaction service
S: servicio de teleacción
F: service de téléaction

telecommunication
S: telecomunicación
F: télécommunication

telecommunication Administration
S: Administración de telecomunicaciones
F: Administration des télécommunications

telecommunication capability
S: capacidad de telecomunicación
F: capacité de télécommunications

telecommunication network
S: red de telecomunicaciones
F: réseau de télécommunications

telecommunication path
S: trayecto de telecomunicación
F: itinéraire de télécommunications

telecommunication service
S: servicio de telecomunicación
F: service de télécommunications

telecommunications
S: telecomunicaciones
F: télécommunication

telecommunications management network (TMN)
S: red de gestión de las telecomunicaciones (RGT)
F: réseau de gestion des télécommunications (RGT)

telecommunications traffic; teletraffic
S: tráfico de telecomunicación; teletráfico
F: trafic de télécommunications; télétrafic

teleconference service
S: servicio de teleconferencia
F: service de téléconférence

telefax
S: telefax
F: téléfax

telefax 2
S: telefax 2
F: téléfax 2

telefax 3
S: telefax 3
F: téléfax 3

telefax 4
S: telefax 4
F: téléfax 4

telegraph alphabet
S: alfabeto telegráfico
F: alphabet télégraphique

telegraph channel
S: canal telegráfico
F: voie de transmission télégraphique

telegraph circuit
S: circuito telegráfico
F: circuit télégraphique

telegraph code
S: código telegráfico
F: code télégraphique

telegraph demodulator
S: demodulador telegráfico
F: démodulateur télégraphique

telegraph discriminator
S: discriminador telegráfico
F: discriminateur télégraphique

telegraph distortion; time distortion
S: distorsión telegráfica
F: distorsion télégraphique

telegraph junction circuit
S: circuito telegráfico de enlace
F: jonction de sous-centre

telegraph modulator
S: modulador telegráfico
F: modulateur télégraphique

telegraph radioconverter
S: convertidor de señales radiotelegráficas
F: convertisseur de signaux radiotélégraphiques; détecteur de signaux radiotélégraphiques

telegraph regenerative repeater
S: repetidor regenerativo telegráfico
F: régénérateur (télégraphique)

telegraph repeater
S: repetidor telegráfico; traslator telegráfico
F: translation (télégraphique)

telegraph signal
S: señal telegráfica
F: signal télégraphique

telegraph switching exchange
S: centro de conmutación telegráfica
F: centre de commutation télégraphique

(telegraph) terminal
S: terminal (telegráfico)
F: terminal (télégraphique)

telegraph transmitter
S: transmisor telegráfico
F: émetteur (télégraphique)

telematic services
S: servicios de telemática; servicios telemáticos
F: services télématiques

telemessage
S: telemensaje
F: télémessage

telemessage service
S: servicio de telemensajes
F: service de télémessages

telemessage switching centre
S: centro de conmutación de telemensajes
F: centre de commutation de télémessages

telephone booth
S: cabina telefónica cerrada
F: cabine téléphonique

telephone call
S: comunicación telefónica
F: communication téléphonique

telephone circuit
S: circuito telefónico
F: circuit téléphonique

telephone circuit (international or trunk circuits)
S: circuito telefónico (internacional o interurbano)
F: circuit téléphonique (international ou interurbain)

telephone message
S: conferencia telefónica
F: conversation téléphonique

telephone number
S: número telefónico
F: numéro de téléphone

telephone set; telephone instrument
S: aparato telefónico; teléfono
F: poste téléphonique; appareil téléphonique; téléphone

telephone signal
S: señal telefónica
F: signal téléphonique

telephone stall
S: cabina telefónica abierta
F: cabine téléphonique ouverte

telephone station
S: estación telefónica
F: poste téléphonique (installé)

telephone-type channel
S: canal de tipo telefónico
F: voie de type téléphonique

telephone-type circuit
S: circuito de tipo telefónico
F: circuit de type téléphonique

Telephone User Part (TUP)
S: parte usuario de telefonía (PUT)
F: Sous-Système Utilisateur Téléphonie (SSUT)

telephony
S: telefonía
F: téléphonie

telephony input and output points for the line link
S: puntos de entrada y de salida, para la telefonía, de un enlace en línea
F: points d'entrée et de sortie, pour la téléphonie, d'une liaison en ligne

teleprinter; teletypewriter
S: teleimpresor
F: téléimprimeur

(teleprinter) control unit
S: unidad de control (de un teleimpresor)
F: coffret de commande (d'un téléimprimeur)

teleservice
S: teleservicio; servicio final
F: téléservice

teletex
S: telètex
F: télétex

teletex basic control function repertoire
S: repertorio teletex básico de funciones de control
F: répertoire des fonctions de commande télétex de base

teletex basic graphic character repertoire
S: repertorio teletex básico de caracteres gráficos
F: répertoire des caractères graphiques télétex de base

teletex call
S: comunicación teletex
F: communication télétex

teletex character repertoire
S: repertorio teletex de caracteres
F: répertoire des caractères télétex

other teletex character repertoires
S: otros repertorios teletex de caracteres
F: autres répertoires de caractères télétex

teletex control function repertoire
S: repertorio teletex de funciones de control
F: répertoire des fonctions de commande télétex

teletex document
S: documento teletex
F: document télétex

teletex equipment
S: equipo teletex
F: équipement télétex

teletex graphic character repertoire
S: repertorio teletex de caracteres gráficos
F: répertoire des caractères graphiques télétex

teletex page
S: página teletex
F: page télétex

Teletex service
S: servicio teletex
F: service télétex

teletex terminal
S: terminal teletex
F: terminal télétex

teletex terminal identifier
S: identificador de terminal teletex
F: identificateur de terminal télétex

television circuit
S: circuito de televisión
F: circuit télévisuel

television circuit section
S: sección de circuitos de televisión
F: section de circuit télévisuel

television receive-only station (TVRO)
S: estación de televisión con recepción únicamente (TVRU)
F: station de télévision uniquement réceptrice (STVUR)

telewriting
S: telescritura
F: télé écriture

telewriting image
S: imagen de telescritura
F: image de téléécriture

telex
S: télex
F: télex

telex answer-back
S: distintivo de télex
F: indicatif télex

telex conversation mode
S: modo conversacional télex
F: conversation télex

telex destination code
S: código télex de destino
F: code télex de destination

telex letter service (prefix 24)
S: servicio de cartas télex (prefijo 24)
F: service télex postal (préfixe 24)

telex network identification code
S: código de identificación de la red télex
F: code d'identification de réseau télex

telex number
S: número télex
F: numéro de télex

temporary mobile station identity (TMSI)
S: identidad temporal de la estación móvil (ITEM)
F: identité temporaire de station mobile (ITSM)

temporary trunk blocking after release
S: bloqueo temporal de circuito (entre centrales) después de la liberación 42 Rec. Q.762
F: blocage temporaire de circuit après libération

term
S: término
F: terme

terminal
S: terminal
F: terminal

terminal connection method (in telex)
S: método de conexión del terminal (en télex)
F: mode de raccordement (en télex)

terminal country (or Administration)
S: país (o Administración) terminal
F: pays (ou Administration) terminale(e)

terminal echo suppressor
S: supresor de eco terminal
F: suppresseur d'écho terminal

terminal equipment (TE)
S: equipo terminal (ET)
F: équipement terminal (ET)

terminal identifier (TID)
S: identificador de terminal (IDT)
F: identificateur de terminal (TID)

terminal identity
S: identidad del terminal
F: identité du terminal

terminal international centre
S: centro terminal internacional
F: centre terminal international

terminal international exchange
S: central internacional terminal
F: centre international terminal

terminal national centre
S: centro terminal nacional
F: centre terminal national

terminal national section
S: sección terminal nacional
F: section nationale terminale

terminal operating mode
S: modo de funcionamiento del terminal
F: mode de fonctionnement du terminal

terminal O/R address
S: dirección O/D de terminal
F: adresse terminale E/D

terminal share
S: parte alícuota terminal
F: quote-part terminale

terminal symbol
S: símbolo terminal
F: symbole terminal

terminal type
S: tipo de terminal
F: type de terminal

terminate and leave (T&L)
S: terminación y partida (TyP)
F: terminer et quitter

terminating connection
S: conexión de destino; conexión de terminación
F: connexion d'arrivée

terminating traffic
S: tráfico de destino
F: trafic d'arrivée

terminology harmonization
S: armonización de la terminología
F: harmonisation de la terminologie

tertiary digital muldex
S: múldex digital terciario
F: muldex numérique tertiaire

test
S: prueba
F: essai

test access point (TAP)
S: punto de acceso para las pruebas (PAP)
F: trajet d'accès d'essai (TAE)

test balance return loss (TBRL)
S: atenuación de equilibrado en posición de medida (AEPM)
F: affaiblissement d'équilibrage en position de mesure

test body
S: cuerpo de prueba
F: corps du test

test call indicator (sent in the forward direction)
S: indicador de llamada de prueba (transmitida hacia adelante)
F: indicateur d'appel d'essai (émis dans le sens: vers l'avant)

test case
S: caso de prueba
F: test élémentaire; cas d'essai

test configuration
S: configuración de prueba
F: configuration d'essai

test coordination procedures
S: procedimientos de coordinación de pruebas
F: procédures de coordination de tests

test data
S: datos de prueba
F: données d'essai

test/measurement day
S: día de la prueba/medida
F: jour d'essai/de mesure

test event
S: suceso de prueba; evento de prueba
F: événement de test; événement d'essai

test group
S: grupo de pruebas
F: groupe de tests; groupe d'essais

test laboratory
S: laboratorio de pruebas
F: laboratoire de test

test levels at exchange boundaries
S: niveles de pruebas en las fronteras de la central
F: niveaux d'essai aux accès du centre

test management protocol
S: protocolo de gestión de pruebas
F: protocole de gestion des tests

test purpose
S: finalidad de la prueba
F: objet du test

test realizer
S: realizador de la prueba
F: réalisateur de l'équipement de test

test section
S: sección de pruebas
F: section d'essais

test step
S: fase de prueba
F: module de test

test suite
S: serie de pruebas
F: suite de tests; ensemble d'essais

tested RQ
S: control de RQ; prueba de RQ
F: contrôle de RQ

testing point (line signalling)
S: punto de pruebas de la señalización de línea
F: centre pour les essais de la signalisation de ligne

testing point (switching and interregister signalling)
S: punto de pruebas de conmutación y señalización entre registradores
F: centre pour les essais de la commutation et de la signalisation entre enregistreurs

testing point (transmission)
S: punto de pruebas de la transmisión
F: centre pour les essais de la transmission

testing repetition cycle
S: ciclo de repetición controlado
F: cycle de répétition contrôlé

text
S: texto
F: texte

text area
S: zona de texto
F: zone de texte

text block
S: bloque de texto
F: bloc de texte

text extension symbol
S: símbolo de ampliación de texto
F: symbole d'extension de texte

text string
S: cadena de texto
F: chaîne de texte

text transfer (TT)
S: transferencia de texto (TT)
F: transfert de texte (TT)

text unit
S: unidad de texto
F: unité de texte

theoretical duration of a significant interval
S: duración teórica de un intervalo significativo
F: durée théorique d'un intervalle significatif

theoretical margin
S: margen teórico
F: marge théorique

three-party service
S: servicio tripartito
F: service comportant un troisième correspondant

three point one (3.1) kHz audio
S: audio a 3,1 kHz
F: audiofréquence de 3,1 kHz

three point one (3.1) kHz audio information transfer
S: transferencia de información de audio a 3,1 kHz
F: transfert de signaux audiofréquence à 3,1 kHz

thresholding
S: determinación de umbrales
F: fixation des seuils

through connection
S: transconexión
F: transfert

through-connection delay
S: demora de transconexión; tiempo de transferencia de una central; retardo de transconexión
F: durée d'établissement d'un commutateur; délai d'établissement; temps de transfert

through-connection delay (end-to-end channel associated or common channel signalling)
S: tiempo de transferencia de la central (señalización asociada al canal de extremo a extremo o señalización por canal común)
F: délai de traversée du central (signalisation voie par voie ou par canal sémaphore de bout en bout)

through-connection delay (link-by-link channel associated signalling)
S: tiempo de transferencia de la central (señalización asociada al canal sección por sección)
F: délai de traversée du central (signalisation voie par voie, section par section)

through-fifteen (15)-supergroup assembly connection point
S: punto de transferencia de agregado de 15 grupos secundarios
F: point de transfert d'assemblage de 15 groupes secondaires

through-group connection point
S: punto de transferencia de grupo primario
F: point de transfert de groupe primaire

through-mastergroup connection point
S: punto de transferencia de grupo terciario
F: point de transfert de groupe tertiaire

through-supergroup connection point
S: punto de transferencia de grupo secundario
F: point de transfert de groupe secondaire

through-supermastergroup connection point
S: punto de transferencia de grupo cuaternario
F: point de transfert de groupe quaternaire

throughput
S: caudal de tráfico; caudal
F: capacité utile; débit

throughput capacity
S: capacidad de caudal
F: capacité de débit

time
S: tiempo; time
F: temps (time)

time acceleration factor
S: factor de aceleración temporal
F: facteur d'accélération temporelle

time and charges requested at end of call (prefix 37)
S: petición de duración e importe al final de la comunicación (prefijo 37)
F: durée et taxes demandées à la fin de la communication (préfixe 37)

time between failures
S: tiempo entre fallos
F: temps entre défaillances

time between interruptions
S: tiempo entre interrupciones
F: temps entre interruptions

time compression multiplex
S: múltiplex por compresión en el tiempo
F: multiplex à compression temporelle

time congestion
S: congestión temporal
F: congestion temporelle

time consistent busy hour
S: hora cargada media repetitiva o sistemática
F: heure chargée moyenne

time division
S: división en el tiempo; división temporal
F: répartition dans le temps; répartition temporelle

time division multiplexing (TDM)
S: multiplexación por división en el tiempo (MDT); multiplexación temporal; multiplexión temporal
F: multiplexage par répartition dans le temps (MRT); multiplexage temporel

time division switching
S: conmutación por división en el tiempo; conmutación temporal
F: commutation par répartition dans le temps; commutation temporelle

time interval
S: intervalo de tiempo
F: intervalle de temps

time interval error
S: error de intervalo de tiempo
F: dérive temporelle

time limit
S: límite de tiempo
F: délai

time-out
S: temporización
F: temporisation

time quantized control
S: control por cuantificación temporal
F: synchronisation échantillonnée

time sharing
S: tiempo compartido
F: partage de temps

time slicing
S: segmentación de tiempo
F: découpage de temps

time slot
S: intervalo de tiempo
F: intervalle de temps; créneau temporel

time slot interchange
S: intercambio de intervalos de tiempo
F: échange entre intervalles de temps

time slot sequence integrity
S: integridad de la secuencia de intervalos de tiempo
F: intégrité de la séquence d'intervalles de temps

time to failure
S: tiempo hasta el fallo
F: durée de fonctionnement avant défaillance

time to first failure
S: tiempo hasta el primer fallo
F: durée de fonctionnement avant la première défaillance

time to restoration; time to recovery
S: tiempo de avería
F: temps de panne

timer
S: temporizador
F: temporisateur

timing for start of charging (circuit switched calls)
S: temporización para el comienzo de la tasación (llamadas con conmutación de circuitos)
F: début de la taxation (appels commutés par circuits)

timing information
S: información de temporización
F: information de rythme

timing jitter
S: fluctuación de fase de temporización
F: gigue de rythme

timing recovery; timing extraction
S: recuperación de la temporización; extracción de la temporización
F: récupération du rythme

timing signal
S: señal de temporización
F: signal de rythme

title
S: título
F: titre; appellation

title-domain
S: dominio de título
F: domaine de l'appellation

title-domain-name
S: nombre de dominio de título
F: nom de domaine d'appellation

to assemble
S: ensamblar
F: assembler

to compile
S: compilar
F: compiler

to debug (in programming)
S: depurar (en programación)
F: mettre au point (en programmation)

to designate
S: designar
F: désigner

to dump
S: vaciar
F: vider

to invoke
S: invocar
F: appeler

to link (in programming)
S: enlazar en programación; vincular
F: relier (en programmation)

to map (over)
S: hacer corresponder
F: appliquer

to pack
S: compactar
F: condenser

to patch
S: parchear
F: rapiécer

to relocate
S: reubicar
F: translater

to represent
S: representar
F: représenter

token
S: testigo
F: jeton

tone
S: tono
F: tonalité

tone on hold
S: tono de retención
F: tonalité de garde

tool
S: instrumento
F: outil

top edge
S: borde superior
F: limite supérieure

top left corner
S: esquina superior izquierda
F: angle supérieur gauche; coin supérieur gauche

top right corner
S: esquina superior derecha
F: angle supérieur droit; coin supérieur droit

total call connection delay (TCCD)
S: retardo total de conexión de la llamada (RTCL)
F: temps total d'établissement de la communication (TCCD)

total electroacoustic gain
S: ganancia electroacústica total
F: gain électroacoustique total

total transit delay of a UDT message
S: tiempo de transmisión total de un mensaje DTU
F: temps de transit total d'un message DSC

trace
S: rastreo; trazo
F: trace

traffic carried
S: tráfico cursado
F: trafic écoulé

traffic-carrying device
S: dispositivo de curso de tráfico
F: organe de trafic

traffic distribution imbalance
S: desequilibrio de la distribución interna de tráfico
F: déséquilibre interne de trafic

traffic flow control (signalling-)
S: control del flujo del tráfico (de señalización)
F: contrôle de flux de trafic (sémaphore)

traffic matrix
S: matriz de tráfico
F: matrice de trafic

traffic offered
S: tráfico ofrecido
F: trafic offert

traffic relation
S: relación de tráfico
F: flux de trafic

traffic route
S: ruta de tráfico
F: voie d'acheminement du trafic

traffic routing
S: encaminamiento de tráfico
F: acheminement

traffic routing (in circuit switching)
S: encaminamiento de tráfico (en conmutación de circuitos)
F: acheminement (en commutation de circuits)

traffic-unit price procedure
S: procedimiento de remuneración por unidad de tráfico
F: méthode de rémunération par unité de trafic

traffic volume
S: volumen de tráfico
F: volume de trafic

trafficability performance
S: aptitud para cursar tráfico
F: traficabilité; capacité d'écoulement du trafic

trailing edge
S: borde posterior
F: front arrière; bord arrière; bord postérieur

transaction
S: transacción
F: transaction

transaction (in signalling applications)
S: transacción (en aplicaciones de señalización)
F: transaction (dans les applications de signalisation)

transaction capabilities (TC)
S: capacidades de transacción (CT)
F: gestionnaire de transactions (GT)

Transaction Capabilities Application Part (TCAP)
S: parte aplicación de capacidades de transacción (PACT)
F: Sous-Système Application pour la Gestion des Transactions

transaction portion
S: porción de transacción
F: partie transaction

transceiver
S: transceptor; transmisor-receptor
F: émetteur-récepteur

transcoding gain (TG)
S: ganancia de transcodificación (GT)
F: gain de transcodage (GT)

transfer
S: transferencia
F: transfert

transfer-allowed (procedure)
S: autorización de transferencia (procedimiento de); transferencia autorizada
F: transfert autorisé (procédure de)

transfer-allowed-acknowledgement signal
S: señal de acuse de recibo de autorización de transferencia
F: signal d'accusé de réception d'un signal d'autorisation de transfert

transfer-allowed signal
S: señal de autorización de transferencia
F: signal d'autorisation de transfert

transfer channel
S: canal de transferencia
F: voie de transfert

transfer controlled (procedure)
S: control de transferencia (procedimiento de)
F: transfert sous contrôle (procédure de)

transfer delay
S: tiempo de transferencia
F: temps de transfert

transfer link
S: enlace de transferencia
F: liaison de transfert

transfer mode
S: modo de transferencia
F: mode de transfert

transfer-prohibited (procedure)
S: prohibición de transferencia (procedimiento de); transferencia prohibida)
F: transfert interdit (procédure de)

transfer-prohibited signal
S: señal de prohibición de transferencia
F: signal d'interdiction de transfert

transfer-restricted (procedure)
S: restricción de transferencia (procedimiento de); transferencia restringida
F: transfert restreint (procédure de)

transfer syntax
S: sintaxis de transferencia
F: syntaxe de transfert

transfer syntax name
S: nombre de sintaxis de transferencia
F: nom de syntaxe de transfert

transfer system (T/SYS)
S: sistema de transferencia (T/SYS)
F: système de transfert (T/SYS)

transfer time, T_t
S: tiempo de transferencia, T_t
F: temps de transfert, T_t

transit connection
S: conexión de tránsito
F: connexion de transit

transit country (or Administration)
S: país (o Administración) de tránsito
F: pays (ou Administration) de transit

transit delay
S: retardo de tránsito
F: délai de transfert; temps de transfert

transit exchange
S: central de tránsito
F: centre de transit; commutateur nodal télégraphique

transit network identification
S: identificación de la red de tránsito
F: identification du réseau de transit

transit network section
S: sección de red de tránsito
F: section de réseau de transit

transit node
S: nodo de tránsito
F: nœud de transit

transit share
S: parte alícuota de tránsito
F: quote-part de transit

transit time of a CC message for the relay function at a relay point with coupling
S: tiempo de tránsito de un mensaje CC por la función de relevo en un punto de repetición con acoplamiento
F: temps de transit d'un message CCO pour la fonction relais d'un point relais avec mise en relation

transit time of a CR message for the relay function at a relay point with coupling
S: tiempo de tránsito de un mensaje PC por la función de repetición en un punto de repetición con acoplamiento
F: temps de transit d'un message DCO pour la fonction relais d'un point relais avec mise en relation

transit time of a CR message for the relay function at a relay point without coupling
S: tiempo de tránsito de un mensaje PC por la función de repetición en un punto de repetición sin acoplamiento
F: temps de transit d'un message DCO pour la fonction relais d'un point relais sans mise en relation

transit time of a DT message for the relay function at a relay point with coupling
S: tiempo de tránsito de un mensaje DT por la función de relevo en un punto de relevo con acoplamiento
F: temps de transit d'un message DT pour la fonction relais d'un point relais avec mise en relation

transit time of a UDT message for the relay function at a relay point
S: tiempo de tránsito de un mensaje DTU para la función de relevo en un punto de relevo
F: temps de transit d'un message DSC pour la fonction relais d'un point relais

transit traffic
S: tráfico de tránsito
F: trafic de transit

transition
S: transición
F: transition

transition area
S: área de transición
F: zone de transition

transition string
S: cadena de transición
F: chaîne de transition

transition string area
S: área de cadena de transición
F: zone de chaîne de transition

translation
S: traducción
F: traduction

translation (in telegraphy and data transmission)
S: traducción (en telegrafía y transmisión de datos)
F: traduction (en télégraphie et transmission de données)

translator
S: traductor
F: traducteur

transmission
S: transmisión
F: transmission

transmission buffer (TB)
S: memoria tampón de transmisión (MT)
F: tampon d'émission (TEM)

transmission capability
S: capacidad de transmisión
F: capacité de transmission

transmission channel
S: canal de transmisión
F: voie de transmission

transmission delay (through a digital exchange)
S: tiempo de transmisión (a través de una central digital)
F: temps de transmission (dans un central numérique)

transmission interruption
S: interrupción de transmisión
F: interruption de transmission

transmission loss of path a-t-b; semi-loop loss
S: atenuación del trayecto a-t-b; atenuación en semibucle
F: affaiblissement du trajet a-t-b; affaiblissement en demi-boucle

transmission maintenance point (international line) (TMP-IL)
S: centro de mantenimiento de la transmisión para la línea internacional (CMT-LI)
F: centre de maintenance de la transmission pour la ligne internationale (CMT-LI)

transmission medium requirement
S: requisito del medio de transmisión; medio de transmisión requerido
F: type de connexion demandé

transmission method
S: método de transmisión
F: méthode de transmission

transmission of a verbal message service
S: servicio de transmisión de un mensaje verbal
F: service de transmission d'un message verbal

transmission overload
S: sobrecarga de transmisión
F: surcharge de transmission

transmission performance
S: calidad de transmisión
F: qualité de transmission

transmission plan
S: plan de transmisión
F: plan de transmission

transmission reference point
S: punto de referencia para la transmisión
F: point de référence pour la transmission

transmission restoration
S: restablecimiento de la transmisión
F: rétablissement de la transmission

transmission restoration control function
S: función de control del restablecimiento de la transmisión
F: fonction de commande de rétablissement de transmission

transmission restoration equipment
S: equipo de restablecimiento de la transmisión
F: équipement de rétablissement de transmission

transmission restoration function: automatic or semi-automatic transmission rerouting (protection network switching)
S: función de restablecimiento de la transmisión: reencaminamiento automático o semiautomático en transmisión (conmutación de protección de red)
F: fonction de rétablissement de transmission: réacheminement automatique ou semi-automatique en transmission (commutation de protection de réseau)

transmission restoration function: direct transmission restoration (protection link switching)
S: función de restablecimiento de la transmisión: restablecimiento directo de la transmisión (conmutación de protección de enlace)
F: fonction de rétablissement de transmission: rétablissement de transmission direct (commutation de protection de liaison)

transmission restoration function: manual transmission rerouting
S: función de restablecimiento de la transmisión: reencaminamiento manual de la transmisión
F: fonction de rétablissement de transmission: réacheminement manuel en transmission

transmission restoration function: 1 + 1 restoration
S: función de restablecimiento de la transmisión: restablecimiento 1 + 1
F: fonction de rétablissement de transmission: rétablissement 1 + 1

transmission restoration system
S: sistema de restablecimiento de la transmisión
F: système de rétablissement de transmission

transmission route
S: ruta de transmisión
F: trajet de transmission

transmission route diversity
S: diversidad de rutas de transmisión
F: diversité de routage de transmission

transmit channel
S: canal de emisión
F: voie d'émission

transmit window
S: ventana de transmisión
F: fenêtre de transmission

transmittal
S: transmisión
F: transmission

transmitter distortion
S: distorsión en la emisión; distorsión en el emisor
F: distorsion à l'émission

transmitting objective loudness rating (TOLR)
S: índice de sonoridad objetivo en emisión (ISOE)
F: équivalent objectif pour la sonie à l'émission (EOSE)

transmultiplexer
S: transmultiplexor
F: transmultiplexeur

transmultiplexer channel
S: canal de un transmultiplexor
F: voie de transmultiplexeur

transparency
S: transparencia
F: transparence

transparent (data)
S: (datos) transparentes
F: données transparentes

transparent data transfer phase
S: fase de transferencia transparente de datos
F: phase de transfert transparent de données

transparent loopback
S: bucle transparente
F: bouclage transparent; bucle transparente

transport service provider; TS-provider
S: proveedor de servicio de transporte; proveedor ST
F: fournisseur du service de transport

transport service user
S: usuario del servicio de transporte
F: utilisateur du service de transport

transverse voltage
S: tensión transversal
F: tension transversale

trap
S: trampa
F: piège

tributary channel
S: canal afluente
F: voie affluente

trombone (loop) connection
S: conexión en bucle
F: connexion en boucle

true ...
S: ... verdadero
F: ... vrai

true
S: true; cierto
F: vrai

trunk channel (TC)
S: canal troncal (CT)
F: voie interurbaine (VI)

trunk circuit
S: circuito (entre centrales); circuito troncal; circuito interurbano
F: circuit (commuté); circuit interurbain

trunk code
S: indicativo interurbano
F: indicatif interurbain

trust
S: fiduciario
F: confiance

twisted pair
S: par trenzado
F: paire torsadée

two condition; three condition; four condition
S: bivalente; de dos estados; trivalente; tetravalente; etc.
F: bivalent [trivalent, etc.]

two-sided test
S: prueba bilateral
F: test bilatéral

two-step activation
S: activación en dos etapas; activación bietapa
F: activation en deux étapes

two way; bidirectional
S: en ambos sentidos; bidireccional
F: à double sens; bidirectionnel

two way alternate (TWA)
S: modo bidireccional alternado (BDA)
F: échange bidirectionnel à l'alternat (BDA)

two-way-alternate interaction
S: interacción bidireccional alternada
F: interaction à l'alternat

two way simultaneous (TWS)
S: modo bidireccional simultáneo (BDS)
F: échange bidirectionnel simultané (BDS)

two-way-simultaneous interaction
S: interacción bidireccional simultánea
F: interaction bidirectionnelle simultanée

two-wire switching
S: conmutación a dos hilos
F: commutation à deux fils

type
S: tipo
F: type

type definition
S: definición de tipo
F: définition de type

type I information
S: información de tipo I
F: information de type I

type I risk
S: riesgo de tipo I
F: risque de première espèce

type II information
S: información del tipo II
F: information de type II

type II risk
S: riesgo de tipo II
F: risque de seconde espèce

type III information
S: información del tipo III
F: information de type III

type of coding
S: tipo de codificación
F: type de codage

type P transmultiplexer (TMUX-P)
S: transmultiplexor de tipo P (TMUX-P)
F: transmultiplexeur de type P (TMUX-P)

type (or value) reference name
S: nombre de referencia de tipo; nombre de referencia de valor
F: nom de dénotation de type (ou de valeur)

type S transmultiplexer (TMUX-S)
S: transmultiplexor de tipo S (TMUX-S)
F: transmultiplexeur de type S (TMUX-S)

types of sound-programme circuit
S: tipos de circuitos radiofónicos
F: types de circuits radiophoniques

U

unacceptable transmission probability
S: probabilidad de transmisión inaceptable
F: probabilité d'une transmission inacceptable

unaffected level
S: nivel invariable
F: niveau inchangé

unallocated number (sent in the backward direction)
S: número no asignado (transmitida hacia atrás)
F: signal de numéro non utilisé (émis dans le sens: vers l'arrière)

unallocated-number signal
S: señal de número no asignado
F: signal de numéro inutilisé

unassigned reference
S: referencia no asignada
F: référence non affectée

unavailability (U)
S: indisponibilidad (I)
F: indisponibilité (U)

unavailability of a relay point
S: indisponibilidad de un punto de relevo; indisponibilidad de un punto de repetición
F: indisponibilité d'un point relais

unavailability of a SCCP relation
S: indisponibilidad de una relación PCCS
F: indisponibilité d'une relation SSCS

unavailable signalling link
S: enlace de señalización indisponible
F: canal sémaphore indisponible

unblocking acknowledgement message (UBA)
S: mensaje de acuse de desbloqueo (ARD)
F: message d'accusé de réception de déblocage (DBA)

unblocking-acknowledgement signal
S: señal de acuse de recibo de desbloqueo
F: signal d'accusé de réception de déblocage

unblocking message (UBL)
S: mensaje de desbloqueo a la dirección (DBL)
F: message de déblocage (DBL)

unblocking signal
S: señal de desbloqueo
F: signal de déblocage

unconfirmed-service
S: servicio no confirmado
F: service non confirmé

uncontrolled slip
S: deslizamiento incontrolado
F: glissement non commandé

undefined
S: indefinido
F: indéfini (undefined)

undercharging probability
S: probabilidad de subtarificación
F: probabilité de sous-taxation

underground duct
S: conducto subterráneo
F: conduites souterraines

undetected errors
S: errores no detectados
F: erreurs non décelées

undetected fault time
S: tiempo de no detección de una avería
F: temps de non-détection de panne

unequipped circuit identification code message (UCIC)
S: mensaje de código de identificación de circuito no equipado (CICN)
F: message de code d'identification de circuit non équipé (CINÉ)

unforeseen outcome
S: resultado imprevisto
F: résultat imprévu

unformatted postal O/R address
S: dirección postal O/D no formatizada
F: adresse postale E/D non formatée

unidirectional
S: unidireccional
F: unidirectionnel; unilatéral

uniform; non uniform
S: uniforme; no uniforme
F: uniforme; non uniforme

uniform encoding
S: codificación uniforme
F: codage uniforme

uniform quantizing
S: cuantificación uniforme
F: quantification uniforme

unilateral control
S: control unilateral
F: synchronisation unilatérale

unintelligible crosstalk components
S: componentes de diafonía ininteligible
F: composantes de diaphonie inintelligible

unique postal name
S: nombre postal exclusivo
F: nom postal unique

unit element
S: elemento unitario
F: élément unitaire

unit element error rate for isochronous modulation
S: tasa de errores en los elementos unitarios
F: taux d'erreur sur les éléments unitaires

unit interval
S: intervalo unitario; intervalo unidad
F: intervalle unitaire

unit interval
S: intervalo unitario
F: intervalle unitaire

unit scaling
S: escalamiento unitario
F: pondération d'unité

unitdata (UDT)
S: dato unidad (DTU)
F: données sans connexion (DSC)

unitdata service (UDTS)
S: servicio de dato unidad (SDTU)
F: renvoi de données sans connexion (RSC)

universal access number service
S: servicio de números universales
F: service de numéros universels

unreasonable message
S: mensaje irrazonable; o irracional; mensaje incoherente
F: message inattendu; message irrationnel

unrestricted digital information
S: información digital sin restricciones
F: information numérique sans restriction

unrestricted information transfer
S: transferencia de información sin restricciones
F: transfert d'information sans restriction

unscheduled maintenance
S: mantenimiento no programado
F: maintenance non programmée

unstructured
S: no estructurado
F: non structuré

unsuccessful call
S: llamada infructuosa
F: appel infructueux

up state
S: estado de disponibilidad
F: état de disponibilité

up time
S: tiempo de disponibilidad
F: temps de disponibilité; temps de bon fonctionnement

upper tester
S: probador superior
F: testeur supérieur

upper window edge
S: borde superior de ventana
F: limite supérieure de fenêtre

upper window edge allocated to the peer entity
S: borde superior de ventana atribuido a la entidad par
F: limite supérieure de fenêtre autorisée à l'entité homologue

upstream failure indication (UFI)
S: indicación de fallo atrás (IFA)
F: indication de défaillance en amont (IDA)

useful life
S: vida útil
F: (durée de) vie utile

user
S: usuario
F: usager; utilisateur

user (of the signalling system)
S: usuario (del sistema de señalización)
F: utilisateur du système de signalisation

user (of ASN.1)
S: usuario (de NSA.1)
F: utilisateur (d'ASN.1)

user access; user-network access
S: acceso de usuario; acceso usuario-red
F: accès d'usager; accès usager-réseau

user agent (UA)
S: agente de usuario (UA)
F: agent d'usager (AU)

user certificate
S: certificado de usuario
F: certificat de l'usager

user class-of-service
S: clase de servicio de usuario
F: catégorie d'usager; catégorie d'usagers du service

user-element
S: elemento de usuario
F: élément utilisateur

user facility
S: facilidad de usuario
F: service complémentaire

user guidance
S: orientación del usuario
F: guidage de l'usager

user handling time T_{hu}
S: tiempo de tratamiento de usuario T_{hu}; tiempo de tratamiento de la parte de usuario de telefonía T_{hu}
F: temps de traitement RNIS T_{hu}; temps de traitement par le Sous-Système Utilisateur Téléphonie T_{hu}

user information transfer parameters
S: parámetros de transferencia de la información de usuario
F: paramètres de transfert de l'information d'usager

user message transfer unit (UMXU)
S: unidad de transferencia de mensajes de usuario (UTMU)
F: unité de transfert de messages d'usager (UTMU)

user network interface
S: interfaz usuario-red
F: interface usager-réseau

user-network interface only deactivation
S: desactivación de interfaz usuario-red solamente
F: désactivation de l'interface usager-réseau

user of a telecommunication network
S: usuario de una red de telecomunicación
F: usager d'un réseau de télécommunications

user packet
S: paquete de usuario
F: paquet d'usager

User Part (UP)
S: parte usuario (PU)
F: Sous-Système Utilisateur (SSU)

user password
S: contraseña de usuario
F: mot de passe de l'usager

user-readable comments
S: comentarios legibles por el usuario
F: commentaires lisibles par l'utilisateur

user service
S: servicio de usuario
F: service complémentaire offert aux usagers

user service identifier (USID)
S: identificador de servicio de usuario (IDSU)
F: identificateur de service d'usager (USID)

user service information
S: información de servicio de usuario
F: service demandé par l'usager

user signalling acknowledgement delay
S: retardo de acuse de recibo de señalización de usuario
F: délai d'accusé de réception de la signalisation d'usager

user-to-user indicators
S: indicadores de usuario a usuario
F: indicateurs de signalisation d'usager à usager

user-to-user information
S: información de usuario a usuario
F: information d'usager à usager

user-to-user information message (USR)
S: mensaje de información de usuario a usuario (IUU)
F: message d'information d'usager à usager (UAU)

user-to-user signalling (UUS)
S: señalización de usuario a usuario (SUU)
F: signalisation d'usager à usager (SUU)

user-to-user signalling (UUS) supplementary service
S: servicio suplementario de señalización de usuario a usuario (SUU)
F: service supplémentaire de signalisation usager à usager (SUU)

user-user protocol
S: protocolo usuario-usuario
F: protocole d'usager à usager; protocole usager-usager

user-visible name
S: nombre visible por el usuario
F: nom visible par l'utilisateur

utility processor
S: procesador utilitario
F: processeur utilitaire

V

V interface
S: interfaz V
F: interface V

V_1 reference point
S: punto de referencia V_1
F: point de référence V_1

V_2 reference point
S: punto de referencia V_2
F: point de référence V_2

V_3 reference point
S: punto de referencia V_3
F: point de référence V_3

V_4 reference point
S: punto de referencia V_4
F: point de référence V_4

valid input signal set
S: conjunto de señales de entrada válidas
F: ensemble de signaux d'entrée valides

valid presentation-protocol-data-unit
S: unidad de datos de protocolo de presentación válida
F: unité de données du protocole de présentation valide

valid SPDU
S: UDPS válida
F: SPDU valide

valid specification
S: especificación válida
F: spécification valide

valid test event
S: suceso de prueba válido
F: événement de test valide

validation of the called teletex terminal (validation result positive or negative)
S: validación del terminal teletex llamado (resultado de validación positivo o negativo)
F: validation du terminal télétex demandé (résultat de la validation positif ou négatif)

value
S: valor
F: valeur

Van Duuren radiotelegraph system; teleprinting over radio circuits (TOR)
S: sistema de radiotelegrafía Van Duuren
F: radiotélégraphie Van Duuren; TOR (teleprinting over radio circuits)

variable
S: variable
F: variable

variable bit rate (VBR)
S: velocidad binaria variable (VBV)
F: débit binaire variable (DBV)

variable definition
S: definición de variable
F: définition de variable

variable spacing
S: espaciamiento variable
F: espacement variable

variable text
S: texto variable
F: texte variable

variance (of a random variable)
S: varianza (de una variable aleatoria)
F: variance (d'une variable aléatoire)

verdict
S: veredicto
F: verdict

verification
S: verificación
F: vérification

VERIFY
S: VERIFICAR
F: VÉRIFICATION

vertical plane
S: plano vertical
F: plan vertical

video
S: video
F: vidéo

video attributes
S: atributos video
F: attributs vidéo

Video conference service
S: servicio de videoconferencia
F: service de visioconférence

videography
S: videografía
F: vidéographie

videomessaging
S: videomensajería
F: messagerie vidéo

Videophone service
S: servicio videofónico
F: service visiophonique

videotex; interactive videography
S: videotex; videografía interactiva
F: vidéographie interactive; vidéotex

videotex access point
S: punto de acceso videotex
F: point d'accès vidéotex

videotex application
S: aplicación videotex
F: application vidéotex

videotex application provider
S: proveedor de una aplicación videotex
F: fournisseur d'application vidéotex

videotex closed user group
S: grupo cerrado de usuarios videotex
F: groupe fermé d'usagers vidéotex

videotex communications network provider
S: proveedor de red de comunicación videotex
F: fournisseur de réseau de communication vidéotex

videotex conferencing
S: conferencia videotex
F: conférence vidéotex

videotex data base
S: base de datos videotex
F: base de données vidéotex

videotex data processing
S: procesamiento de datos videotex
F: traitement des données vidéotex

videotex form
S: formulario videotex
F: formule vidéotex

videotex frame
S: trama videotex
F: feuillet vidéotex

videotex gateway
S: función de multiacceso videotex; cabecera videotex
F: accès multiple vidéotex

videotex host computer
S: ordenador principal videotex; computador principal videotex
F: ordinateur principal vidéotex

videotex information provider
S: proveedor de información videotex
F: fournisseur d'information vidéotex

videotex information retrieval
S: recuperación de información videotex; obtención de información videotex
F: recherche d'information vidéotex

videotex interface unit
S: unidad de interfaz videotex
F: dispositif d'interface vidéotex

videotex interworking
S: interfuncionamiento videotex
F: interfonctionnement vidéotex

videotex messaging
S: mensajería videotex
F: messagerie vidéotex

videotex page
S: página videotex
F: document vidéotex

Videotex service
S: servicio videotex
F: service vidéotex

videotex service centre
S: centro de servicio videotex
F: centre de service vidéotex

videotex service facility
S: facilidades del servicio videotex
F: services complémentaires vidéotex; prestations du service vidéotex

videotex service profile
S: perfil del servicio videotex
F: profil du service vidéotex

Videotex service provider
S: proveedor del servicio videotex
F: prestataire de service vidéotex

Videotex service unit
S: unidad de servicio videotex
F: dispositif de service pour vidéotex

videotex system field
S: campo de sistema videotex
F: champ de système vidéotex

videotex systems
S: sistema videotex
F: systèmes vidéotex

videotex telesoftware
S: telesoporte lógico videotex
F: télélogiciel vidéotex

videotex terminal
S: terminal videotex
F: terminal vidéotex

videotex transaction
S: transacción videotex
F: transactions vidéotex

videotex user
S: usuario videotex
F: usager du vidéotex

videotex user number
S: número de usuario videotex
F: numéro d'usager vidéotex

videotex user/terminal identification facility
S: facilidad de identificación del usuario/terminal videotex
F: prestation d'identification de l'usager/du terminal vidéotex

view definition
S: definición de visión
F: définition de visibilité

view expression
S: expresión de visión
F: expression de visibilité

virtual analogue switching points (VASP)
S: extremos virtuales analógicos (EVA)
F: extrémités analogiques virtuelles

virtual call; switched virtual connection
S: llamada virtual; conexión virtual conmutada
F: communication virtuelle; communication virtuelle commutée

virtual call and permanent virtual circuit bearer service category
S: categoría de servicio portador de llamada virtual y de circuito virtual permanente
F: catégorie de service support de communication virtuelle et de circuit virtuel permanent

virtual circuit
S: circuito virtual
F: circuit virtuel

virtual decision value
S: valor virtual de decisión
F: valeur virtuelle de décision

virtual source function
S: función de la fuente virtual
F: fonction de source virtuelle

virtual source position
S: posición de la fuente virtual
F: position de la source virtuelle

visibility
S: visibilidad
F: visibilité

visible display
S: zona visible
F: zone visible

visited MSC
S: CCM visitado
F: CCM visité (CCMV)

visited PLMN
S: RMTP visitada
F: RMTP visité

visited public land mobile network (VPLMN)
S: red móvil terrestre pública (RMTP) visitada
F: réseau mobile terrestre public visité; RMTP visité

visitor location register
S: registro de posiciones visitado
F: enregistreur de localisation pour visiteurs (ELV)

visitor location register (VLR)
S: registro de posiciones de visitantes (RPV)
F: enregistreur de localisation pour visiteurs (ELV)

visual telephone service
S: servicio videotelefónico
F: service visiophonique

VLR address
S: dirección RPV
F: adresse de l'ELV

voice activity ratio
S: factor de actividad de las señales vocales
F: facteur d'activité vocale

voice-band data ratio
S: tasa de datos en banda vocal
F: taux de transmission de données en bande vocale

voice dialling service
S: servicio de marcación por la voz
F: service de numérotation par la voix

voice freezeout excess
S: rebasamiento de la exclusión por ocupación de señales vocales
F: excès de gel des signaux vocaux

voice-frequency multiplex aggregate
S: haz de circuitos de telegrafía armónica
F: faisceau de télégraphie harmonique

voice-frequency (VF) signalling; VF signalling
S: señalización en frecuencia vocal; señalización FV
F: signalisation à fréquences vocales

voice-frequency telegraphy (VFT)
S: telegrafía armónica (TA)
F: télégraphie harmonique; télégraphie à fréquences vocales

voice queue freezeout fraction (Voice FOF)
S: fracción de exclusión por ocupación de la cola de señales vocales (FEOSV)
F: taux de gel (TDG) de la file d'attente des signaux vocaux (TDG vocal)

volume; speech volume
S: volumen; volumen vocal
F: volume; volume de la parole

W

waiting time; queuing time
S: tiempo de espera; tiempo de cola
F: temps de mise en attente; temps d'attente

wander
S: fluctuación lenta de fase
F: dérapage

warning signal
S: señal de aviso
F: signal avertisseur

warning tone
S: tono de aviso
F: tonalité d'avertissement

(inherent) weakness failure
S: fallo por fragilidad (inherente)
F: défaillance par fragilité (inhérente)

(inherent) weakness fault
S: avería por fragilidad (inherente)
F: panne par fragilité (inhérente)

wear-out failure period
S: período de fallos por envejecimiento
F: période de défaillance par vieillissement; période de défaillance par usure

well-formedness rules
S: reglas de formación correcta
F: règles de bonne formation

"Who are you" signal (function); WRU signal
S: señal « ¿Con quién comunico?»; señal WRU
F: signal «qui est là»; signal WRU

wide area telephone service
S: servicio telefónico concertado en grandes zonas
F: service téléphonique à l'intérieur d'une zone déterminée

widow
S: viuda
F: veuve

widow size
S: tamaño viuda
F: taille veuve

wildcard
S: comodín
F: caractère de remplacement

window
S: ventana
F: fenêtre

window area
S: zona de ventana
F: sous-fenêtre

window information
S: información de ventana
F: informations de contrôle de fenêtre

work station function (WSF) block
S: bloque de funciones de estación de trabajo (FETR)
F: bloc de fonction de poste de travail (FPT)

work window area
S: zona de ventana de trabajo
F: sous-fenêtre de travail

working range
S: gama de funcionamiento
F: plage de fonctionnement

workstation (WS)
S: estación de trabajo (ETR)
F: poste de travail (PT)

X

X.121 address
S: dirección X.121
F: adresse X.121

X interface
S: interfaz X
F: interface X

X.410-1984 mode
S: modo X.410-1984
F: mode X.410-1984

x reference points
S: puntos de referencia x
F: points de référence x

Y

Y-ratio
S: relación Y
F: rapport Y

yearly continuous measurement
S: medida anual continua
F: mesures annuelles continues

yearly non-continuous measurement
S: medida anual discontinua
F: mesures annuelles non continues

yes or no test
S: prueba de viabilidad
F: essai par «tout ou rien»

Z

z-operation
S: operación Z
F: transformation Z

zero-dispersion slope
S: pendiente de dispersión nula
F: pente de dispersion nulle

zero-dispersion wavelength
S: longitud de onda de dispersión nula
F: longueur d'onde de dispersion nulle

zero sidetone line impedance (Z_{S0})
S: impedancia de línea de efecto local nulo (Z_{S0})
F: impédance de ligne à effet local nul

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PART IV

SERIES B AND C RECOMMENDATIONS

SERIES B RECOMMENDATIONS

Means of expression

Recommendation No.	*Title*
B.1	Letter symbols for telecommunications
B.3	Use of the international system of units (SI)
B.10	Graphical symbols and rules for the preparation of documentation in telecommunications
B.11	Legal time; use of the term UTC
B.12	Use of the decibel and the neper
B.13	Terms and definitions
B.14	Terms and symbols for information quantities in telecommunications
B.15	Nomenclature of the frequency and wavelength bands used in telecommunications
B.16	Use of certain terms linked with physical quantities
B.17	Adoption of the CCITT Specification and Description Language (SDL)
B.18	Traffic intensity unit
B.19	Abbreviations and initials used in telecommunications

Recommendation B.1 [1]

LETTER SYMBOLS FOR TELECOMMUNICATIONS

The CCITT,

considering

(a) that in order to simplify the reading of documents dealing with telecommunication technique, it is essential to use simple notations in a homogeneous system and having well-defined meaning; that, moreover, it is an advantage, wherever possible, to have notations that have been universally adopted;

(b) that CMV is collaborating with Technical Committee No. 25 of the IEC,

recommends

that in their mutual relations the ITU and its permanent organs and Administrations and recognized private operating agencies use in all languages, wherever possible, the letter symbols and the notations recommended by the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) to represent the physical quantities and the mathematical operations.

[1] A similar text will be submitted to the CCIR as a revision of Rec. 608.

Note – References of relevant publications (updated in 1988).

ISO Standard 31: "General principles concerning quantities, units and symbols"

Parts of ISO Standard 31 of greatest interest for telecommunications:

0 (General principles)
I (Quantities and units of space and time)
II (Quantities and units of periodic and related phenomena)
V (Quantities and units of electricity and magnetism)
VI (Quantities and units of light and related electromagnetic radiations)
VII (Quantities and units of acoustics)
XI (Mathematical signs and symbols)

IEC Publication 27: "Letter symbols to be used in electrical technology"

27-1	General	(1971 Edit. 5, with 1974 Amend. 1 and 1977 Amend. 2) (1983 Amend. 4, including 1981 Amend. 3)
27-1A	(1976)	(Time-dependent quantities)
27-2	(1972)	(Telecommunications and electronics)
27-2A	(1975)	(First supplement: waveguide propagation; scattering matrix and transfer matrix; static convectors; automatic control science and technology)
27-2B	(1980)	(Second supplement: linear *n*-port networks)
27-3	(1974)	(Logarithmic quantities and units) (see CCIR Recommendation 574)
27-4	(1985)	(Quantities to be used for rotating electric machines)

See also IEC Handbook *Letter Symbols* (1983) and the *Directives applicable to the work of the IEC on letter Symbols* (1986).

Recommendation B.3 [1]

USE OF THE INTERNATIONAL SYSTEM OF UNITS (SI)

The CCITT,

recommends

that the various ITU organs, as well as Administrations and recognized private operating agencies should use in their mutual relations:

- the units of the international system of units (SI) adopted by the General Conference of Weights and Measures (CGPM) and supported by the International Organization for Standardization (ISO); this system is based on the rationalized form of electromagnetic and electrotechnical relations;
- the letter symbols adopted in the SI system;
- rules similar to those of the SI system when it is necessary to form names of other units and their symbols in the field of telecommunications.

Note – References of relevant publications (updated in 1988).

BIPM publications: "BIPM Publication: Le système international d'unités" (SI). [2]

International Standard ISO 31: "General principles concerning quantities, units and symbols"

[1] The text of this Recommendation is analogous to that of Recommendation 430-2 of the CCIR.

[2] The English translation of this publication is published under the title: "The International System of Units", Her Majesty's Stationery Office, London, 1970, and "The International System of Units", U.S. National Bureau of Standards, Special Publication 330, U.S. Government Printing Office, Washington, DC, 1970.

Parts of International Standard ISO 31 of greatest interest for the telecommunications:

0 (General principles)
I (Quantities and units of space and time)
II (Quantities and units of periodic and related phenomena)
V (Quantities and units of electricity and magnetism)
VI (Quantities and units of light and related electromagnetic radiations)
VII (Quantities and units acoustics)
XI (Mathematical signs and symbols)

International Standard ISO 1000: "SI units and recommendations for the use of their multiples and of certain other units"

IEC Publication 27: see Recommendation B.1

See also ISO Standards Handbook 2 (1982) "Units of measurement".

Recommendation B.10 [1)]

GRAPHICAL SYMBOLS AND RULES FOR THE PREPARATION OF DOCUMENTATION IN TELECOMMUNICATIONS

The CCITT,

which cooperates in the work of the CCI/IEC Joint Working Group set up for the purpose of establishing internationally agreed graphical symbols and rules for the preparation of documentation and for item designations (see CCITT Recommendation A.13 or CCIR Resolution 23),

recommends

that, on diagrams for international use concerning telecommunications, the Administrations and recognized private operating agencies of the CCIs and CCI Secretariats should use the graphical symbols for diagrams given in IEC Series 617 publications and should observe the rules for the preparation of documentation and for item designation laid down in IEC, Publications 113 and 750.

Administrations wishing to use symbols on equipment are recommended to refer to IEC Publication 417.

Note 1 – See CCIR Resolution 23.

Note 2 – References of relevant publications (updated in 1988).

IEC Publication 113: "Diagrams, charts, tables"

113-1	(1971)	(Definitions and classification)
113-2	(1971)	(Item designation of components) replaced by Publication 750
113-3	(1974)	(General recommendations for the preparation of diagrams)
113-4	(1975)	(Recommendations for the preparation of circuit diagrams)
113-5	(1975)	(Preparation of interconnection diagrams and tables)
113-6	(1976 and Amend. 1 1983)	(Preparation of unit wiring diagrams and tables)
113-7	(1981)	(Preparation of logic diagrams)
113-8	(1982 and Amend. 1 1983)	(Preparation of diagrams for system manuals)

[1)] A similar text will be submitted to the CCIR as a revision of Rec. 461-3.

IEC Publication 117: "Recommended graphical symbols", replaced by Publication 617

IEC Publication 416: (1972 and 1978 amendment No. 1): "General principles for the formulation of graphical symbols"

IEC Publications 417: (1973 and 7 supplements of 1974, 1975, 1977, 1978, 1980, 1982 and 1985): "Graphical symbols for use on equipment"

IEC Publication 617: "Graphical symbols for diagrams"

617-1	(1985):	General information, General Index. Cross-reference tables
617-2	(1983):	Symbol elements, qualifying symbols and other symbols having general application
617-3	(1983)	Conductors and connecting devices
617-4	(1983)	Passive components
617-5	(1983)	Semi-conductors and electron tubes
617-6	(1983)	Production and conversion of electrical energy
617-7	(1983)	Switchgear, controlgear and protective devices
617-8	(1983)	Measuring instruments, lamps and signalling devices
617-9	(1983)	Telecommunications: Switching and peripheral equipment
617-10	(1983)	Telecommunication: Transmission
617-11	(1983)	Architectural and topographical installation plans and diagrams
617-12	(1983)	Binary logic elements
617-13	(1983)	Analogue elements

IEC Publication (1983): "Item designation in electrotechnology"

Recommendation B.11

LEGAL TIME; USE OF THE TERM UTC

(Geneva, 1980)

The CCITT,

considering

(a) that according to CCIR Recommendation 460-3 all standard-frequency and time-signal emissions should conform to Coordinated Universal Time (UTC);

(b) that since 1972 UTC has been available as a worldwide time reference;

(c) that in 1975 the General Conference of Weights and Measures (CGPM) recommended the use of UTC as the basis of civil time;

(d) that other scientific organizations, particularly the International Astronomical Union (IAU) and the International Union of Radio Science (URSI) have recommended the general use of UTC;

(e) that UTC enables the time of events to be determined with an uncertainty of 1 μs;

(f) that according to CCIR Recommendation 536 and in accordance with the Recommendation of the General Conference of Weights and Measures the designation UTC is to be used in all languages;

(g) that the World Administrative Radio Conference (Geneva, 1979) has decided that UTC shall be used in international radiocommunication activities;

(h) that in accordance with Appendix 2 to the Telegraph and Telephone Regulations, Geneva, 1973 (relating to reciprocal exchange of information through the medium of the General Secretariat) Resolution No. 1 of these Regulations recommends Administrations *inter alia* to inform the Secretary-General of the legal time they apply.

unanimously recommends

that UTC should be used to designate the time in all other international telecommunication activities (including operational information) and in all service documents of the International Telecommunication Union.

Recommendation B.12 [1]

USE OF THE DECIBEL AND THE NEPER IN TELECOMMUNICATIONS [2]

The CCITT,

considering

(a) the frequent use by the CCIR and CCITT of the decibel and the neper for expressing quantities;

(b) the IEC Publication 27-3 (1974) on logarithmic quantities and units;

(c) the collaboration of CMV with Technical Committee No. 25 of the IEC which permits coordination with a view to establishing further Recommendations;

(d) International Standard ISO 31;

(e) the convenience of using only one unit to express in logarithmic form the numerical values of international specifications and the results of measurements in exchanges at the international level;

(f) the use in radiocommunications of the decibel alone to express the results of measurements in logarithmic form;

(g) the need, within the ITU, to publish a guide on this subject;

recommends

that symbols used for the logarithmic expression of quantities that directly or indirectly refer to power should be chosen with the guidance of Annex A.

ANNEX A

(to Recommendation B.12)

Use of the "decibel" and the "neper"

A.1 *Definition of the decibel*

A.1.1 The *bel* (symbol B) expresses *the ratio of two powers* by the decimal logarithm of this ratio. This unit is not often used, having been replaced by the *decibel* (symbol dB) which is one-tenth of a bel.

A.1.2 The decibel may be used to express the ratio of two *field quantities*, such as voltage, current, sound pressure, electric field, charge velocity or density, the square of which in linear systems is proportional to power. To obtain the same numerical value as a power ratio, the logarithm of the field quantity ratio is multiplied by the factor 20, assuming that the impedances are equal.

The relationship between a current or voltage ratio and that of the corresponding power ratio is impedance dependent. Use of the decibel when the impedances are not equal is not appropriate unless adequate information is given concerning the impedances involved.

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[1] A similar text will be submitted to the CCIR as a revision of Recommendation 574-2.

[2] In this Recommendation, the notation letter lg is used for the decimal logarithm in accordance with ISO 31 (Part XI) and usage within the IEC (Publication 27-3). The notation $\log_{10}$ is also used within ISO and the IEC.

For example, if P_1 and P_2 are two powers, their ratio expressed in decibels is:

$$10 \lg \frac{P_1}{P_2}$$

If P_1 and P_2 represent the powers dissipated by currents I_1 and I_2 in resistances R_1 and R_2:

$$10 \lg \frac{P_1}{P_2} = 10 \lg \frac{I_1^2 R_1}{I_2^2 R_2} = 20 \lg \frac{I_1}{I_2} + 10 \lg \frac{R_1}{R_2}$$

A.1.3 The decibel may also be used to express the ratio of two values of a quantity connected with power by a well-defined relationship. In this case, the logarithm of this ratio must be multiplied by a factor representing the relationship which connects the quantity with a power, and a term representing a multiplying factor may be added to it.

The corresponding formulae, together with an example, are given in Appendix I, § I.2.

A.2 *Definition of the neper*

The *neper* (symbol N_p) expresses the ratio of two field quantities such as voltage or current, the square of which is proportional to power by the natural logarithm of this ratio. The value of a power ratio in nepers is one half of the natural logarithm of the power ratio. The values in nepers of the ratio of two field quantities and of the corresponding powers are equal only if the impedances are equal.

One neper corresponds to the value of e of a field quantity ratio and to the value e^2 of a power quantity ratio.

Sub-multiples such as the decineper (dNp) are also used.

In some disciplines, nepers may be used to express the logarithm of a power ratio without the factor ½. An example is optical depth or attenuation in radiometry. Such usage is deprecated in telecommunications in order to avoid ambiguity. Under this definition, the neper would in fact be equal to 4.34 dB, instead of 8.68 dB as is traditionally the case.

A.3 *Use of the decibel and neper*

Countries can continue to use either the neper or the decibel for measurement purposes within their own territory and, to avoid conversion of values, countries which prefer to do so may continue to use the neper between themselves by bilateral agreement.

For the international exchange of information concerning transmission measurement and related values and for the international specification of limits for such values, the only logarithmic expression to be used is the decibel.

For theoretical or scientific calculations, where ratios are expressed in terms of naperian logarithms, the neper will always be used, implicitly or explicitly.

As a result of some calculations on complex quantities, a real part in nepers and an imaginary part in radians are obtained. Factors may be applied for converting to decibels or degrees.

The conversion values between the neper and the decibel are as follows:

1 Np = (20 lg e)dB $\approx$ 8.686 dB

1 dB = (0.05 ln 10)Np $\approx$ 0.1151 Np

A.4 *Rules for the use of the symbols where dB is included*

Concerning the symbols that include the symbol dB, the following rules should be used as far as possible:

A.4.1 *The symbols dB without additional indication*

The symbol dB without additional indication should be used to indicate a difference between two power levels or a ratio of two powers, two power densities, or two other quantities clearly connected with power.

A.4.2 *The symbol dB followed by additional information within parenthesis*

The symbol dB followed by additional information within parentheses should be used to express an absolute level of power, power flux density or any other quantity clearly connected with power, in relation to a reference value within the parentheses. In some cases, however, common use may give rise to simplified symbols such as dBm instead of dB(mW).

A.4.3 *The symbol dB followed by additional information without parenthesis*

The symbol dB followed by additional information without parenthesis should be used to express by convention, special conditions such as measurements through specified filters or at a specified point of a circuit.

A.5 *Loss and gain*

The *attenuation* or *loss* is a decrease between two points of an electric, electromagnetic or acoustic power. The attenuation is also the quantitative expression of a power decrease, generally in decibels; this decrease is expressed by the ratio of the values at two points of a power or of a quantity related to power in a well-defined manner.

The *gain* is the increase between two points of an electric, electromagnetic or acoustic power. The gain is also the quantitative expression of a power increase, generally in decibels; this increase is expressed by the ratio of the values at two points of a power or of a quantity related to power in a well-defined manner.

The exact designation of the loss or gain in question must be given (e.g. image-attenuation coefficient, insertion loss, antenna gain) which in fact refers to the precise definitions of the ratio in question (terminal impedances, reference conditions, etc.).

A.5.1 *Transmission loss* (Refs. Recommendation 341, CCIR Volume V and Recommendation 573, term A43, CCIR Volume XIII)

This is the ratio, expressed in decibels, of the transmitted power (P_t) to the received power (P_r):

$$L = 10 \lg (P_t/P_r) \qquad \text{dB}$$

A.5.2 *Antenna gain* (Refs. Radio Regulations, Article 1, No. 154 and Recommendation 573, term E04, CCIR Volume XIII)

This is "the ratio usually expressed in decibels of the power required at the input of a loss free reference antenna (P_0) to the power supplied to the input of the given antenna (P_a) to produce, in a given direction, the same field strength or the same power flux-density at the same distance".

$$G = 10 \lg (P_0/P_a) \qquad \text{dB}$$

A.6 *Levels*

In many cases, the comparison of a quantity, here called x, with a specified reference quantity of the same kind (and dimension), x_{ref} is expressed by the logarithm of the ratio x/x_{ref}. This logarithmic expression is often called "the level of x (with respect to x_{ref})" or "the x-level (with respect to x_{ref})". With the general letter symbol for level L, the level of the quantity x may be written L_x.

Other names and other symbols exist and can be used, x may in itself be a single quantity, e.g. power P, or a ratio, e.g. P/A, where A is area, x_{ref} is here supposed to have a fixed value, e.g. 1 mW, 1 W, 1 μW/m^2, 20 μPa, 1 μV/m.

The level representing the quantity x with reference quantity x_{ref} may be indicated by the quantity symbol: L_x (with respect to x_{ref}), and may be expressed in decibels, when the reference quantity is a power, or a quantity linked to power, in a well defined way.

Example:

The statement that the level of a certain power, P, is 15 dB above the level corresponding to 1 W can be written:

L_P (with respect to 1 W) = 15 dB, which means 10 lg (P/1 W) = 15[3)]

or 10 lg P (in watts) = 15

In many cases it is found practical to use a condensed notation based only on the unit, which in this case would be:

$$L_P = 15 \text{ dB(1 W)}$$

The number "1" in the expression of the reference quantity can be omitted, but this is not recommended in cases where confusion may occur. (Such omission has been made in some of the examples below.) In other words, where no number is shown, the number 1 is to be understood.

There exist condensed notations for special cases, such as dBW, dBm, dBm0. See § A.8 below.

Below are given some examples in which the reference level is expressed after the unit in a condensed form. It must be observed that the condensed notation is often insufficient for characterizing a quantity, and that then a clear definition or another appropriate description of the quantity must be given.

A.6.1 *Power*

The "absolute power level" corresponds to the ratio of P and a reference power, e.g. 1 W.

If P = 100 W and the reference power 1 W, we obtain:

L_P = 10 lg (P/1 W) dB
= 10 lg (100 W/1 W) dB
= 20 dB

with the condensed notation 20 dB(1 W) or 20 dBW, dBW being the abbreviation for: dB(1 W). With the reference power 1 mW and P = 100 W we obtain 50 dB(1 mW), or with the special notation mentioned earlier. 50 dBm, being the abbreviation for: dB(1 mW). The notations dBW and dBm are currently used in the CCIR and the CCITT. See § A.8 below.

A.6.2 *Power spectral density (with respect to bandwidth)*

The logarithmic expression corresponds to the ratio of $P/\Delta f$ (where Δf denotes a bandwidth) and a reference quantity, e.g. 1 mW/kHz. P may be a noise power. The logarithm will in this case, as in all other cases, be taken of a pure number.

An example with a condensed notation is 7 dB(mW/kHz) or that which is the same thing: 7 dB(W/MHz) or 7 dB(μW/Hz).

A.6.3 *Power flux-density (with respect to area)*

The logarithmic expression corresponds to the ratio of P/A, where A is area, and a reference power density, e.g. 1 W/m^2. A notation in a certain case can be:

-40 dB(W/m^2)
or -10 dB(mW/m^2).

[3)] In the ratio (P/1 W), it is evident that both powers must be expressed in the same units.

A.6.4 *Power density with respect to temperature*

The logarithmic expression corresponds to the ratio of P/T, where T is temperature, and a reference power density, e.g. 1 mW/K, where K is kelvin.

An example is: 45 dB(mW/K)

or: 15 dB(W/K).

A.6.5 *Spectral power-flux density (power density with respect to area and frequency band)*

The logarithmic expression corresponds to the ratio of $P/(A \cdot \Delta f)$ and a reference density e.g. 1 W/($m^2 \cdot$ Hz).

An example is: -18 dB(W/($m^2 \cdot$ Hz))

or: -18 dB($W \cdot m^{-2} \cdot Hz^{-1}$).

A variant sometimes used is, dB(W/($m^2 \cdot$ 4 kHz)).

A.6.6 *Absolute level of electromagnetic field*

The strength of an electromagnetic field can be expressed by a power flux-density (P/A), by an electric field strength E or by a magnetic field-strength H. The field-strength level L_E is the logarithm of the ratio of E and a reference field-strength, usually 1 μV/m.

An example with a condensed notation is:

L_E = 5 dB(μV/m).

As the power carried by an electromagnetic field is linked to the square of the field strength, this notation means:

20 lg E(μV/m) = 5.

A.6.7 *Sound pressure level*

The level corresponds to the ratio of sound pressure and a reference pressure, often 20 μPa.

Example: 15 dB(20 μPa).

As acoustic power is linked to the square of sound pressure, this means:

20 lg (p/20 μPa) = 15[4)]

A.7 *Ratios expressing transmission quality*

A.7.1 *Signal-to-noise ratio*

This is either the ratio of the signal power (P_s) to the noise power (P_0), or the ratio of the signal voltage (U_s) to the noise voltage (U_n) measured at a given point with specified conditions. It is, expressed in decibels:

$$R = 10 \lg (P_s/P_n) \quad \text{dB} \qquad \text{or} \qquad R = 20 \lg (U_s/U_n) \quad \text{dB}$$

The ratio of the wanted signal to the unwanted signal is expressed in the same way. Detailed definitions are given in CCIR Recommendation 573-1, terms F21 and F23.

A.7.2 *Protection ratio*

This is either the ratio of the wanted signal power (P_u) to the maximum permissible interfering signal power (P_i), or the ratio of the wanted signal field-strength (E_u) to the maximum permissible interfering signal field-strength (E_i). It is expressed in decibels:

$$A = 10 \lg (P_u/P_i) \quad \text{dB} \qquad \text{or} \qquad A = 20 \lg (E_u/E_i) \quad \text{dB}$$

More detailed definitions of protection ratios are given in Recommendation 573-1, terms F22 and F24.

[4)] In the ratio (p/20 μPa), it is evident that both sound pressures must be expressed in the same units.

A.7.3 *Carrier to spectral noise density ratio* (C/N_0)

This is the ratio $P_c/(P_n/\Delta f)$ – where P_c is the carrier power, P_n the noise power, Δf the corresponding frequency bandwidth. This ratio has a dimension of frequency, it cannot be expressed without caution in terms of decibels, for power is not linked with frequency on a well-defined basis.

This ratio could be expressed in relation with a reference quantity such as 1 W/(W/Hz) which clearly indicates the origin of the result.

For example, with P_c = 2 W, P_n = 20 mW, and Δf = 1 MHz, for the logarithmic expression corresponding to C/N_0 we have:

$$10 \lg \frac{P_c}{P_n/\Delta f} = 50 \text{ dB (W/(W/kHz))}$$

This expression is abbreviated to read 50 dB(kHz) which should however be avoided if it is liable to give rise to any misunderstanding.

A.7.4 *Figure of merit (M)*

The figure of merit (M) characterizing a receiving radio station is a logarithmic expression which is related to the antenna gain G (in decibels) and the overall noise temperature T (in kelvins) in the following way:

$$M = \left[G - 10 \lg \frac{T}{1\text{K}}\right] \text{dB (W/(W} \cdot \text{K))}$$

The decibel notation may be abbreviated to read dB(K^{-1}) which should however be avoided if it is liable to give rise to misunderstanding.

A.8 *Special notations*

Examples of special notations, the use of which may be continued are given below. These notations are often made in addition to other notations.

For absolute power level (see Appendix I, § I.1.1)

dBW: absolute power level with respect to 1 watt, expressed in decibels;

dBm: absolute power level with respect to 1 milliwatt, expressed in decibels;

dBm0: absolute power level with respect to 1 milliwatt, expressed in decibels, referred to a point of zero relative level;

dBm0p: absolute psophometric power level (weighted for telephony) with respect to 1 milliwatt, expressed in decibels, referred to a point of zero relative level;

dBm0s: absolute power level with respect to 1 milliwatt, expressed in decibels, referred to a point of zero relative level in sound programme transmission;

dBm0ps: absolute psophometric power level (weighted for sound-programme transmission) with respect to 1 milliwatt, expressed in decibels, referred to a point of zero relative level in sound programme transmission.

For absolute level of an electromagnetic field (see Appendix I, § I.2.1):

dBμ or dBu: absolute level of the electromagnetic field with respect to 1μV/m, expressed in decibels.

For absolute voltage level including the audio-frequency noise level (see Appendix I, §§ I.2.2 and I.2.3):

dBu: absolute voltage level with respect to 0.775 V, expressed in decibels;

dBu0: absolute voltage level with respect to 0.775 V, referred to a point of zero relative level;

dBu0s: absolute voltage level with respect to 0.775 V, referred to a point of zero relative level in sound-programme transmission;

dBqps: absolute weighted voltage level measured according to Recommendation 468, CCIR Volume X-1, in sound-programme transmission;

dBq0ps: absolute weighted voltage level measured according to Recommendation 468, CCIR Volume X-1, referred to a point of zero relative level in sound-programme transmission;

dBq0s: absolute unweighted voltage level measured according to Recommendation 468, CCIR Volume X-1, in sound-programme transmission with respect to 0.775 V referred to a point of zero relative level.

For relative power level (see Appendix I, § I.1.2):

dBr: decibels (relative);

For relative voltage level in sound-programme transmission (see Appendix I, § I.2.4):

dBrs: relative power level expressed in decibels, referred to another point in sound-programme transmission.

For absolute acoustic pressure level:

dBA (or dBB, dBC): weighted acoustic pressure level with respect to 20 μPa, mentioning the weighting curve used (curves A, B or C, see IEC Publication 123).

For antenna gain in relation to an isotropic antenna:

dBi.

For antenna gain in relation to a half-wave dipole:

dBd.

Note 1 – In the case of the ratio "energy per bit to spectral noise density", E/N_0, which is used in digital transmission, the ratio is made between two quantities homogeneous with spectral power density, and this ratio may normally be expressed in decibels, like power ratios (see § A.1 above). However, it is necessary to ensure that the units used for the expression of both terms in the ratio are equivalent: for example, joule (J) for energy and watts per hertz (W/Hz) for spectral noise density.

Note 2 – Appendix I gives the principles for the use of the term decibel in telecommunication.

The examples given in the present Recommendation are illustrations of these principles.

Note 3 – In Appendix II is given the principle of the notation recommended by the IEC for expressing the level of a quantity with respect to a specified reference. The notations used in the present Recommendation are applications of this principle.

APPENDIX I

(to Recommendation B.12)

Use of the term decibel in telecommunication

I.1 *Use of the decibel for ratios of quantities directly connected with power*

I.1.1 *Absolute power level*

The absolute power level is the ratio, generally expressed in decibels, between the power of a signal at a point in a transmission channel and a specified reference power.

It should be specified in every case whether the power is real or apparent.

It is necessary for the reference power to be indicated by a symbol:

- when the reference power is one watt, the absolute power level is expressed in "decibels relative to one watt" and the symbol "dBW" is used;
- when the reference power is one milliwatt, the absolute power level is expressed in "decibels relative to one milliwatt" and the symbol "dBm" is used.

I.1.2 *Relative power level and related concepts*

I.1.2.1 *Definition*

The relative power level is the ratio, generally expressed in decibels, between the power of a signal at a point in a transmission channel and the same power at another point in the channel chosen as reference point, generally at the origin of the channel.

It should be specified in every case whether the power is real or apparent.

Unless otherwise specified, the relative power level is the ratio of the power of a sinusoidal test signal (at 800 or 1000 Hz) at a point in the channel to the power of that signal at the transmission reference point.

I.1.2.2 *Transmission reference point*

In the old transmission plan, the CCITT had defined "the zero relative-level point" as being the two-wire origin of a long distance circuit (point 0 of Figure I-1/B.12).

In the presently recommended transmission plan the relative level should be −3.5 dBr at the virtual switching point on the sending side of a four-wire international circuit (point V of Figure I-2/B.12). The "transmission reference point" or "zero relative level point" (point T of Figure I-2/B.12) is a virtual two-wire point which would be connected to V through a hybrid transformer having a loss of 3.5 dB. The conventional load used for the computation of noise on multi-channel carrier systems corresponds to an absolute mean power level of −15 dBm at point T.

I.1.2.3 *Meaning of "dBm0"*

If a measuring signal with an absolute power level L_M (in dBm) is applied at point T, the absolute power level of signal appearing at a point X, where the relative level is L_{XR} (in dBr), will be $L_M + L_{XR}$ (in dBm).

Conversely, if a signal at X has an absolute power level L_{XA} (in dBm), it is often convenient to "refer it to zero relative level point" by computing L_0 (in dBm0) by the formula:

$$L_0 = L_{XA} - L_{XR}$$

This formula may be used, not only for signals, but also for noise (weighted or unweighted), which helps in the computation of a signal-to-noise ratio.

Note – More detailed explanations for § I.1.2.1 and I.1.2.2 above are given in Recommendations G.101 (§ 5) and G.223 published in Volume III.

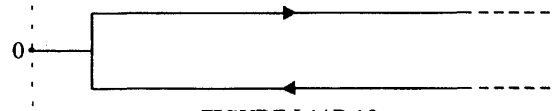

FIGURE I-1/B.12

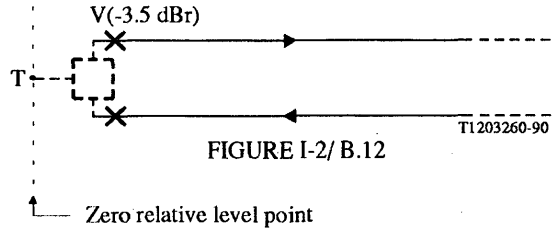

FIGURE I-2/B.12

I.1.3 *Power density*

Definition: Quotient of a power by another quantity, for example, an area, a bandwidth, a temperature.

Note 1 – The quotient of a power by an area is called "*power flux-density*" ("puissance surfacique") and is commonly expressed in "watts per square metre" (symbol: $W \cdot m^{-2}$ or W/m^2).

The quotient of a power by a frequency bandwidth is called "*power spectral density*" and can be expressed in "watts per hertz" (symbol: $W \cdot Hz^{-1}$ or W/Hz). It can also be expressed with a unit involving a bandwidth characteristic of the technique concerned, for example, 1 kHz or 4 kHz in analogue telephony, 1 MHz in digital transmission or in television; the power spectral density is then expressed in "watts per kilohertz" (W/kHz) or in "watts per 4 kHz" (W/4 kHz) or even in "watts per megahertz" (W/MHz).

The quotient of a power by a thermo-dynamic temperature, used particularly in the case of noise powers, has no specific name. It is usually expressed as "watts per kelvin" (symbol: $W \cdot K^{-1}$ or W/K).

Note 2 – In some cases a combination of several types of power densities can be used, for example a "spectral power flux-density" which is expressed as "watts per square metre and per hertz" (symbol: $W \cdot m^{-2} \cdot Hz^{-1}$ or $W/(m^2 \cdot Hz)$).

I.1.4 *Absolute power density level*

Definition: Expression in logarithmic form, usually in decibels, of the ratio between the power density at a given point and a reference power density.

Note – For example, if one watt per square metre is chosen as the reference power flux-density, the absolute power flux-density levels are expressed as "decibels with respect to one watt per square metre" (symbol: $dB(W/m^2)$).

Similarly, if one watt per hertz is chosen as the spectral reference power density, the absolute spectral power density levels are expressed as "decibels with respect to one watt per hertz" (symbol: dB(W/Hz)).

If one watt per kelvin is chosen as the reference for power density per unit temperature, the absolute power density levels per temperature unit are expressed as "decibels with respect to one watt per kelvin" (symbol: dB(W/K)).

This notation can easily be extended to combined densities. For example, the absolute spectral density levels of the flux-density are expressed as "decibels with respect to one watt per square metre and per hertz" for which the symbol is: $dB(W/(m^2 \cdot Hz))$.

I.2 *Use of the decibel for ratios of quantities indirectly connected with power*

Current practice has led to an extension of the use of the term decibel to ratios of quantities which are only indirectly connected with power or which are linked to it through the medium of a third quantity. In these various cases, the decibel should be used with the utmost precaution and should always be accompanied by a note indicating the conventions adopted and the sphere of validity of this usage.

A case extremely common in practice, is where the ratio of two powers P_1 and P_2 depends solely on the ratio of the values X_1 and X_2 of another quantity X by an equation in the form:

$$P_1/P_2 = (X_1/X_2)^{\alpha}$$

α being any real number. The corresponding number of decibels can then be *calculated* from the ratio:

X_1/X_2 from the equation:

$$N = 10 \lg (P_1/P_2) = 10\ \alpha \lg (X_1/X_2) \qquad \text{dB}$$

It should be noted that a quantity X is not always associated with the same value of the number α, and therefore it is not possible, without some other indication, to express in decibels the ratio of two values of the quantity X.

Most often α is equal to 2, and then the expression in decibels of ratios of currents or voltages or other analogous quantities in other fields, is:

$$N = 20 \lg (X_1/X_2) \qquad \text{dB}$$

An example where α is other than 2 is the relationship between cross-polarization (XPD) and the co-polarized path attenuation (CPA) given by the empirical relationship (see CCIR Report 722, Volume V):

$$\text{XPD} = \text{U} - \text{V lg (CPA)} \qquad \text{dB}$$

I.2.1 *Absolute level of the electromagnetic field*

The electromagnetic field set up by a transmitter is of concern to some services. At considerable distances from the antenna this field is generally defined by its electric component E, for which it is often convenient to use a logarithmic scale.

For a non-guided wave propagated in a vacuum, or in practice in the atmosphere, there is a clearly defined relationship between the electric field E and the power flux-density p:

$$E^2 = Z_0 \, \text{p}$$

Z_0, which is the intrinsic impedance of the vacuum, having a fixed numerical value of 120 π ohms. In particular, a field of 1 microvolt per metre corresponds to a power flux-density of -145.8 dB(W/m^2).

The absolute level of the electric field can then be defined by the equation:

$$N = 20 \lg \left(\frac{E}{E_0}\right)$$

E_0 being a reference field, generally 1 microvolt per metre. In this case, N represents the absolute field level in "decibels with respect to 1 microvolt per metre", the symbol for which is "dB(μV/m)".

In accordance with International Standard ISO 2955, the symbol "dB(uV/m)" may be used when the character set employed does not comprise Greek letters. This symbol is sometimes further abbreviated to "dBu". This symbol does however have another use which is defined in § I.3.2.

I.2.2 *Absolute voltage level*

The absolute voltage level is the ratio, generally expressed in decibels, of the voltage of a signal at a point in a transmission channel to a specified reference voltage.

The nature of the voltage in question, e.g. r.m.s. value, should be specified in every case.

A reference voltage with an r.m.s. of 0.775 volts is generally adopted which corresponds to a 1 milliwatt power dissipated in a resistance of 600 ohms, since 600 ohms represents a rough approximation to the characteristic impedance of certain balanced telephone lines.

I.2.2.1 If the impedance at the terminals of which the voltage U_1 is measured, is in fact 600 ohms, the absolute voltage level thus defined, corresponds to the absolute power level with respect to 1 milliwatt, and so the number N exactly represents the level in decibels with respect to 1 milliwatt (dBm).

I.2.2.2 If the impedance at the terminals of which the voltage U_1 is measured, is R ohms, N equals the number of dBm increased by the quantity 10 log (R/600).

I.2.3 *Absolute audio-frequency noise level in broadcasting, sound recording or sound-programme transmission*

Measurement of audio-frequency noise in broadcasting, sound recording or sound-programme transmission is made, normally through a weighting network and by following the quasi-peak value method of Recommendation 468 using a reference voltage of 0.775 volt at 1 kHz and a nominal impedance of 600 ohms and expressing the results normally in dBqp.

Note – The two notations in "dBq" and "dBm" should not be used interchangeably. In sound-programme transmission the notation "dBq" is restricted to level measurements of noise with single or multiple tone bursts whereas the notation "dBm" only applies to sinusoidal signals used for lining up the circuit.

I.2.4 *Relative voltage levels in sound-programme transmission*

The relative voltage level at a point in a sound-programme transmission chain is the ratio, expressed in dB, of the voltage level of a signal at that point relative to the voltage level of the same signal at the reference point. This ratio is expressed in "dBrs", the "r" indicating "relative level" and "s" indicating that the ratio refers to levels in a "sound-programme" system. At the reference point (the point of zero relative level, 0 dBrs) a test signal at the alignment level (see Recommendation 645, CCIR Volume X-1, has a level of 0 dBu. Note that in some broadcasting chains, there may be no point of zero relative level. However, points of measurements and interconnection may still be given a level (in dBrs) relative to hypothetical reference point.

I.3 *Use of the decibel, by extension, for ratios of quantities not connected with power*

I.3.1 *Voltage ratios*

In certain spheres such as audio frequencies, the concept of voltage is sometimes more important than that of power. This is the case, for example, when low output- and high input-impedance two-port networks are associated in tandem. In this way a deliberate departure is made from the impedance matching conditions in order to simplify the formation of these networks. When this is done, only the voltage ratios at different points in the link need to be taken into consideration.

It is then convenient to express these voltage ratios in a logarithmic scale, e.g. to the base 10, by defining the number N of corresponding units by means of the equation:

$$N = K \lg \left(\frac{U_1}{U_2} \right)$$

In this equation the coefficient K is *a priori* arbitrary. However, by analogy with the operation:

$$N = 20 \lg \left(\frac{U_1}{U_2} \right)$$

which expresses in decibels the ratio of the I^2R loss as in two equal resistances at the terminals of which the voltages U_1 and U_2 respectively, are applied, one is led to adopt the value 20 for the coefficient K. The number N then expresses in decibels the power ratios which would correspond to the voltage ratios, if the latter were applied to equal resistances, although in practice this is not generally the case.

I.3.2 *Absolute voltage level*

If the impedance at the terminals of which the voltage is measured is not specified, the corresponding power level cannot be calculated. However, a number N can be defined conventionally in accordance with § I.3.1 with respect to a reference voltage and can be expressed in decibels. To avoid any confusion, it is essential to specify that an absolute voltage level is concerned and the symbol dBu must be used. The symbol dBu appears to create no confusion with the use defined in § I.2.1 as the absolute level of the electromagnetic field referred to 1 microvolt per metre. If, however, there is any risk of confusion, the expression dB (775 mV) must be written, at least the first time.

APPENDIX II

(to Recommendation B.12)

Notation for expressing the reference of a level

(Part 5 of IEC Publication 27-3)

A level representing the quantity x with the reference quantity x_{ref} may be indicated by:

L_x (with respect to x_{ref}) or by L_x/x_{ref}.

Examples

The statement that a certain sound pressure level is 15 dB above the level corresponding to a reference pressure of 20 μPa can be written as:

L_p (re 20 μPa) = 15 dB or as $L_{p/20\ \mu Pa}$ = 15 dB.

The statement that the level of a current is 10 Np below 1 ampere can be written as:

L_I (with respect to 1 A) = −10 Np.

The statement that a certain power level is 7 dB above 1 milliwatt can be written as:

L_p (with respect to 1 mW) = 7 dB.

The statement that a certain electric field-strength is 50 dB above 1 microvolt per metre can be written as:

L_E (with respect to 1 μV/m) = 50 dB.

In presenting data, particularly in tabular form or in graphical symbols, a condensed notation is often needed for identifying the reference value. Then, the following condensed form, illustrated by application to the above examples, may be used:

15 dB(20 μPa)

−10 Np(1 A)

7 dB(1 mW)

50 dB(1 μV/m).

The number "1" in the expression of a reference quantity is sometimes omitted. This is not recommended in cases when confusion may occur.

When a constant level reference is used repeatedly in a given context and explained in the context, it may be omitted.[5)]

[5)] The omission of the reference level, permitted by the IEC, is not permitted in CCIR and CCITT texts.

Recommendation B.13 [1]

TERMS AND DEFINITIONS

The CCITT,

considering

(a) that it is desirable to have, in addition to specific terminology texts produced by Study Groups, definitions of the general technical terms used in CCI texts;

(b) that the CCIs are cooperating with the International Electrotechnical Commission (IEC) in the production of the International Electrotechnical Vocabulary (IEV) (see CCIR Resolution 66 and CCITT Recommendation A.12),

recommends

(1) that Administrations and recognized private operating agencies of the CCIs, as well as CCI Secretariats, should use as far as possible, technical terms in the field of telecommunications with the meaning given in the IEV, the plan of which is given in Appendix I to this Recommendation;

(2) that general terms common to several Study Groups should be used with the meaning given in Appendix II to this Recommendation, generally close to the meaning given in the IEV but adapted for CCI needs.

Note – The definitions given in the IEV Chapters, like those included in Appendix II, are of a general nature; their purpose is that all Study Groups should use general terms with the same meaning. In certain cases they may be slightly different from more complete definitions prepared, or being prepared, by some Study Groups for their specific needs, but they are not in contradiction with the latter.

These definitions do not replace definitions contained in CCIR or CCITT Recommendations (or in the Radio Regulations, the Telegraph and Telephone Regulations or the ITU Convention) which are to be used in their respective fields of application.

APPENDIX I

(to Recommendation B.13)

"Telecommunications" chapters of the International Electrotechnical Vocabulary (IEV)

The IEV is IEC Publication No. 50; it comprises a great number of chapters, published in separate fascicles. Chapters of the 700 series deal with telecommunications and are prepared by Joint Working Groups in which CCI experts take part, coordinated by the JCG (Joint Coordinating Group).

Series 700 Chapters which are dealt with by Joint Working Groups are the following:

[1] A similar text will be transmitted to the CCIR as a revision of Recommendation 662.

Chapters and Sections	Status in 1988
701 – *Telecommunications, channels and networks*	Being published
1 – Forms of telecommunications	
2 – Channels, circuits and networks	
3 – Use and operation of circuits and networks	
702 – *Oscillations, signals and related devices*	Approved for publication
1 – Frequencies	
2 – Oscillations and waves	
3 – Pulses	
4 – Signals; general terms	
5 – Discrete signals and digital signals; coding	
6 – Modulation and demodulation	
7 – Noise and interference	
8 – Transmission characteristics and performance; distortion	
9 – Linear and non-linear networks and devices	
704 – *Transmission*	Approved for publication
1 – General aspects of transmission	
2 – Analogue transmission	
3 – Time division mulitplexing	
4 – Digital transmission	
5 – Pulse code modulation	
705 – *Radio waves propagation*	Being approved
1 – Essential characteristics of electromagnetic fields and waves	
2 – Radiation, paths and velocity of electromagnetic waves	
3 – Electromagnetic properties of propagation media	
4 – Phenomena related to boundaries of propagation media	
5 – Tropospheric propagation and effets of the ground	
6 – Terrestrial ionized media	
7 – Effects of the ionosphere on radio wave propagation	
8 – Influence of propagation on radiocommunications	
712 – *Antennas*	Approved for publication
1 – Basic terms for antennas and antenna assemblies	
2 – Electrical or radiating characteristics of antenna	
3 – Types of antennas defined by their electrical or radiating characteristics	
4 – Antennas and antenna elements consisting mainly of radiating conductors	
5 – Antennas and antenna elements consisting mainly of radiating surfaces and apertures	
6 – Devices associated with antennas	
713 – *Radiocommunications: transmitters, receivers, networks and operation*	Being prepared
714 – *Switching and signalling (in telecommunications)*	Being published
01 – General terms	
02 to 05 – Switching functions and techniques	
06 to 14 – Signalling functions and techniques	
15 and 16 – Control functions and techniques	
17 to 20 – Equipment and hardware	
21 to 24 – Executive software	
715 – *Telecommunication networks teletraffic, trunking and operating*	Being prepared
716 – *Integrated services digital networks*	Being prepared (one section being approved)
1 – Basic terms on ISDNs	
2 – Services	
3 – Networks	
4 – Access	

Chapters and Sections	Status in 1988
720 – *Telematics*	Being prepared
721 – *Telegraphy and data communication*	Being published
1 – Forms of telecommunications using discrete signals	
2 – Discrete signals and transmission using discrete signals	
3 – Telegraphy and data communication	
4 – Facsimile	
5 – Telegraph and data networks, switching, operation and sources	
722 – *Telephony*	Being published
– General terms	
– Telephone set components	
– Telephone set feeding and signalling	
– Telephone set types	
– Telephone set accessories	
– Telephone networks	
– Telephone exchanges	
– Private telephone systems	
– Telephone calls description	
– Local line networks	
– Telephone station usage	
– Transmission performance	
– Measuring apparatus	
– Telephonometry	
723 – *Broadcasting services: sound broadcasting and television*	Being prepared (4 sections being approved)
1 – General terms	
2 – Common sound/television broadcasting terms	
3 – Sound broadcasting	
4 – Television: General terms	
5 – Television: Picture analysis and display video signals	
6 – Picture quality and impairment	
7 – Equipment devices used in television	
8 – Specific terms for colour television systems	
9 – Cable distribution system	
725 – *Space radiocommunications*	Published in 1982 (Section 3 "Technical aspects" being prepared)
1 – Satellites, space craft and arbits	
2 – Space radiocommunication systems	
726 – *Transmission lines and waveguides*	Published in 1982
1 – Transmission line, waveguide and cavity resonator configurations	
2 – Propagation in transmission lines and waveguides	
3 – Waveguide connections	
4 – Waveguide components	
5 – Non-reciprocal effects and devices	
6 – Measurements on transmission lines	
731 – *Optical fibre communication*	Being approved
1 – General concepts	
2 – Fibre construction and optical characteristics	
3 – Propagation characteristics	
4 – Cables	
5 – Connectors and couplers etc.	
6 – Optical sources and detectors	
7 – Measurement techniques	
8 – Systems	

Chapters and Sections	Status in 1988
161 – *Electromagnetic compatibility* [a]	Being approved
1 – Basic concepts	
2 – Waveforms	
3 – Interference control related terms	
4 – Measurements	
5 – Equipment classification	
6 – Receiver and transmitter terms	
7 – Power control and network impedances	
8 – Voltage changes and flicker	
9 – Ignition systems of internal combustion engines	
191 – *Reliability, maintainability and quality of service* [b]	Approved for publication
1 – Dependability – Common terms	
2 – Quality of service in telecommunications	

[a] This Chapter has not been prepared under the responsibility of the JCG, but representatives of the JCG participated in the Working Group.

[b] Although prepared by a Working Group of the JCG, in collaboration with TC 56 of the IEC, this Chapter is included in the IEV 100 Series (Basic terms).

APPENDIX II

(to Recommendation B.13)

General terminology of telecommunications

(Terms common to CCIR and CCITT)

In order to ensure that telecommunication terms employed by the CCIs have the same meaning, CMV has collected general terms used in the texts of different Study Groups together with their definitions.

Note – These terms and definitions in this Appendix have been arranged according to subject as follows:

1) Forms of telecommunications.
2) Channels, circuits and networks.
3) Use and operation of circuits and networks.
4) Frequencies and bandwidths.

Administrations and Study Groups are invited to comment on these terms and definitions, and particularly, to forward to CMV their proposals for revision or for alternative applications, accompanied by appropriate justifications.

When examining these definitions, it should be borne in mind that Recommendation 573 on radiocommunication vocabulary contains terms relating more specifically to the CCIR.

The following Notes should also be taken into account:

Note 1 – Definitions of "forms of telecommunication" have been produced by the CMV in cooperation with the CCI-IEC Joint Coordination Group on Vocabulary (JCG), to be used by CCIR and CCITT Study Groups.

These definitions of "forms of telecommunication" are of a general nature and are not in contradiction with definitions of services presently specified by CCITT and CCIR. Definitions of services are produced by the Study Groups responsible for these services (mainly CCITT Study Groups I and II for telecommunication services, CCIR Study Groups 10 and 11 for broadcasting services).

Note 2 – A number of terms in this Recommendation appear also in Article 1 of the Radio Regulations with a different definition. These terms are identified by (RR . . ., MOD). Modifications are proposed for two reasons:

a) some Radio Regulations definitions only take into account regulatory aspects, while the CMV proposes definitions of a technical nature;

b) some Radio Regulations definitions give rise to difficulties of interpretation, in these cases, modifications or additions proposed by the CMV may be useful later for draft revisions of the Radio Regulations definitions in accordance with Recommendation No. 72 of WARC-79 and Study Programme 1A/CMV.

For regulatory applications, only the terms and definitions in the Radio Regulations may be used.

Note 3 – Terms and definitions relating to reliability have not been included in this appendix because they usually have rather specific applications. However, some terms (such as availability, reliability, maintainability) are currently used by a number of Study Groups. Many terms will be found in Recommendation G.106 "Concepts, terms and definitions related to quality of service, availability and reliability".

II.1 *Forms of telecommunications*

II.1.1 **Information,** *Information, Información*

Intelligence or knowledge capable of being represented in forms suitable for communication, storage or processing.

Note – Information may be represented for example by signs, symbols, pictures or sounds.

II.1.2 **Signal,** *Signal, Señal*

A physical phenomenon one or more of whose characteristics may vary to represent information.

Note – The physical phenomenon may be for instance an electromagnetic wave or acoustic wave and the characteristic may be an electric field, a voltage or a sound pressure.

II.1.3 **Transmission,** *Transmission, Transmisión*

The transfer of information from one point to one or more other points by means of signals.

Note 1 – Transmission can be effected directly, or indirectly, with or without intermediate storage.

Note 2 – The use of the English word "transmission" in the sense of "emission" in radiocommunication is deprecated.

II.1.4 **Sending,** (in telecommunication), **Transmission** (deprecated in this sense); *Emission* (en télécommunication); *Emisión* (en telecomunicación

The production of a signal at an input port of a transmission line or into a transmission medium.

Note – In French the term "émission" has other meaning in radiocommunications, as given in CCIR Recommendation 573.

II.1.5 **Communication,** *Communication, Comunicación*

Information transfer according to agreed conventions.

Note – In French and Spanish the corresponding terms "communication" and "comunicación" have additional specific meanings in telecommunications (see §§ II.3.5 and II.3.2).

II.1.6 **Telecommunication,** *Télécommunication, Telecomunicación*

Communication by wire, radio, optical or other electromagnetic systems.

Note – The following definition is given in the International Telecommunication Convention (Nairobi, 1982) (and RR 4):

Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

II.1.7 **Telephony,** *Téléphonie, Telefonía*

A form of telecommunication primarily intended for the exchange of information in the form of speech.

Note – This is the definition given in the International Telecommunication Convention (Nairobi, 1982) (RR 117, MOD).

II.1.8 **Telegraphy,** *Télégraphie, Telegrafía*

A form of telecommunication in which the transmitted information is intended to be recorded on arrival as a graphic document; the transmitted information may sometimes be presented in an alternative form or may be stored for subsequent use.

Note 1 – A graphic document records information in a permanent form and is capable of being filed and consulted; for example, it may take the form of written or printed matter or a fixed image.

Note 2 – This is the definition given in the International Telecommunication Convention (Nairobi, 1982) (RR 111, MOD).

Note 3 – Telegraph does not include television or videography.

Note 4 – Moreover, in the Convention and in the RR, the following restriction is given:

"For the purpose of the Radio Regulations, unless otherwise specified therein, telegraphy shall mean a form of telecommunication for the transmission of written matter by the use of a signal code" (RR 111, extract).

II.1.9 **Telex** (service), (service) *Télex*, (servicio) *Télex*

A telegraph service enabling subscribers to communicate directly and temporarily with each other by means of start-stop apparatus and telecommunication circuits of the public telecommunication network.

II.1.10 **Facsimile,** *Télécopie, Facsímil*

A form of telecommunication for the reproduction at a distance of graphic documents in the form of other graphic documents geometrically similar to the original.

II.1.11 **Telewriting,** *Téléécriture, Teleescritura*

A form of telecommunication for the purpose of transmitting graphical information as it is being manually written or drawn and for simultaneously generating a reproduction at the distant terminal either on a screen or in some other form.

Note – In cases where the reproduction at the receiving end is in the form of a graphic document, the term "téléautographie" can be employed in French.

II.1.12 **Data,** *Données, Datos*

Information represented in a manner suitable for automatic processing.

II.1.13 **Data communication, Data transmission** (deprecated in this sense); *Communication de données; Transmission de données (deprecated in this sense); comunicación de datos, Transmisión de datos (deprecated in this sense)*

A form of telecommunication intended for the transfer of information between data processing equipments.

II.1.14 **Data transmission,** *Transmission de données, Transmisión de datos*

The conveying of data from one place to another by telecommunication.

Note – The term "data transmission" is deprecated in the sense of "data communication".

II.1.15 **Teleprocessing, teleinformatics;** *Téléinformatique, Télétraitement; Teleinformática, Teleproceso*

The association of telecommunication and data processing techniques to process information at a distance.

II.1.16 **Television,** *Télévision, Televisión*

A form of telecommunication for the transmision of signals representing scenes; images of the scenes being reproduced on a screen as they are received.

Note 1 – The received signals may be stored for subsequent display of the images on a screen.

Note 2 – This form of telecommunication finds major application in television broadcasting and the word "television" is often used without qualification to describe this application. The same technique is also used for industrial, scientific, medical and other applications; such applications are often referred to as "closed-circuit television".

II.1.17 **Still-picture television (SPTV),** *Télévision à images fixes, Televisión de imágenes fijas*

Television in which the time interval between a displayed picture and the display of either an updated version of the same picture, or a new picture forming part of a sequence, exceeds (generally by an appreciable factor) the usual time interval between pictures.

Note – The question as to whether still-picture television includes certain modes in teletext, broadcast videography (see § II.1.20), is still under study.

II.1.18 **Telematics (services),** *Télématique (services de), Telemática (servicios de)*

Telecommunication services supplementing conventional telegraphic or telephonic services, generally using teleprocessing techniques to permit a user to receive or send public or private information, or to effect operations such as file consultation, reservations, commercial or banking transactions.

Examples of telematics services: facsimile, teletex, videography, telewriting.

Note – Telematics services do not include broadcasting of sound or television programmes.

II.1.19 **Videography,** *Vidéographie, Videografía*

A form of telecommunication in which information, generally in the form of digital data, is transmitted primarily in order to permit the selection and display of textual or pictorial information to a user on a visual display unit, for instance on the screen of a television receiver.

Note – The teletex service and various forms of telegraphy are not forms of videography.

II.1.20 **Teletext, broadcast videography;** *Vidéographie diffusée, télétexte; Videografía radiodifundida, teletexto*

Videography in which information is broadcast utilizing the means of transmission used for normal television broadcasting and the desired part of this information may be selected by any user having suitable equipment.

Note 1 – Information may be transmitted simultaneously with normal television pictures.

Note 2 – The terms "teletext" and "teletex" refer to two different concepts.

Note by Secretariat – In CCIR Report 802, § 3.1, CCIR Study Group 11 has provided the following definition for a teletext service:

"A digital data broadcasting service which may be transmitted either within the structure of an analogue television signal or by using digital modulation systems. The service is primarily intended to display text or pictorial material in two-dimensional form reconstructed from coded data on the screens of suitably equipped television receivers."

II.1.21 **Videotex, interactive videography;** *Vidéotex, vidéographie interactive, Videotex, videografía interactiva*

Videography in which a telecommunication network is used for transmission of the user's requirements as well as the answers to his requests.

II.1.22 **Teletex** (service), (service) *Télétex*, (servicio) *Teletex*

A telematics service for text transmission offering additional facilities to the telex service, in particular further typewriter functions and remote text processing facilities.

Note – The terms "teletex" and "teletext" refer to two different concepts.

II.1.23 **Video-telephony, viewphone, visual telephone**; *Visiophonie, vidéophonie* (deprecated); *Videofonía, videotelefonía*

An association of telephone and television techniques which allows users to see each other during their telephone conversation.

II.1.24 **Still-picture video-telephony,** *Visiophonie à images fixes, Videofonía de imágenes fijas*

Video-telephony in which the time interval between a displayed picture and the display of either an updated version of the same picture, or a new picture forming part of a sequence, exceeds (generally by an appreciable factor) the usual time interval between pictures.

II.1.25 **Teleconference,** *Téléconférence, Teleconferencia*

A conference between more than two participants located in two or more different places and utilizing telecommunication facilities.

II.1.26 **Audioconference,** *Audioconférence, Audioconferencia*

A teleconference in which participants are connected by telephone circuits; the transmission of other signals such as facsimile or telewriting signals may be possible in addition to speech signals.

II.1.27 **Videoconference,** *Visioconférence,* (vidéoconférence); *Videoconferencia*

A teleconference in which participants are connected by television circuits providing for the transmission of animated images in addition to that of speech and graphic documents.

II.1.28 **Telemetry, Telemetering**; *Télémesure; Telemedida*

A process in which measurements are made at some remote location and the results are transmitted by telecommunication.

II.1.29 **Telecommand,** *Télécommande, Telemando*

The transmission of signals to initiate, modify or terminate functions of distant equipment.

II.1.30 **Telecontrol,** *Téléconduite, Telecontrol*

The control of operational equipment at a distance using a combination of telemetry and telecomand.

II.1.31 **Teleguidance,** *Téléguidage, Teleguiaje*

The guidance and control of distant mobile craft by telecommunication.

II.1.32 **Telemonitoring,** *Télésurveillance, Telesupervisión*

The observation at a distance by telecommunication of industrial processes, operational equipment, natural phenomena or individuals.

II.1.33 **Remote alarm,** *Téléalarme, Telealarma*

The alerting of a central point by telecommunication to the occurrence of an unwanted situation or event.

II.1.34 **Broadcasting,** *Télédiffusion, Teledifusión*

A form of unidirectional telecommunication intended for a large number of users having appropriate receiving facilities, and carried out by means of radio or by cable networks.

Note – In English, it should be assumed that "broadcasting by radio waves" is intended where the word "broadcasting" is used without qualification, unless the context indicates the contrary.

Examples: Sound broadcasting or television broadcasting, teletext, the distribution of time signals and navigational warnings, the distribution of news from press agencies.

II.1.35 **Broadcasting** (service), *Radiodiffusion, Radiodifusión*

Radiocommunication in which transmissions are intended for direct reception by the general public; these may include sound transmissions, television transmissions and other types of transmission.

Note – By common usage in French and Spanish the meaning of "radiodiffusion" and "radiodifusión" is frequently restricted to "sound broadcasting".

II.1.36 **Sound broadcasting** (service), *Radiodiffusion sonore, Radiodifusión sonora*

A broadcasting service limited to sound programmes.

II.1.37 **Television broadcasting** (service), *Radiodiffusion visuelle,* (Radiodiffusion de) *télévision,* (Radiodifusión de) *Televisión*

A broadcasting service of visual programmes with associated sounds.

II.1.38 **Cabled distribution;** *Télédistribution, Câblodistribution (Canada), distribución por cable*

A form of telecommunication for the distribution of television or sound programmes over networks of cables to a number of users.

Note – Some systems may transmit other signals and provide return channels.

II.2 *Channels, circuits and networks*

II.2.1 **(Transmission) channel,** *Voie (de transmission), Canal (de transmisión)*

A means of transmission of signals in one direction between two points.

Note 1 – Several channels may share a common path; for example each channel is allocated a particular frequency band or a particular time slot.

Note 2 – In some countries the term "communication channel" or its abbreviation "channel" is also used to mean "telecommunication circuit", i.e. to encompass the two directions of transmission. This usage is deprecated.

Note 3 – A transmission channel may be qualified by the nature of the transmitted signals, or by its bandwidth, or by its digit rate; for example: telephone channel, telegraph channel, data channel, 10 MHz channel, 34 Mbit/s channel.

II.2.2 **Telephone-type channel,** *Voie de type téléphonique, Canal de tipo telefónico*

A transmission channel suitable for the transmission of speech but which is used for the transmission of other signals.

II.2.3 **(Telecommunication) circuit,** *circuit (de télécommunication), circuito (de telecomunicación)*

A combination of two transmission channels permitting transmission in both directions between two points, of the signals exchanged between the same terminals

Note 1 – If the telecommunication is by nature unidirectional, e.g. long-distance television transmission, the term "circuit" is sometimes used to designate the single transmission channel providing the facility, but this usage is deprecated.

Note 2 – A telecommunication circuit may be qualified by the nature or characteristics of the transmitted signals; for example: telephone circuit, telegraph circuit, data circuit, digital circuit.

Note 3 – Such characteristics of the transmission channels as bandwidth, digit rate, may be different in the two directions of transmission.

Note 4 – In telephony, usage of the term "telephone circuit" is generally limited to a telecommunication circuit directly connecting two switching centres.

II.2.4 **Telephone-type circuit,** *Circuit de type téléphonique, Circuito de tipo telefónico*

A pair of associated telephone-type channels permitting transmission in both directions between two points.

II.2.5 **(Frequency) channel,** *Canal (de fréquences), Canal (de frecuencias)*

Part of the frequency spectrum intended to be used for a transmission of signals and which may be defined by two specified limits, or by its centre frequency and the associated bandwidth, or by any equivalent indication.

Note 1 – A frequency channel may be time-shared in order to allow communication in both directions by simplex operation.

Note 2 – The use of the term "channel" to mean "telecommunication circuit" is deprecated.

Note 3 – The term "radio-frequency channel" used in radiocommunication is defined in CCIR Recommendation 573.

II.2.6 **Link,** *Liaison, Enlace*

A means of telecommunication with specified characteristics between two points.

Note – The type of the transmission path or the capacity is normally indicated, e.g. radio link, coaxial link, broadband link.

II.2.7 **Point-to-point communication,** *Communication point à point, Comunicacion punto a punto*

Communication provided by a link between two specified fixed points.

II.2.8 **Point-to-multipoint communication,** *Communication point à multipoint, Comunicación punto a multipunto*

Communication provided by links between one specified fixed point and a number of specified fixed points.

II.2.9 **Point-to-area communication,** *Communication point à zone, Comunicación punto a zona*

Communication provided by links between one specified fixed point and any number of nonspecified points located in a given area.

Note – When point-to-area communication involves unidirectional links from a single fixed point to a number of points, this type of communication is commonly referred to as "broadcasting" (see § II.1.34).

II.2.10 **Telecommunication network, telecommunication system** (United States of America); *Réseau de télécommunication; Red de telecomunicación*

All the means of providing telecommunication services between a number of locations where equipment provides access to these services.

II.2.11 (Telecommunication) **terminal,** *Terminal* (de télécommunication), *Terminal* (de telecomunicación)

An equipment connected to a telecommunication network to provide access to one or more specific services.

Note – The term may be qualified to indicate the type of service or user, e.g. "data terminal", "subscriber's terminal".

II.2.12 **Subscriber's line, subscriber loop;** *Ligne d'abonné, ligne de rattachement; Línea de abonado, bucle de abonado*

A link between equipment in a subscriber's premises and the telecommunication centre providing the required services.

II.2.13 **Port** (of a network), *Accès* (d'un réseau), *Porte* (term not to be used in this sense); *Puerta* (de una red)

A termination through which signals can enter or leave a network.

II.2.14 **Transmission path,** *Trajet de transmission, Trayecto de transmisión*

The course taken by a signal during its transmission between two points.

II.2.15 **Interface,** *Interface, Interfaz*

A boundary between two systems or between two parts of the same system, defined by the specification of suitable characteristics, usually for the purpose of ensuring format, function, signal and interconnection compatibility at the boundary.

Note – An interface may be defined, for example, at a plug and socket connection, at the aperture of an antenna or between layers of a hierarchical system.

II.2.16 **Distribution link,** *Liaison de distribution, Enlace de distribución*

A link for the transmission of sound or television broadcasting programmes to the users, generally from a programme production centre, when no further post-production processing is intended.

II.2.17 **Primary distribution link,** *Liaison de distribution primaire, Enlace de distribucion primaria*

The part of a distribution link from a programme production centre to either a broadcast transmitting centre or the head-end of a cabled distribution network.

II.2.18 **Secondary distribution link,** *Liaison de distribution secondaire, Enlace de distribución secundaria*

The part of a distribution link from the head-end of a cabled distribution network to the users.

II.2.19 **Contribution link,** *Liaison de contribution, Enlace de contribución*

A link for the transmission of sound or television broadcasting signals to a programme production centre.

II.3 *Use and operation of circuits and networks*

II.3.1 **Connection,** *Chaîne de connexion, Cadena de conexión*

A temporary association of transmission channels or telecommunication circuits, switching and other functional units set up to provide for the transfer of information between two or more points in a telecommunication network.

II.3.2 **(Complete) connection;** *Chaîne de connexion complète,* (Chemin de) communication; *Cadena de conexión completa, (camino de) comunicación*

A connection between users' terminals.

Note – In French and in Spanish, the terms "communication" and "comunicación", have also a more general meaning (see § II.1.5).

II.3.3 **Switching** (in telecommunication), *Commutation* (en télécommunication), *Conmutación* (en telecomunicación)

The process of temporarily associating functional units, transmission channels or telecommunication circuits for the purpose of providing a desired telecommunication facility.

II.3.4 **Call attempt** (by a user), *(Tentative d') appel* (par un usager), *(Tentativa de) llamada* (por un usuario)

A single sequence of operations made by a user of a telecommunication network trying to obtain the desired user, terminal or service.

Note – This definition differs slightly from the definition of the same term which appears in CCITT Recommendation P.10 (§ 21 – Telephone calls description).

II.3.5 **Call,** *Communication, Comunicación*

The establishment and use of a complete connection, following a call attempt.

Note – In French and in Spanish, the terms "communication" and "comunicacíon", have also a more general meaning (see § II.1.5).

II.3.6 **Conversation** (in telecommunication), *Conversation* (en télécommunication), *Conversación* (en telecomunicación)

An exchange of information between terminals.

II.3.7 **Code,** *Code, Código*

A system of rules defining a one-to-one correspondence between information and its representation by characters, symbols or signal elements.

II.3.8 **Modulation,** *Modulation, Modulación*

A process by which a quantity which characterizes an oscillation or wave follows the variations of a signal or of another oscillation or wave.

Note – Modulation may be intentional or unintentional.

II.3.9 **Carrier,** *Porteuse, Portadora*

An oscillation or wave, usually periodic, some characteristic of which is intended to be constrained by modulation to follow the values of a signal or of another oscillation.

II.3.10 **Carrier (component),** *(Composante) porteuse, Portadora (componente)*

In a modulated oscillation or wave, the spectral component having the frequency of the periodical oscillation or wave prior to modulation.

II.3.11 **Multiplexing,** *Multiplexage, Multiplexación*

A reversible process for assembling signals from several separate sources into a single composite signal for transmission over a common transmission channel; this process is equivalent to dividing the common channel into distinct channels for transmitting independent signals in the same direction.

II.3.12 **Demultiplexing,** *Démultiplexage, Demultiplexación*

A process applied to a composite signal formed by multiplexing, for recovering the original independent signals, or groups of these signals.

Note – Demultiplexing may be partial, for instance for extracting a group from a supergroup of telephone channels.

II.3.13 **Multiple access,** *Accès multiple, Acceso múltiple*

Any technique whereby a number of terminals are able to share the transmission capacity of a link in a predetermined manner or in accordance with traffic demand.

II.3.14 **Space division,** *Répartition spatiale, División espacial*

A technique whereby a separate individual transmission path is used for each transmission channel for example in multiplexing, switching or multiple access operations.

II.3.15 **Time division,** *Répartition temporelle, División en el tiempo*

A technique whereby a separate distinct recurrent time interval is used for each transmission channel, for example in multiplexing, switching or multiple access operations.

II.3.16 **Frequency division,** *Répartition en fréquence, répartition fréquentielle, Distribución en frecuencia*

A technique whereby a separate distinct frequency band is used for each transmission channel, for example in multiplexing, switching or multiple access operations.

II.3.17 **Code division,** *Répartition en code, División por código*

A technique whereby orthogonal signals are used to provide distinct transmission channels, for example in multiplexing, switching or multiple access operations; such signals being distinguishable even when they share the same frequency bands and the same time intervals.

II.3.18 **Simplex, half duplex** (deprecated); *Simplex, à l'alternat, semi-duplex* (deprecated in this sense); *Símplex, semiduplex*

Designating or pertaining to a method of operation in which information can be transmitted in either direction, but not simultaneously, between two points.

II.3.19 **Duplex, full duplex** (deprecated); *Duplex, bilatéral simultané; Dúplex*

Designating or pertaining to a mode of operation by which information can be transmitted in both directions simultaneously between two points.

II.3.20 **Unidirectional;** *Unilatéral, unidirectionnel, simplex* (term deprecated in this sense); *Unidireccional, unilateral*

Pertaining to a link where the transfer of user's information is possible in one preassigned direction only.

Note – This term should not be used to describe the direction of call set-ups.

II.3.21 **Bidirectional;** *Bilatéral, bidirectionnel, duplex* (term deprecated in this sense); *Bidireccional, bilateral*

Pertaining to a link where the transfer of users' information is possible simultaneously in both directions between two points.

Note 1 – The transmission channel capacity and signalling rate are not necessarily the same in both directions.

Note 2 – This term should not be used to describe the directions of call set-ups.

II.3.22 **One-way;** *à sens unique, spécialisé* (term deprecated in this sense); *de sentido único*

Pertaining to an operational mode in which the call set-ups always occur in one direction.

Note – This term should not be used to describe the direction of transfer of users' information.

II.3.23 **Both-way;** *A double sens, mixte; De doble sentido*

Pertaining to an operational mode in which the call set-ups occur in both directions.

Note 1 – The amount of traffic flowing is not necessarily the same in both directions.

Note 2 – These terms should not be used to describe the direction of transfer of users' information.

Note 3 – The term "two-way" is sometimes used in English in place of "both-way"; this usage is not recommended.

II.4 *Frequencies and bandwidths*

II.4.1 **Frequency band,** *Bande de fréquences, Banda de frecuencias*

A continuous set of frequencies lying between two specified limiting frequencies.

Note – A frequency band is characterized by two values which define its position in the frequency spectrum, for example, its lower and upper limiting frequencies.

II.4.2 **Frequency bandwidth,** *Largeur de bande* (de fréquences), *Anchura de banda* (de frecuencia)

The quantitative difference between the limiting frequencies of a frequency band.

Note 1 – The term "bandwidth" is usually associated with a qualification, for example:

- baseband bandwidth;
- necessary bandwidth;
- bandwidth of an amplifier or other device.

Note 2 – A bandwidth is defined by a single value and does not depend upon the position of the band in the frequency spectrum.

II.4.3 **Baseband,** *Bande de base, Banda de base*

1) The frequency band occupied by one signal, or by a number of multiplexed signals intended to be conveyed by a radio transmission system or a line transmission system.

Note 1 – In the case of radiocommunication, the baseband signal constitutes the signal modulating the transmitter.

Note 2 – The following definition proposed by the JCG in IEV Chapter 702, was also found to be acceptable.

2) That frequency band occupied by one signal or by a number of multiplexed signals at specified input and output points of a transmission system.

Note 1 – In the case of a radiocommunication, the baseband is that band which is occupied by the signal modulating the transmitter.

Note 2 – When the transmission involves multiple modulation, it is generally considered that the baseband is that band occupied by the signal which is applied to the first modulation stage and not the band occupied by an intermediate modulated signal.

II.4.4 *x* **dB bandwidth** (of a signal), *Largeur de bande «à x dB», Anchura de banda entre puntos a «x dB»*

The width of a frequency band such that beyond its lower and upper limits any spectral line or any power spectral density of the spectrum of a signal is at least x dB lower than a 0 dB reference level specified for the type of signal considered.

II.4.5 **Frequency departure,** *écart de fréquence, déviation de fréquence* (term deprecated in this sense); *desajuste de frecuencia*

An unintentional frequency separation from a stated frequency.

II.4.6 **Frequency shift,** *Déplacement de fréquence, Desplazamiento de frecuencia*

An intentional frequency change produced by modulation, or an unintentional change due to a natural phenomenon.

II.4.7 **Frequency drift,** *Dérive de fréquence, Deriva de frecuencia*

An undesired progressive and slow change in frequency with time.

II.4.8 **Frequency offset,** *Décalage de fréquence, Separación de la frecuencia*

A small intentional frequency change for purposes other than that of modulation.

Note – A frequency offset may be effected, for example, as a means of avoiding or minimizing interference.

Recommendation B.14[1)]

TERMS AND ABBREVIATIONS FOR INFORMATION QUANTITIES IN TELECOMMUNICATIONS

The CCITT,

considering

(a) that in telecommunications data transmission is more and more widely used;

(b) that the ISO is the international organization concerned with standardization in the field of data processing;

(c) that IEC Technical Committee No. 25 has requested the CMV to assist with the definition of letter symbols for terms and units used in data communication,

recommends

(1) that the CCIs should use the terms "bit", "baud", "shannon", "byte" and "N-bit byte" with the definitions established by the ISO and the ITU and appearing in Annex A;

(2) that the term "bit" is synonymous with "binary digit" and is also used in the letter symbol for this unit; the term being an abbreviation of the English term "binary digit" and being adopted also in French and Spanish; for multiples of this unit and for derived units the letter symbols kbit, Mbit, kbit/s should be used;

(3) that the unit "baud" should have as its letter symbol Bd with possible multiples of kBd and MBd;

(4) that the unit "shannon" should have as its letter symbol Sh;

(5) that for the terms "byte" it is the task of the ISO to provide the letter symbol it judges to be necessary. In the meantime this term and its multiples should be written in full in the documents and texts of the CCIs. For example 10 kilo-bytes, 1 mega-byte. The term "N-bit byte" has no multiples.

ANNEX A

(to Recommendation B.14)

A.1 **binary digit, bit**

F: élément binaire, bit

S: digito binario, bit

A member of a set of two elements commonly used to represent information.

Note – In the interest of clarity, it is recommended that the term "bit" shall not be used in two-condition start-stop modulation instead of "unit-element".

A.2 **binary digit rate, bit rate**

F: débit binaire

S: velocidad binaria

The number of binary elements transferred in a time interval divided by that time.

Note: – The binary digit rate is expressed in bits per second (bit/s) and multiples of this unit.

A.3 **baud (symbol: Bd)**

F: baud (symbole: Bd)

S: baudio (símbolo: Bd)

The unit of modulation rate in telegraphy and data communication or the unit of line digit rate in digital transmission; when expressed in terms of this unit, the modulation rate or line digit rate equals the reciprocal of the duration in seconds of the shortest signal element or of the unit interval in a digital signal composed of signal elements of constant duration.

[1)] A similar text will be submitted to the CCIR as a revision of Recommendation 607-1.

Example – If the duration of the unit interval is 20 milliseconds, the modulation rate is 50 bauds.

A.4 **shannon**

F: shannon

S: shannon

A unit of logarithmic measure of information equal to the decision content of a set of two mutually exclusive events expressed as a logarithm to base two.

Example: The decision content of a character set of eight characters equals 3 shannons ($\log_2 8 = 3$).

A.5 **byte octet, 8-bit byte**

F: octet

S: octeto (byte)

An ordered set of 8 binary digits operated upon as an entity.

A.6 **n-bit byte**

F: multiplet n-uplet

S: multibit n-bit

An ordered set of a specified number of binary digits operated upon as an entity.

Note – This definition is compatible with the definition of ISO (Data Processing – Vocabulary, Part 4: Data Organization).

Recommendation B.15 [1]

NOMENCLATURE OF THE FREQUENCY AND WAVELENGTH BANDS USED IN TELECOMMUNICATIONS

The CCITT,

considering

(a) that the merits of Heinrich Hertz (1857-1897), as a research worker on the basic phenomena of radio waves, are universally recognized, as was confirmed at the centenary of his birth; and that as early as 1937 the IEC adopted the hertz (symbol: Hz) as a name for the unit of frequency (see *inter alia*, Publication 27);

(b) that the nomenclature in this Recommendation should be as synoptic as possible and that the designation of frequency bands should be as concise as possible,

recommends

(1) that the hertz (Hz) be accepted for use in publications of the ITU, as the name for the unit of frequency in accordance with Recommendation B.3 on the use of the international system of units (SI);

(2) that Administrations should always use the nomenclature of the frequency and wavelength bands given in Annex A:

– Table A-1/B.15 and Notes 1 and 2, which take account of No. 208 of the Radio Regulations, and

– Note 3, which contains the proposal of the International Union of Radio Sciences (URSI),

except in those cases where this would inevitably cause very serious difficulties.

[1] A similar text will be submitted to the CCIR as a revision of Recommendation 431-4.

ANNEX A

(to Recommendation B.15)

TABLE A-1/B.15

Band number	Symbols	Frequency range (lower limit exclusive, upper limit inclusive)	Corresponding metric subdivision	Metric abbreviations for the bands
3	ULF	300 to 3000 Hz	Hectokilometric waves	B.hkm
4	VLF	3 to 30 kHz	Myriametric waves	B.Mam
5	LF	30 to 300 kHz	Kilometric waves	B.km
6	MF	300 to 3000 kHz	Hectometric waves	B.hm
7	HF	3 to 30 MHz	Decametric waves	B.dam
8	VHF	30 to 300 MHz	Metric waves	B.m
9	UHF	300 to 3000 MHz	Decimetric waves	B.dm
10	SHF	3 to 30 GHz	Centimetric waves	B.cm
11	EHF	30 to 300 GHz	Millimetric waves	B.mm
12		300 to 3000 GHz	Decimillimetric waves	B.dmm
13		3 to 30 THz	Centimillimetric waves	B.cmm
14		30 to 300 THz	Micrometric waves	B.μm
15		300 to 3000 THz	Decimicrometric waves	B.dμm

Note 1 – "Band number N" extends from 0.3×10^N to 3×10^N Hz.

Note 2 – Symbols: Hz: hertz;
k: kilo (10^3), M: mega (10^6), G: giga (10^9), T: tera (10^{12});
μ: micro (10^{-6}), m: milli (10^{-3}), c: centi (10^{-2}), d: deci (10^{-1});
da: deca (10), h: hecto (10^2), Ma: myria (10^4).

Note 3 – This nomenclature, used for designating frequencies in the field of telecommunications, may be extended to cover the ranges shown below as is proposed by the International Union of Radio Science (URSI). (See Table A-2/B.15.)

TABLE A-2/B.15

Band number	Symbols [a]	Frequency range (lower limit exclusive, upper limit inclusive)	Corresponding metric subdivision	Metric abbreviations for the bands
–1	ELF	0.03 to 0.3 Hz	Gigametric waves	B.Gm
0		0.3 to 3 Hz	Hectomegametric waves	B.hMm
1		3 to 30 Hz	Decamegametric waves	B.daMm
2		30 to 300 Hz	Megametric waves	B.Mm

[a] The symbol EBF is used in French.

Note – In most countries the frequency ranges used for FM sound broadcasting and television are designated by the Roman numerals I - V. The frequency ranges are indicated in Table A-3/B.15. It should be noted that these ranges are, in some cases, not exclusive to the broadcasting services.

TABLE A-3/B.15

Designation	Frequency range (MHz)		
	Region 1	Region 2	Region 3
I	47 - 68	54 - 68	47 - 68
II	87.5 - 108	88 - 108	87 - 108
III	174 - 230	174 - 216	174 - 230
IV	470 - 582	470 - 582	470 - 582
V	582 - 960	582 - 890	582 - 960

Note – Certain frequency bands are sometimes designated by letters other than the symbols and abbreviations recommended in Tables A-1/B.15 and A-2/B.15. The symbols in question consist of capital letters which may be accompanied by an index (usually a small letter). There is at present no standard correspondence between the letters and the frequency bands concerned, and the same letter may be used to designate a number of different bands. It is not advisable to use these symbols in ITU publications. If, however, a letter symbol is used, reference should be made to the corresponding frequency band limits or at least to a frequency in the band, if that information is sufficient in itself, the first time the symbol appears in the text.

Recommendation B.16 [1]

USE OF CERTAIN TERMS LINKED WITH PHYSICAL QUANTITIES

The CCITT,

considering

(a) that ITU technical texts contain a number of terms expressing a relationship between quantities, such as quotient, ratio, coefficient, factor, index, constant, rate, etc., and that their meaning is liable to cause confusion owing to a lack of consistency;

(b) that the situation is particularly confused owing to the existence of three working languages, as can be seen from such texts as the Provisional Glossary of Telecommunications Terms published by the ITU in 1979;

(c) that attempts at standardization have been made in certain countries, in vocabularies recently prepared by the IEC and the JCG and in ISO International Standards,

recommends

(1) that certain terms linked with physical quantities should be used by authors and translators of ITU texts, according to the guidelines annexed to this Recommendation;

(2) that these guidelines should be used to ensure that the term chosen to denote a quantity, fully describes its nature;

(3) that these guidelines should be followed when forming new terms or reviewing existing terms which deviate from the guidelines.

[1] A similar text will be submitted to the CCIR as a revision of Recommendation 663.

ANNEX A

(to Recommendation B.16)

Guidelines for the use in ITU texts of certain terms linked with physical quantities in French, English and Spanish

A.1 *Quotient*

The term "quotient" is used to express the result of the division of two numbers or two quantities. For example; when A/B = C, C is the quotient of A by B.

This very general mathematical term is not used in the composition of the names of quantities, but does form part of the definition of some of them.

In the context of definitions, quotient is a difficult word to use in English as it is often much more practical to use the expression "A divided by B" rather than "the quotient of A by B".

Example: the pulse repetition frequency is the number of pulses in a pulse train divided by the duration of the pulse train.

A.2 *Coefficient and factor*

The words "coefficient" and "factor" are used for expressions representing the quotient of two quantities. They are used to form terms expressing certain quantities.

A.2.1 *Coefficient*

The word "coefficient" is used when two quantities are of different kinds. A coefficient has therefore a dimension.

Examples:

E	F	S
Hall coefficient temperature coefficient coefficient of linear expansion	coefficient de Hall coefficient de température coefficient de dilatation linéique	coeficiente de Hall coeficiente de temperatura coeficiente de dilatación lineal

The word "coefficient" is also used in mathematics to express a number that multiplies the value of an algebraic quantity and in statistics (see ISO Standard 3534).

Examples:

E	F	S
coefficient of an equation coefficient of correlation coefficient of variation confidence coefficient (level)	coefficient d'une équation coefficient de corrélation coefficient de variation niveau de confiance	coeficiente de una ecuación coeficiente de correlación coeficiente de variación coeficiente (nivel) de confianza

A.2.2 *Factor*

The word "factor" is used when the two quantities are of the same kind. A factor is therefore dimensionless.

Examples:

E	F	S
reflection factor noise factor quality factor (Q) figure of merit (M)	facteur de réflexion facteur de bruit facteur de qualité (Q) facteur de qualité (M)	factor de reflexión factor de ruido factor de calidad (Q) factor de calidad (M)

A.3 *Constant*

The term "constant" should only be used to denote an invariable number or quantity.

Examples: mathematical constants such as π, universal physical constants.

E	F	S
Planck's constant electric constant magnetic constant	constante de Planck constante électrique constante magnétique	constante de Planck constante eléctrica constante magnética

The word "constant" is sometimes used incorrectly, in conjunction with a qualifier, to indicate a variable characteristic quantity of a system or substance. In such cases, the use of the word is deprecated, and a specific term should be used (frequently the word "coefficient" suitably qualified) or in French, in the absence of such a term, the word "caractéristique".

Deprecated term			Correct term		
E	F	S	E	F	S
dielectric constant	constante diélectrique	constante dieléctrica	permittivity	permittivité	permitividad
propagation constant	constante de propagation	constante de propagación	propagation coefficient	exposant linéique de propagation	exponente lineal de propagación
attenuation constant	constante d'affaiblissement	constante de atenuación	attenuation coefficient	affaiblissement linéique	coeficiente de atenuación
phase constant	constante de phase	constante de fase	phase coefficient	déphasage linéique	coeficiente de fase
–	constantes du sol	constantes del suelo	–	caractéristiques du sol	características del suelo

However, the term "time constant" (E), "constante de temps" (F), "constante de tiempo" (S) is acceptable, as it is in common use.

A.4 *Index*

In French and Spanish the term "indice" (F), "indice" (S) is sometimes used instead of "facteur" (F), "factor" (S). In English "index" is sometimes used instead of "ratio" in those cases where one of the two quantities is a reference quantity.

Examples:

E	F	S
refractive index modulation index	indice de réfraction indice de modulation	índice de refracción índice de modulación

The term also designates a quantity which is not clearly defined or which is identifiable rather than measurable.

Example:

E	F	S
ionospheric index	indice ionosphérique	índice ionosférico

In all the above cases extension of the usage of the term is not recommended. It should be replaced wherever possible by the terms coefficient, factor or (in English) ratio, or by a specific term of magnitude. Thus the French term "L'indice de force des sons" was replaced by "l'affaiblissement pour la sonie", "loudness rating" (E), "coeficiente de sonoridad" (S).

A.5 *Ratio*

The term "ratio" is used to express the result of the division of two numbers or two quantities of the same kind. It may therefore be used in this case as an equivalent of the term "quotient".

Examples:

- Attenuation is defined as the ratio of two powers.
- Ratio of A to B.
- Ratio of width to height (picture).

In English and in Spanish, the word "ratio" ("relación") is also used to explicitly indicate the fractional expression of the relationship between two quantities before the division is performed, e.g. written as a fraction or a relationship as 5/21 or 5 : 21 rather than the resulting 0.238. The two quantities may or may not be the same, e.g. power/weight ratio, relación potencia/peso.

In French and in Spanish the term "rapport" (F) ("relación" (S)) should not be used when the two quantities are not the same physical kind, or when they are of a different mathematical kind, for example, to express the quotient of a vector or a tensor by a scalar number.

The word is also used to form terms for expressing dimensionless quantities.

Examples:

E	F	S
standing wave ratio signal-to-noise ratio protection ratio error ratio	rapport d'onde stationnaire rapport signal sur bruit rapport de protection taux d'erreur	relación de onda estacionaria relación señal/ruido relación de protección proporción de errores

Note – Error ration is normally expressed as a decimal fraction, e.g. $4 \cdot 10^{-5}$.

A.6 *Rate, ratio (E); Taux, débit (F); Tasa/proporción/frecuencia (S)*

The term "taux" in French designates a factor usually expressed as a percentage or any decimal fraction such as a thousandth or a millionth. It does not always correspond with the English term "rate". In particular, it should not be used to express the relationship of a quantity with a unit of time. In such cases, an appropriate term such as "débit" (F), "fréquence" (F), "vitesse" (F) should be used. An exception which has been established by usage is "failure rate" (E), "taux de défaillance" (F), "tasa de fallos" (S) in the field of reliability.

Although in English the term "rate" may be used to express the relationship between two quantities of the same kind, it is generally used to express the relationship of quantities of a different kind (particulaarly a quantity per unit of time). For expressing the proportion of errors in telecommunication however, the use of this term can be confusing and is deprecated. The term "ratio" should be used for this purpose.

In Spanish, the term "tasa" should not be used to express the relationship between a quantity and the unit of time. There are a number of different terms which should be used for this purpose depending on the quantity e.g. "velocidad" (S) for distance, "frecuencia" (S) for events, "caudal" (S) for volume flow, etc.

In Spanish, the term "tasa" is also frequently used incorrectly to indicate a factor or index usually expressed as a percentage or in hundredths or as a smaller decimal fraction such as a thousandth or millionth. The use of this erm for this term for this purpose in Spanish is deprecated and should be replaced by the term "proporción" (S).

Examples:

E	F	S
sampling rate	fréquence d'échantillonnage	frecuencia de muestreo
digit rate	débit numérique	velocidad digital
fading rate	cadence d'évanouissement	ritmo de desvanecimiento
rain rate	intensité de pluie	intensidad de lluvia
modulation rate	rapidité de modulation	velocidad de modulación
failure rate	taux de défaillance	tasa de fallos
error ratio[a)]	taux d'erreur	proporción de errores
harmonic factor	taux d'harmoniques	proporción de armónicos
modulation factor	taux de modulation	factor de modulación

[a)] In English, "error rate" is used to denote the number of errors/unit time. In this case in French "fréquence des erreurs" may be used.

Recommendation B.17 [1)]

ADOPTION OF THE CCITT SPECIFICATION AND DESCRIPTION LANGUAGE (SDL)

The CCITT,

considering

(a) that there is a need for a common method or procedure for the unambiguous specification and description of the behaviour of telecommunication systems;

(b) that a specification of a system is the description of its required behaviour;

[1)] A similar text will be submitted to the CCIR as revision of Recommendation 664.

(c) that a description of a system is the description of its actual behaviour;

(d) that a universal method for specification and description should bring economic benefits;

(e) that the CCITT has adopted such a method called the Specification and Description Language (SDL) as described in CCITT Recommendations Z.100 to Z.104,

recommends

(1) the adoption within the ITU of the use of the CCITT Specification and Description Languae (SDL) for unambiguous specification and description of telecommunication systems (see Annex A);

(2) that the possibilities for application of SDL in areas of common interest for the purposes of standardization be brought to the attention of other international bodies (e.g. the IEC and ISO) for their consideration.

ANNEX A

(to Recommendation B.17)

Introduction to SDL

The purpose of recommending SDL is to provide a language for unambiguous *specification* and *description* of the behaviour of telecommunications *systems.* The *specifications* and *descriptions* using SDL are intended to be formal in the sense that it is possible to analyse and interpret them unambiguously.

The terms *specification* and *description* are used with the following meaning:

- a *specification* of a *system* is the description of its required *behaviour,* and
- a *description* of a *system* is the description of its actual *behaviour.*

SDL also provides structuring concepts which allow a *system* to be partitioned so that it can be defined, developed and understood one part at a time.

These concepts are of value both initially in specifying a *system,* when different aspects can be independently dealt with, and later in describing a *system,* when the description structures should match the *system* structure.

SDL gives a choice of the use of two different forms when representing SDL descriptions; a graphic representation (SDL/GDR) and a textual phrase representation (SDL/PR). As they are both specific representations of the same SDL semantics, they are equivalent from a semantic point of view.

Objectives

The general objectives when defining SDL have been to provide a language that:

- is easy to learn, use and interpret in relation to the needs of an operating organization;
- provides unambiguous specifications and descriptions for ordering and tendering;
- may be extended to cover new developments;
- is able to support several methodologies of system specification and design, without assuming any one of these.

Scope

The main are of application for SDL is the description of the behaviour of aspects of telecommunications *systems.* Applications include:

- call processing (e.g. call handling, telephony signalling, metering) in stored programme control (SPC) switching systems;
- maintenance and fault treatment (e.g. alarms, automatic fault clearance, routine tests) in general telecommunications systems;

– system control (e.g. overload control, modification and extension procedures);

– data communication protocols.

SDL can of course also be used for the description of any behaviour capable of being described using a discrete model, i.e. communicating with its environment by discrete messages.

A description of SDL is given in CCITT Recommendations Z.100 to Z.104.

Recommendation B.18 [1]

TRAFFIC INTENSITY UNITY

The CCITT,

considering

(a) that in CCITT texts concerning telephone operations and tariffs and in CCIR texts concerning radiotelephone transmissions (e.g. telephone radio-relay systems and the maritime mobile service radiotelephony), the quantity "traffic intensity" is used together with the unit in which it is expressed. With progress in telecommunications, increasing use will be made of this term and this unit;

(b) that the unit of carried traffic intensity is defined in CCITT Recommendation E.600,

recommends

(1) that for telecommunications purposes, the unit of carried traffic intensity should be defined as follows:

> *Erlang:* the unit of carried traffic intensity. The value in erlangs of the intensity of traffic carried by a pool of resources [2] over a given period of time is equal to the average number of resources simultaneously busy during this period;

(2) that the erlang should be represented by the symbol E.

Note – The name "erlang" was given to the traffic unit in 1946 by the CCIF, in honour of the Danish mathematician, A. K. Erlang (1878-1929), who was the founder of traffic theory in telephony.

Recommendation B.19 [1]

ABBREVIATIONS AND INITIALS USED IN TELECOMMUNICATIONS

The CCITT,

considering

(a) the rapid increase in the number of abbreviations and initials used in the texts of the CCIs;

(b) that it is sometimes difficult to find the precise meaning of an abbreviation or acronym appearing in a text of the CCIs,

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[1] The text of this Recommendation is analogous to that of Recommendation 665 of the CCIR.

[2] The term "resource" means any entity used for carrying traffic (circuit, switching equipment, subscriber line, etc.).

[1] CCIR Recommendation 666 is concerned with the same subject.

recommends

(1) that, with the exception of abbreviations frequently used in telecommunications, abbreviations and acronyms should not be used in the texts of the CCIs unless they make the text easier to read, i.e. when an abbreviation may be used several times in the same text;

(2) that, with the exception of abbreviations frequently used in telecommunications the first time an abbreviation is used in a particular text its full meaning should be given, either in the body of the text or in a footnote;

(3) that at alphabetical list of the abbreviations used in the CCI volumes should be published either at the end of each volume or in a separate fascicle[2), 3)]

(4) that for abbreviations specific to certain fields, the Administrations, CCI Secretariats and other participants in the work of the CCIs should use the abbreviations which appear in the publications listed in Appendix I.

APPENDIX I

(to Recommendation B.19)

References to lists of specific abbreviations

I.1 *Frequency and wavelength bands*

See Recommendation B.15.

I.2 *Alphabets, codes, routing codes and identities*

See the relevant CCITT Recommendations (Index of the Blue Book, Fascicle I.4).

I.3 *Codes contained in the Radio Regulations*

I.3.1 Designation of emissions: Article 2.

I.3.2 Symbols for the various types of antenna: Appendix 2, Section III.

I.3.3 Q code, general section (QRA to QUZ): Appendix 13, Section I.

I.3.4 Miscellaneous abbreviations: Appendix 13, Sections I and II.

I.3.5 SINPO and SINPFEMO codes: Appendix 15.

I.4 *Abbreviations used by the ITU for the names of countries*

See the Preface to the International Frequency List, Table I. (Different abbreviations have been approved by ISO.)

I.5 *Acronyms of international organizations involved in telecommunications*

See the ITU "List of Adddresses", § 3.

I.6 *Symbols and names for units*

I.6.1 Recommendation B.3 gives the sources to be used. This Recommendation refers to IEC Publication 27 and to ISO International Standards 31 and 1000.

I.6.2 Recommendation B.14: Terms and symbols for information quantities in telecommunications.

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2) An alphabetical list of the abbreviations used in the CCITT volumes is published in Part V of this fascicle.

3) CCIR Recommendation 666 contains in its Appendix I, a list of about 100 abbreviations, in general use by the CCIR Study Groups and which are arranged by subject together with the corresponding abbreviations in the three working languages.

I.6.3 Recommendation B.15: (Note 2) – Frequency unit.

I.6.4 Recommendation B.12: Use of the decibel and the neper in telecommunications.

I.6.5 Recommendation B.18: Traffic intensity unit.

I.7 *Letter symbols*

Recommendation B.1: "Letter symbols for telecommunications" provides guidelines to be followed to simplify the reading of documents dealing with telecommunication techniques; it refers to IEC Publication 27 and to ISO International Standard 31 for letter symbols to represent physical quantities and mathematical operations.

I.8 *Chemical symbols*

See the table published by the International Union of Pure and Applied Chemistry (IUPAC).

SERIES C RECOMMENDATIONS

General telecommunications statistics

Recommendation No.	*Title*
C.1	Yearbook of common carrier telecommunication statistics
C.3	Instructions for international telecommunication services

Recommendation C.1

YEARBOOK OF COMMON CARRIER TELECOMMUNICATION STATISTICS

(Geneva, 1972; Geneva, 1976; Geneva, 1980)

(1) The CCITT recommends that a Yearbook of Common Carrier Telecommunication Statistics be published annually by the General Secretariat of the ITU.

(2) This statistical Yearbook is to be a collection of data on the various branches of common carrier telecommunications (see also Recommendation F.91), namely:

- telephone service,
- telegram service,
- telex service,
- data transmission service.

(Radio services *other than broadcasting* [sound or television] are regarded as common carriers to the extent to which they are used for the transmission of paid messages between subscribers of the telecommunications undertaking.)

(3) The statistical data to be published are those covered by the items listed in Annex A to this Recommendation. Any explanations required for uniform and unambiguous interpretation of the items are given in Annex B.

(4) These statistical data should be provided each year by Administrations before 1 September of the year following the one to which they refer.

(5) The data assembled will be published in chronological series relating to the past ten years.

Important note – Those countries not in a position to communicate all the data listed in the Recommendation should provide the data they do have and mark with a dash ("–") those items not evaluated.

ANNEX A

(to Recommendation C.1)

List of items appearing in the Yearbook of common carrier telecommunication statistics

A. SIZE OF TELECOMMUNICATION SYSTEMS, TRAFFIC AND STAFF

1 Telephone service

1.1	*Size of telephone system*	
1.1.1	Number of telephone stations (sets) of all kinds connected to the public network	10^3
1.1.2	Number of main lines	10^3
1.1.3	Number of main lines connected to private branch exchanges (PBX, etc.)	10^3

1.1.4	Percentage of main lines connected to automatic exchanges	%
1.1.5	Percentage of main lines equipped for direct customer dialling to international destinations	%
1.1.6	Percentage of main lines which are residential	%
1.1.7	Connection capacity of local public switching exchanges (number of subscriber terminal equipments)	10^3
1.1.8	Number of trunk and international circuit ends connected to manual switching exchanges	10^3
1.1.9	Number of trunk and international circuit ends connected to automatic switching exchanges	10^3
1.2	*Volume of the demand for connection and size of the waiting list*	
1.2.1	New applications for main lines	10^3
1.2.2	Total demand for main lines (including transfers)	10^3
1.2.3	Waiting list for main lines	10^3
1.3	*Volume of telephone traffic*	
1.3.1	Volume of total national traffic	10^6
1.3.1.1	Volume of local traffic	10^6
1.3.1.2	Volume of national trunk (toll) traffic	10^6
1.3.2	Volume of total outgoing international traffic	10^6
1.3.3	Volume of total traffic	10^6
1.3.4	Outgoing international subscriber dialled telephone traffic as a percentage of total outgoing international telephone traffic	%

2 Public telegram service

2.1	Number of national paid telegrams	10^3
2.2	Number of international outgoing full rate telegrams	10^3
2.3	Number of international outgoing reduced rate (LT) telegrams	10^3
2.4	Number of outgoing international phototelegrams	10^3

3 Telex service

3.1	*Size of telex system*	
3.1.1	Number of subscriber lines	10^3
3.2	*Volume of telex traffic*	
3.2.1	Volume of national traffic	10^3
3.2.2	Volume of outgoing international traffic	10^3
3.2.3	Volume of total traffic	10^3

4 Data transmission

4.1	*Size of data system*	
4.1.1	Number of data terminal equipments on the public telephone and telex networks	10^3
4.1.2	Number of private leased circuits	10^3
4.1.3	Number of data terminal equipments connected to dedicated public data networks	10^3

5 Equivalent full-time telecommunications staff

5.1	Total staff in telecommunication services	10^3
5.2	Operating staff	10^3
5.3	Technical staff	10^3
5.4	Other staff	10^3

B. DEMOGRAPHIC, ECONOMIC, AND FINANCIAL INFORMATION

Area of country in square kilometres:

Denomination of the national monetary unit:

6 Demographic and macro-economic data

6.1	Number of inhabitants	10^3
6.2	Number of households	10^3

6.3	Gross domestic product at factor costs in national currency	10^6
6.4	Gross fixed capital formation in national currency	10^6
6.5	Exchange rate (national currency equivalent to one US$ at the end of the year)	
6.6	Consumer price index (1970 = 100)	

7 Income, expenditure, and financial results of telecommunication services (in the national currency, current prices)

7.1	*Total income from the telephone service*	10^6
7.1.1	Income from connection charges	10^6
7.1.2	Income from annual rentals	10^6
7.1.3	Income from calls	10^6
7.2	*Total income from the public telegram service*	10^6
7.3	*Total income from the telex service*	10^6
7.4	*Other income (data, facsimile transmission services)*	10^6
7.5	*Total income from all telecommunication services*	10^6
7.6	*Total expenditure for all telecommunication services*	10^6
7.6.1	Operational expenditure	10^6
7.6.2	Depreciation	10^6
7.6.3	Interest paid	10^6
7.6.4	Taxes	10^6
7.6.5	Other expenditure	10^6
7.7	Income minus expenditure for the telecommunication services	10^6

8 Investments (annual gross construction expenditure) on telecommunication services

8.1	Total annual gross investments in telecommunications (including land and buildings)	10^6
8.2	Total annual gross investments in telecommunications (excluding land and buildings)	10^6
8.3	Annual gross investments for telephone services	10^6
8.4	Annual gross investments in telephone switching equipment	10^6

9 Comparative ratios

9.1	Telephone main lines per inhabitant	%
9.2	Telephone stations (sets) of all kinds, per inhabitant	%
9.3	Telecommunications investments as a share of GDP	‰
9.4	Telecommunications investments as a share of GFCF	‰

ANNEX B

(to Recommendation C.1)

Yearbook of common carrier telecommunication statistics

Definitions, instructions and explanatory notes on how the information should be provided

General remarks

By "common carrier telecommunication" is meant the traditional field of telecommunication: telephony, telegraphy, telex and data transmission. As telecommunications undertakings in some countries are responsible for providing and maintaining sound broadcasting facilities and sometimes also for the collection of charges for these services, it is stipulated that neither these, nor the investments, income or expenditure for the service in question should be taken into account.

When items of statistics are presented in a different manner from that specified in this Annex, they should be accompanied by an explanation which facilitates their interpretation.

A. SIZE OF TELECOMMUNICATION SYSTEMS, TRAFFIC AND STAFF

1 Telephone service

Preliminary remarks

Common carrier telecommunications provide the inhabitants of a country with services involving access to the network and the possibility of sending traffic with a certain grade of service.

Access to the network is provided by switching exchanges with a certain access capacity, not all of which may be made available to users. These exchanges may be operated either manually or automatically.

The first characteristic of the size of a system from the traffic point of view is therefore the number of connection points to the network, i.e. *main lines.*

The second characteristic of the size of the system is the number of points of access to the network, i.e. *telephone sets.*

The traffic introduced at the points of access to a network is routed between the different switching exchanges by manually or automatically operated circuits.

1.1 *Size of telephone system*

1.1.1 *Telephone stations (sets) of all kinds connected to the public network*

Under this heading should be indicated the total number of telephone sets which have access to the public switched network.

1.1.2 *Main lines*

A "main line" is a telephone line connecting the subscriber's terminal equipment to the public switched network and which has a dedicated port in the telephone exchange equipment. This term is synonymous with the term "main station" which is commonly used in telecommunication documents.

It is understood that:

- the line connected to the telephone exchange may be either an exclusive exchange line or a shared line;
- when a subscriber's equipment has several extensions (private branch exchange), the number of main lines is equal to the number of lines connecting the installation to the telephone exchange, whether these lines are operated in one direction or in both directions.

Example:

A subscriber's equipment with extensions is served by 50 lines which connect it to the telephone exchange. The installation has ten operating positions (and therefore ten "operator's stations") and 500 extensions. In accordance with the above definition this installation must be counted as having *50 main lines* (i.e. as many as there are lines connecting the subscriber installation to the exchange).

In other words, it will not be counted as having:

- either *one* main line (which would refer to the installation),
- or *ten* main lines (which would correspond to the number of operator's stations).

It will thus be seen that according to this definition the number of main lines to be entered in the Statistics is equal to the number of individual lines connected to the exchange.

1.1.3 *Main lines connected to private branch exchanges (PBX, etc.)*

The number of these lines corresponds to the number of exchange lines connecting the PBX, etc. to the exchange.

1.1.4 *Percentage of main lines connected to automatic exchanges*

This percentage is obtained by dividing the number of main lines connected to automatic telephone exchanges by the total number of main lines.

1.1.5 *Percentage of main lines equipped for direct customer dialling to international destinations*

This percentage is obtained by dividing the number of main lines with access to the automatic international service by the total number of main lines.

1.1.6 *Percentage of main lines which are residential*

This percentage is obtained by dividing the number of main lines serving households (i.e. lines which are not used for professional purposes or as public telephone stations) by the total number of main lines.

1.1.7 *Connection capacity at local public switching exchanges*

The total capacity of public switching exchanges corresponds to the maximum number of main lines which can be connected. This number includes, therefore, main lines already connected and main lines available for future connection, including those used for the technical operation of the exchange (test numbers).

1.1.8
1.1.9 *Trunk and international circuit ends*

Under these two headings should be indicated the total number of trunk and international circuits[1] terminating at switching exchanges; no account should be taken of whether the circuit is incoming, outgoing or both-way, nor of the type of trunk or international exchange at the other end of the circuit, nor whether the other end is located within the same or another country.

The only distinction to be made is between the classes of operational use of these circuits, according to whether they are to be used for:

a) manual operation;[2]

b) semi-automatic or automatic operation.[2]

1.2 *Volume of the demand for telephone connection and size of the waiting list*

Requests for connection and waiting list for the telephone service refer to applications for a main line.

1.2.1 *New applications for main lines*

New applications for main lines are applications submitted for the first time.

1.2.2 *Total demand for main lines (including transfers)*

The total demand includes new applications and applications for transfer. A transfer application is an application submitted by the holder of a main line who wants it to be transferred from one place to another.

1.2.3 *Waiting list for main lines*

The waiting list comprises applications for connection which have had to be held over owing to a lack of technical availabilities (equipments, lines, etc.).

Each country should specify in a footnote the period (in days, weeks or months), counting from the date on which the application is submitted, beyond which applications are considered as being on the waiting list.

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[1] Telephone circuit (international or trunk circuits) is defined in CCITT Recommendation E.100 (Fascicle II.2 of the *Blue Book*).

[2] International circuits are designated in different ways by the technical services depending on how they are used (see CCITT Recommendation M.140, §§ 1.2.2, 1.2.3 and 1.2.4 [Fascicle IV.1 of the *Blue Book*]).

1.3 *Telephone traffic*

Depending on the type of telephone exchange equipment, telephone traffic can be measured by the number of calls, by the number of charged pulses or, in certain cases, by the number of charged minutes. It is preferable to provide the number of calls, even if this has to be estimated. In any case, the applied unit must be indicated.

Calls actually set up (successful calls) are classified in two categories for charging purposes: chargeable calls and non-chargeable calls. Non-chargeable calls include "service" calls made from Administration service stations, emergency directory assistance calls or other facility calls (where these are not charged for) and test calls for the technical monitoring of equipment.

1.3.1 *Total national traffic*

This covers all the effective (completed) traffic which both originates and terminates within the same country.

1.3.1.1 *Local traffic*

Local traffic consists of effective (completed) traffic exchanged within the local charging area in which the calling station is situated. This is the area within which one subscriber can call another on payment of the local charge (if applicable).

Each country should include a footnote explaining what it understands by the "local charging area" and indicating the number of such areas and their average size (in km^2).

1.3.1.2 *National trunk (toll) traffic*

National trunk (toll) traffic consists of effective (completed) national traffic exchanged with a station outside the local charging area of the calling station.

1.3.2 *Total outgoing international traffic*

This covers all the effective (completed) traffic originating in a given country to destinations outside that country.

1.3.3 *Total traffic*

Total traffic is the sum of national traffic (§ 1.3.1) and outgoing international traffic (§ 1.3.2).

1.3.4 *Outgoing international subscriber dialled telephone traffic as a percentage of total outgoing international telephone traffic*

This is obtained by dividing the volume of automatic international outgoing traffic, i.e. the fully automatic traffic, by the total volume of international outgoing traffic.

2 Public telegram service

The public telegram service is concerned with the reproduction at a distance of documentary matter such as written, printed or pictorial matter. A pictorial document reproduced is a phototelegram. The traffic is measured by the number of telegrams or phototelegrams.

Note – It must not be confused with the public facsimile service, the traffic for which must not be included.

2.1 *National paid telegrams*

The number of charged telegrams which both originate and terminate within the same country.

2.2 *International outgoing full rate telegrams*

The number of charged outgoing full rate telegrams originating in a given country with a destination outside the country.

2.3 *International outgoing LT telegrams*

The number of outgoing reduced rate telegrams (letter-telegrams) originating in a given country with a destination outside the country.

2.4 *Outgoing international phototelegrams*

The number of paid outgoing phototelegrams originating in a given country with a destination outside the country.

3 Telex service

3.1 *Size of telex system*

3.1.1 *Subscriber line*

A subscriber line is a line connecting the subscriber's terminal equipment to the public telex network and which has a dedicated port in the telex exchange equipment.

3.2 *Telex traffic*

Telex traffic is measured by the number of calls, by the number of charged pulses or in certain cases by the number of charged minutes. It is preferable for the information to be supplied in charged minutes. In any case, the applied unit must be indicated.

3.2.1 *National traffic*

All the traffic which both originates and terminates within the same country.

3.2.2 *Outgoing international traffic*

All the outgoing traffic originating in a given country with a destination outside the country.

3.2.3 *Total traffic*

Total traffic is the sum of national traffic and outgoing international traffic.

4 Data transmission

4.1 *Size of data system*

4.1.1 Number of data terminal equipments on the public telephone and telex networks.

4.1.2 Number of private leased circuits.

4.1.3 Number of data terminal equipments connected to dedicated public data networks.

5 Equivalent full-time telecommunication staff

The definitions applied to staff in some countries might differ to a greater or lesser extent from those in the Yearbook. It is therefore very important that such differences be explained.

5.1 *Total staff in telecommunications services*

Full-time equivalent staff of either sex employed by the telecommunication enterprises in the country for the common carrier telecommunication services.

5.2 *Operating staff*

Full-time equivalent staff employed by the telecommunications Administration/enterprise itself for:

- setting up of telephone and telex calls and the transmission and distribution of telegrams,
- answering requests for information in the switching exchanges (e.g. directory assistance),

- auxiliary work directly related to the above tasks and performed by the same grade of staff (e.g. exchange clerical work performed by operating staff),
- supervisory duties.

5.3 *Technical staff*

Full-time equivalent staff employed by the telecommunications Administration/enterprise itself for the installation, upkeep, maintenance and repair of telecommunications plant and lines.

5.4 *Other staff*

Full-time equivalent staff employed by the telecommunications Administration/enterprise itself for:
- management and administration,
- research and development,
- public relations,
- budgeting and accounting,
- other support functions.

B. DEMOGRAPHIC, ECONOMIC AND FINANCIAL INFORMATION

6 Demographic and macro-economic data

Since the information about demographic and macro-economic data comes from sources outside the telecommunication services, the definitions and numerical information are those used in the Yearbook of National Accounts Statistics published by the United Nations Organizations. The financial information should be given in the national currency at current prices.

7 Income, expenditure and financial results of telecommunication services

The concepts of income, expenditure and financial results of telecommunication services depend on the legal, financial and accounting framework within which the telecommunication services are operated in each country.

7.1 to 7.5 *Income*

Income consists of all telecommunication revenue earned during the financial year under review. This may include income from subscribers, other national and foreign telecommunication Administrations, governments, etc., after deduction of the share of this income to be paid to other Administrations or organizations for outgoing telecommunication traffic (Administrations of the incoming and possibly transit countries).

It does not, however, include monies received in respect of revenue earned during previous financial years, neither does it include monies received by way of loans from governments, investors or money markets, nor monies received from repayable subscribers' contribution or deposits.

7.6 *Total current expenditure for all telecommunication services*

Generally speaking, the total disbursements should be broken down into capital expenditure for investments and current expenditures. The investment concept is explained in the paragraphs which follow.

Current expenditure means expenditure other than investments; it consequently refers to the running of telecommunication services on an annual basis and comprises, for instance the elements mentioned below under §§ 7.6.1 to 7.6.5:

7.6.1 *Operational expenditure*

- on salaries, etc. of operational staff, cost of material for operational purposes, etc.,
- labour and material costs of maintenance and repair of the existing system.

7.6.2 *Depreciation*

Depreciation means the financial charge made in the year for the loss of value of installed equipment and is normally calculated on hypotheses based on the useful life of the different categories of equipment.

7.6.3 *Interest*

Interest refers to the financial year for loans associated with fixed and current assets.

7.6.4 *Taxes*

Taxation refers to taxes on the Administration's income, expenditure, profit or capital (e.g. corporation tax, income tax, excise taxes, non-recoverable VAT and local land taxes) raised by central or local government. This item does not include pay-related (e.g. social) taxes.

7.6.5 *Other expenditure*

"Other expenditure" means current expenditure which cannot be regarded as connected with operation, depreciation, interest or taxation. (N.B. It does not include expenditure on capital items.)

8 Investments (annual gross construction expenditure) on telecommunication services

The term "investments" generally means the expenditure associated with acquiring the ownership of property and plant. These include expenditure on initial installations and on additions to existing installations where the usage is expected to be over an extended period of time.

A distinction must be made between gross investment and net investment (after deduction of depreciation). It proved impossible to apply the concept of net investment, because of the considerable differences in the interpretation of the concept of depreciation in the telecommunication sector.

9 Comparative ratios

9.1 Item 1.1.2/Item 6.1 expressed in %.

9.2 Item 1.1.1/Item 6.1 expressed in %.

9.3 Item 8.1/Item 6.3 expressed in ‰.

9.4 Item 8.1/Item 6.4 expressed in ‰.

Recommendation C.3

INSTRUCTIONS FOR INTERNATIONAL COMMUNICATION SERVICES

The CCITT,

considering

(a) Resolutions Nos. 1 and 3 of the World Administrative Telegraph and Telephone Conference (Geneva, 1973) concerning the *Instructions for the Operation of the International Public Telegram Service* and *Telex Operation and Tariff Principles*, respectively.

(b) that Article 26 of the Radio Regulations (Geneva, 1979) requires the *Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services* to contain the Instructions for the International Public Telegram Service and the International Telephone Service;

(c) that, in the draft *International Telecommunication Regulations* submitted by the CCITT for consideration at the World Administrative Telegraph and Telephone Conference (Melbourne, 1988), Article 1 refers to the need to comply with Recommendations and Instructions, while not implying that they have the same legal status as Regulations;

(d) that, in the same draft Regulations, *Instructions* are defined as consisting of provisions from a CCITT Recommendation or Recommendations dealing with practical operating procedures for the handling of telecommunication traffic (e.g. acceptance, transmission, accounting);

(e) that, provisions to be designated as Instructions are so designated for one or more of the following reasons:

- their observance on a world-wide basis is of particular importance for the orderly and efficient operation of the international telecommunication service(s) concerned;
- it may be convenient to publish them as a separate booklet for use by operators;
- the provisions (or subsequent amendments to them) may need to enter into effect at a specified time throughout the world;

unanimously declares the view

(1) that Administrations should apply the detailed operational procedures laid down in the Instructions, which are constitued as shown in Table 1/C.3 below;

(2) that when modifications are made to the text of Instructions, the Plenary Assembly approving them should also indicate the date of their entry into force, in order to facilitate their world-wide observance in a coordinated manner. In setting this date, due account should be taken of the time required for the publication of the modifications, as well as for their distribution to the operation services concerned.

TABLE 1/C.3

Service	Recommendations	Relevant sections
International telephone service	E.141	All
International public telegram service	F.1, F.42, D.40, D.42, D.43, D.98	All
International telex service	F.60, F.61, F.67	All
Maritime mobile services	F.110/E.200, D.90	All

PART V

LIST OF ABBREVIATIONS AND ACRONYMS

A	Additional *(Series F, X)*
A	Availability *(Series G)*
A-A	Analogue-analogue *(Series O)*
A-D	Analogue-digital *(Series O)*
AAIC	Accounting authority identification code *(Series D, E, F)*
AAR	Automatic alternative routing *(Series E)*
AARE	A-ASSOCIATE-RESPONSE application-protocol-data-unit *(Series X)*
AARQ	A-ASSOCIATE-REQUEST application-protocol-data-unit *(Series X)*
A/B	Answerback *(Series F, T)*
ABDS	Adaptative break-in differential sensitivity *(Series G)*
ABM	Asynchronous balanced mode *(Series T)*
ABR	Answer bid ratio *(Series Q)*
ABRT	A-ABORT application-protocol-data-unit *(Series X)*
AC	Application channel *(Series H)*
AC	Application context *(Series X)*
ACA PPDU	Alter context acknowledge PPDU *(Series X)*
ACB	Access barred signal *(Series Q)*
ACC	Automatic congestion control *(Series E, Q)*
ACCH	Associated control channel *(Series Q)*
ACE	Automatic calling equipment *(Series S)*
ACK	Acknowledge *(Series T)*
ACK	Acknowledgement *(Series Q)*
ACM	Address complete message *(Series Q)*
ACPM	Association control protocol machine *(Series X)*
AC PPDU	Alter context PPDU *(Series X)*
ACSE	Association control service element *(Series T)*
ACU	Acknowledgement signal unit *(Series Q)*
ADC	Address complete signal, charge *(Series Q)*
ADC	Analogue-to-digital converter *(Series P)*
ADDMD	Administration directory management domain *(Series F, X)*
ADI	Address incomplete signal *(Series Q)*
ADM	Adaptive delta modulation *(Series P)*
ADM	Asynchronous disconnected mode *(Series T)*
ADMD	Administration management domain *(Series F, X)*
ADN	Address complete signal, no charge *(Series Q)*
ADP	Answerer detection pattern *(Series V)*
ADPCM	Adaptive differential pulse code modulation *(Series E, G, P, Q)*
ADPFH	Average of daily peak full hour *(Series E)*
ADPH	Average daily peak hour *(Series E)*
ADPQH	Average of daily peak quarterly defined hour *(Series E)*
ADU	Attenuation distortion unit *(Series P)*
ADX	Address complete signal, coin box *(Series Q)*
AE	Application entity *(Series Q, X)*
AE	Associated equipments *(Series F)*
AEF	Address extension facility *(Series X)*
AEF	Address extension field *(Series I)*
AERM	Alignment error rate monitor *(Series Q)*
AES	Aircraft earth station *(Series Q)*
AF	Address field *(Series I, X)*
AFC	Address-complete signal, subscriber-free, charge *(Series Q)*
AFI	Authority and format identifier *(Series I, Q, X)*
AFN	Address-complete signal, subscriber-free, no charge *(Series Q)*
AFX	Address-complete signal, subscriber-free, coin-box *(Series Q)*
AGF	Additional global functions *(Series I)*
AHLF	Additional high layer function *(Series I)*
Ai	Action indicator *(Series Q)*
AI	Articulation index *(Series P)*
AIS	Alarm indication signal *(Series G, I, M, O, X)*
AK	Data acknowledgement *(Series X)*
AK TPDU	Data acknowledge TPDU *(Series X)*
AL	Local acknowledge time *(Series X)*
ALLF	Additional low layer function *(Series I)*
ALP	Abstract local primitive *(Series X)*
AMI	Alternate mark inversion *(Series O)*
AMVFT	Amplitude-modulated voice-frequency telegraph *(Series R)*
ANC	Answer signal, charge *(Series Q)*
ANN	Answer signal, no charge *(Series Q)*
ANU	Answer signal, unqualified *(Series Q)*
AOC	Advice of charge *(Series I)*
AP	Application-process *(Series X)*
APB	Active position backward *(Series T)*
APC	Adaptive predictive coding *(Series E, Q)*
APCI	Application-protocol-control-information *(Series X)*
APD	Active position down *(Series T, X)*
APDU	Application protocol data unit *(Series T, X)*
APF	Active position forward *(Series T)*
APH	Active position home *(Series T)*
APL	Average picture level *(Series N)*
APR	Active position return *(Series T, X)*
APS	Automatic protection switching *(Series G)*
APU	Active position up *(Series T)*

AR	Remote acknowledge time *(Series X)*
ARF	Alternative routing from *(Series E)*
ARIMA	Autoregressive integrated moving average *(Series E)*
ARM	Asynchronous response mode *(Series Q)*
ARMA	Autoregressive moving average *(Series E)*
ARP PPDU	Abnormal release provider PPDU *(Series X)*
ARQ	Automatic repeat request *(Series T)*
ARR	Automatic rerouting *(Series E)*
ART	Alternative routing to *(Series E)*
ARU PPDU	Abnormal release user PPDU *(Series X)*
ASD	Adverse state detector *(Series V)*
ASE	Application-service-element *(Series Q)*
ASN.1	Abstract syntax notation one *(Series Q, T, X)*
ASP	Abstract service primitive *(Series X)*
ASP	Assignment source point *(Series Q)*
ASR	Answer seizure ratio *(Series E)*
ATC	Additional trunk capacity *(Series E)*
ATIC	Time assignment with sample interpolation *(Series G)*
ATM	Asynchronous transfer mode *(Series G, I)*
ATME	Automatic transmission measuring and signalling testing equipment *(Series M, Q)*
ATME	Automatic transmission measuring equipment *(Series M)*
ATS	Air traffic services *(Series Q)*
AU	Access unit *(Series F, Q, T, X)*
AU	Administrative unit *(Series G)*
AU PTR	Administrative unit pointer *(Series G)*
AVA	Attribute value assertion *(Series X)*
AWW	Approximative Wilkinson Wallstrom *(Series E)*
B-ISDN	Broadband aspects of integrated services digital network *(Series I)*
BA	Block address *(Series H)*
BAC	Balanced asynchronous class *(Series V)*
BAC	Block-acknowledged counter *(Series Q)*
BAS	Bit-rate alloction signal *(Series G, H)*
BASN	Block-acknowledged sequence number *(Series Q)*
BBR	Blocked by reception of the blocking signal *(Series Q)*
BBS	Blocked by sending the blocking signal *(Series Q)*
BC	Bearer capability *(Series Q, T, V)*
BC	Buffer control *(Series H)*
BCC	Basic connection components *(Series I)*
BCC	Block-completed counter *(Series Q)*
BCCH	Broadcast control channel *(Series Q)*
BCD	Binary coded decimal *(Series O, Q)*
BCH	Bose, Chaudhuri and Hocquengham *(Series H)*
BCSN	Block-completed sequence number *(Series Q)*
BCUG	Bilateral closed user group *(Series X)*
BCUGOA	Bilateral closed user group with outgoing access *(Series X)*
BEL	Bell *(Series T)*
BER	Bit error rate *(Series G)*
BER	Bit error ratio *(Series G, M, O, Q)*
BGF	Basic global functions *(Series I)*
BHCA	Busy hour call attempts *(Series E)*
BHLF	Basic high layer function *(Series I)*
BIB	Backward indicator bit *(Series Q)*
BIC	Bearer identification code *(Series X)*
BIP	Bit interleaved parity *(Series G)*
BITE	Backward interworking telephone event *(Series Q)*
BLA	Blocking-acknowledgement signal *(Series Q)*
BLER	Block error rates *(Series G)*
BLLF	Basic low layer function *(Series I)*
BLO	Blocking signal *(Series Q)*
BLR	Blocking and unblocking signal reception *(Series Q)*
BLS	Blocking and unblocking signal sending *(Series Q)*
BM	Buffer memory *(Series H)*
BMU	Basic measurement unit *(Series T)*
BNF	Backus Naur form *(Series Z)*
BPH	Break permitted here *(Series T)*
BPSK	Binary phase-shift keying *(Series Q)*
BRC	Background revision control *(Series H)*
BS	Backspace *(Series T, X)*
BS	Base station *(Series Q)*
BSI	Bit sequence independence *(Series H)*
BSM	Backward set-up message *(Series Q)*
BSN	Backward sequence number *(Series Q)*
BSNR	Backward sequence number received *(Series Q)*
BSNT	Backward sequence number of next SU to be transmitted *(Series Q)*
BSU	Bearer switchover unit *(Series R)*
BT	Bridged taps *(Series G)*
BUC	Background update control *(Series H)*
B3ZS	Bipolar with three-zero substitution *(Series G)*
C	Conditional/consumer *(Series T)*
CA	Certification authority *(Series X)*
CA	Contractual agreement *(Series F, X)*
CAD	Call acceptance delay *(Series X)*
CAI	Charge advice information *(Series Q)*
CAM	Call accepted message *(Series X)*
CAN	Cancel *(Series T)*
CAS	Channel associated signalling *(Series G)*
CASE	Common application service elements *(Series T)*
CB1-3	Clear-back signal No. 1-No. 3 *(Series Q)*
CBA	Changeback acknowledgement signal *(Series Q)*
CBD	Changeback declaration signal *(Series Q)*
CBK	Clear-back signal *(Series Q)*
CBNV	Code bit number variation *(Series T)*
CBO	Continuous bit stream oriented *(Series I)*
CC	Call connected *(Series X)*

CC	Call control *(Series Q)*
CC	Character code *(Series T)*
CC	Clearing cause *(Series T)*
CC	Connection confirm *(Series X)*
CC	Continuity-check *(Series Q)*
CC	Country code *(Series E, Q, X)*
CCA	Call control agent *(Series Q)*
CCA	Character content architecture *(Series T)*
CCBS	Completion of calls to busy subscribers *(Series E, I)*
CCCH	Common control channel *(Series Q)*
CCF	Continuity-failure signal *(Series Q)*
CCH	Continuity-check indicator *(Series Q)*
CCH	Control channel *(Series Q)*
CCI	Continuity-check incoming *(Series Q)*
CCL	Calling party clear signal *(Series Q)*
CCM	Circuit supervision message *(Series Q)*
CCO	Continuity-check outgoing *(Series Q)*
CCP	Call confirmation protocol *(Series X)*
CCR	Commitment concurrency and recovery *(Series X)*
CCR	Continuity-check-request signal *(Series Q)*
CCS	Common channel signalling *(Series E, I, Q)*
CCSN	Common channel signalling network *(Series I, X)*
CCSS	Common channel signalling systems *(Series M)*
CCT	Telephone circuit *(Series Q)*
CC TPDU	Connection confirm TPDU *(Series X)*
CD	Call deflection *(Series I, Q)*
CDC	Command document continue *(Series T, U)*
CDCL	Command document capability list *(Series T)*
CDD	Command document discard *(Series T)*
CDE	Command document end *(Series T)*
CDI	Called line identity *(Series X)*
CDLI	Called line identity *(Series E, Q)*
CDPB	Command document page boundary *(Series T)*
CDR	Command document resynchronize *(Series T)*
CDS	Command document start *(Series T, U)*
CDT	Credit *(Series X)*
CDUI	Command document user information *(Series T)*
CE	Connection element *(Series I)*
CED	Called station identification *(Series T)*
CEI	Connection endpoint identifier *(Series Q)*
CELTIC	Concentrateur exploitant les temps d'inoccupation des circuits *(Series G)*
CES	Coast earth station *(Series E, M, U)*
CES	Connection endpoint suffix *(Series Q)*
CESA	Coast earth station assignment *(Series Q)*
CESDL	Coast earth station low speed data *(Series Q)*
CESI	Coast earth station interstation *(Series Q)*
CEST	Coast earth station telex *(Series Q)*
CF	Conversion facility *(Series F, S, T, U)*
CF	Formatted content architecture levels *(Series T)*
CFB	Call forwarding busy *(Series I, Q)*
CFL	Call-failure signal *(Series Q)*
CFNR	Call forwarding no reply *(Series I, Q)*
CFP	Formatted processable content architecture levels *(Series T)*
CFR	Confirmation to receive *(Series T)*
CFU	Call forwarding unconditional *(Series I, Q)*
CGC	Circuit group congestion *(Series E, Q)*
CGC	Circuit group control *(Series Q)*
CGM	Computer graphics metafile *(Series T)*
CGRR	Circuit group reset receipt *(Series Q)*
CGRS	Circuit group reset sending *(Series Q)*
CHAR	Character *(Series T)*
CHG	Charging message *(Series Q)*
CHM	Changeover and changeback messages *(Series Q)*
CI	Command identifier *(Series T)*
CI	Concatenation indication *(Series G)*
CIC	Circuit identification code *(Series M, Q, X)*
CIG	Calling subscriber identification *(Series T)*
CIGRE	International conference on large high voltage electric systems *(Series K)*
CIL	Call identification line *(Series T)*
CIR	Calling-line-identity-request *(Series Q)*
CISPR	International special committee on radio interference *(Series G, K)*
CK	Check bits *(Series Q)*
CL1	Congestion level 1 *(Series E)*
CL	Control channel of the line system *(Series G)*
CLCD	Clear confirmation delay *(Series X)*
CLF	Clear-forward signal *(Series Q)*
CLI	Calling line identification *(Series X)*
CLI	Calling line identity *(Series E, Q, X)*
CLI	Command length indicator *(Series T)*
CLIP	Calling line identification presentation *(Series I, Q)*
CLIR	Calling line identification restriction *(Series I, Q)*
CLR	Circuit loudness rating *(Series G)*
CLRD	Clear request delay *(Series X)*
CM	Conditional mandatory parameter *(Series T)*
CMB	CRC message block *(Series G)*
CMC	CUG management center *(Series Q)*
CME	Circuit multiplication equipment *(Series Q)*
CME	Connection management entity *(Series Q)*
CMI	Coded mark inversion *(Series G, H)*
CMI	Coding method identifier *(Series T)*
CMIP	Common management information protocol *(Series Q)*
CMR	Common-mode rejection *(Series O)*
CMS	Circuit multiplication system *(Series M, O)*
CMS	Colour/monochrone state *(Series H)*
CNG	Calling tone *(Series T)*
CNIC	Clearing network identification code *(Series E, X)*
CNM	Circuit network management message group *(Series Q)*

CNP	Connection-not-possible signal *(Series Q)*
CNS	Connection-not-successful signal *(Series Q)*
COA	Changeover acknowledgement signal *(Series Q)*
CODLS	Connection-mode data link service *(Series X)*
COF	Confusion signal *(Series Q)*
COLP	Connected line identification presentation *(Series I, Q)*
COLR	Connected line identification restriction *(Series I, Q)*
COMSAT	Communications Satellite Corp. *(Series G)*
CONF	Conference calling *(Series I)*
CONS	Connection-mode network service *(Series X)*
COO	Changeover order signal *(Series Q)*
COR	Confirmation of receipt *(Series X)*
COT	Class of traffic *(Series U, X)*
COT	Continuity signal *(Series Q)*
COTC	Class-of-traffic-check *(Series U)*
COV	Changeover signal *(Series Q)*
CP	Call progress *(Series T, X)*
CP	Processable content architecture levels *(Series T)*
CPA PPDU	Connect presentation accept PPDU *(Series X)*
CPC	Call processing control *(Series Q)*
CPE	Customer premises equipment *(Series E)*
CP PPDU	Connect presentation PPDU *(Series X)*
CPR PPDU	Connect presentation reject PPDU *(Series X)*
CPS 1	Candidate protocol suite No. 1 *(Series G)*
CPT	Compatibility tests *(Series Q)*
CR	Carriage return *(Series T, X)*
C/R	Command/response bit *(Series Q, V)*
CR	Connection request *(Series X)*
CRC	Cyclic redundancy check *(Series G, O, Q, V)*
CRE	Corrected reference equivalent *(Series G, P)*
CRED	Credit card calling *(Series I)*
CRF	Connection related functions *(Series I)*
CRI	Continuity-recheck incoming *(Series Q)*
CRL	Coded run lengths *(Series T)*
CRN	Checkpoint reference number *(Series T)*
CRO	Continuity-recheck outgoing *(Series Q)*
CRP	Call request packet *(Series E)*
CRP	Command repeat *(Series T)*
CRS	Circuit reset *(Series Q)*
CR TPDU	Connection request TPDU *(Series X)*
CS	Circuit switched *(Series I, X)*
CS	Clear screen *(Series T, X)*
CSA	Command session abort *(Series T)*
CSC	Circuit supervision control *(Series Q)*
CSC	Control signalling code *(Series R, U, X)*
CSCC	Command session change control *(Series T)*
CSDN	Circuit switched data networks *(Series U)*
CSE	Command session end *(Series T)*
CSI	Called subscriber identification *(Series T)*
CSI	Control sequence introducer *(Series T)*
CSM	Call set-up message *(Series Q)*
CSM	Call supervision message *(Series Q)*
CSMA	Carrier sense multiple access *(Series G)*
CSO	Cold-start-only *(Series G)*
CSPDN	Circuit switched public data network *(Series E, F, I, Q, T, X)*
CSRE	Corrected send reference equivalent *(Series G, Q)*
CSS	Command session start *(Series T)*
CSS	Connection-successful signal *(Series Q)*
CSSN	Circuit state sequence number *(Series Q)*
CSUI	Command session user information *(Series T)*
CT	(international) transit centre *(Series M, Q)*
CT	Call transfer *(Series I)*
CTC	Continue to correct *(Series T)*
CTCR	Complaint-to-completion ratio *(Series E)*
CTD	Cumulative transit delay *(Series X)*
CTR	Response for continue to correct *(Series T)*
CUG	Closed user group *(Series E, F, I, Q, T, X)*
CUG/OA	Closed user group with outgoing access *(Series X)*
CW	Call waiting *(Series I)*
D-A	Digital-analogue *(Series O)*
D-bit	Delivery confirmation bit *(Series X)*
D-D	Digital-digital *(Series O)*
D-W	Durbin-Watson *(Series E)*
DA	Demand assignment *(Series M, Q)*
DA	Digital access *(Series M)*
DAEDR	Delimitation, alignment, error detection (reception) *(Series Q)*
DAEDT	Delimitation, alignment, error detection (transmitting) *(Series Q)*
DAP	Directory access protocol *(Series X)*
DATAM	Document architecture transfer and manipulation *(Series T)*
DB	Document bulk transfer class *(Series T)*
DBM	Document bulk transfer and manipulation class *(Series T)*
DC1	Device control one *(Series T)*
DC	Disconnect confirm *(Series X)*
DCC	Data country code *(Series F, X)*
DCCH	Dedicated control channel *(Series Q)*
DCE	Data circuit-terminating equipment *(Series Q, S, V, X)*
DCF	Data communications function *(Series M)*
DCM	Digital circuit multiplication *(Series I)*
DCME	Digital circuit multiplication equipment *(Series E, G, P, Q)*
DCMG	DCME gain *(Series G)*
DCMS	Digital circuit multiplication systems *(Series G)*
DCN	Data communication network *(Series Q)*
DCN	Disconnect *(Series T)*
DCP	Data coordinating point *(Series M)*
DCR	Degradation category rating *(Series P)*
DCS	Defined context set *(Series X)*

DCS	Digital command signal *(Series T)*
DCS	Digital crossconnect system *(Series M)*
DC TPDU	Disconnect confirm TPDU *(Series X)*
DD	Destination reference *(Series T)*
DDA	Defined display area *(Series T)*
DDI	Direct dialling-in *(Series E, F, I, Q)*
DDR	Demand refresh confirmation information *(Series H)*
DEL	Delete *(Series T)*
DES	Digital echo suppressors *(Series G)*
DIB	Directory information base *(Series F, X)*
DIS	Digital identification signal *(Series T)*
DISC	Disconnect *(Series G, Q, T, V, X)*
DIT	Directory information tree *(Series X)*
DIV	Data-in-voice *(Series G)*
DL	Distribution list *(Series F, X)*
DLC	Data-link-connection *(Series X)*
DLC	Dynamic load control *(Series G)*
DLC	Signalling-data-link-connection-order signal *(Series Q)*
DLCI	Data link connection identifier *(Series I, Q, V)*
DLE	Data link escape *(Series T)*
DLL	Data link layer *(Series X)*
DLL	Digital local line *(Series G)*
DLM	Dynamic linear models *(Series E)*
DLM	Signalling-data-link-connection-order message *(Series Q)*
DLS	Data link service *(Series X)*
DLSAP	Data-link-service-access-point *(Series X)*
DLSDU	Data-link-service-data-unit *(Series X)*
DLT	Down-loading termination procedure *(Series T)*
DM	Degraded minutes *(Series M, Q)*
DM	Disconnected mode *(Series G, Q, V, X)*
DM	Document manipulation class *(Series T)*
DMA	Deferred maintenance alarm *(Series M)*
DMD	Directory management domain *(Series F, X)*
DMOS	Degradation mean opinion store *(Series P)*
DMUX	Demultiplexer *(Series G)*
DN	Delivery status notification *(Series T)*
DN	Directory number *(Series I)*
DNI	Digital non-interpolated *(Series Q)*
DNIC	Data network identification code *(Series E, F, Q, X)*
DOV	Data-over-voice *(Series G)*
DP	Decadic pulsing *(Series Q)*
DP	Dial pulse *(Series I)*
DP	Dot pattern *(Series T)*
DPC	Destination point code *(Series M, Q, X)*
DPE	Document protocol element *(Series T)*
DPN	Digital path not provided signal *(Series Q)*
DR	Demand refresh request information *(Series H)*
DR	Destination reference *(Series T)*
DR	Direct routed *(Series E)*
DR	Disconnect request *(Series X)*
DRCS	Dynamically redefinable character set *(Series F, T)*
DRM	Demand refresh mode *(Series H)*
DRN	Document reference number *(Series T)*
DRPF	Decimal reference publication format *(Series X)*
DRR	Demand refresh request *(Series H)*
DRS	Digital reference sequence *(Series G, Q)*
DR TPDU	Disconnect request TPDU *(Series X)*
DS	Digital section *(Series G)*
DS	Document storage *(Series T)*
DSA	Directory system agent *(Series F, X)*
DSE	Data switching exchange *(Series D, X)*
DSE	Distributed single layer embedded testmethod *(Series X)*
DSI	Digital speech interpolation *(Series E, G, I, Q)*
DSI	Digit sequence integrity *(Series I)*
DSP	Digital signal processor *(Series Q)*
DSP	Directory system protocol *(Series X)*
DSP	Domain specific part *(Series I, X)*
DSS1	Digital subscriber Signalling System No.1 *(Series Q)*
DST-REF	Destination reference *(Series X)*
DT	Data *(Series X)*
DTAM	Document transfer and manipulation *(Series T)*
DTC	Digital transmit command *(Series T)*
DTE	Data terminating equipment *(Series E, I, Q, S, V, X)*
DTMF	Dual tone multi-frequency *(Series G, I, Q)*
DTP	Data transfer part *(Series I)*
DTS	Digital test sequence *(Series P)*
DTS	Digital transmission system *(Series G)*
DT TPDU	Data TPDU *(Series X)*
DUA	Directory user agent *(Series F, T, X)*
DUP	Data User Part *(Series Q, X)*
DXE	Either a DTE or a DCE *(Series X)*
E	Essential *(Series F, X)*
EA	Expedited data acknowledgment *(Series X)*
EA	Extended address field bit *(Series Q)*
EAD	Extended addressing (called) *(Series T)*
EAG	Extended addressing (calling) *(Series T)*
EARS	Electro-acoustic rating system *(Series P)*
EA TPDU	Expedited acknowledge TPDU *(Series X)*
EBCDIC	Extended binary coded decimal interchange code *(Series D)*
EC	Echo cancellers *(Series G)*
EC	Equivalent capacity *(Series E)*
ECA	Emergency changeover acknowledgement *(Series Q)*
ECG	Electro-cardiogram *(Series V)*
ECH	Echo cancellation *(Series G)*
ECM	Emergency changeover message *(Series Q)*
ECO	Emergency changeover order *(Series Q)*
ECT	Echo cancellation technique *(Series V)*

ECTS	Echo canceller testing system *(Series M, O)*
ED	Expedited data *(Series X)*
ED-TPDU-NR	ED TPDU number *(Series X)*
EDN	Expedited data negotiation *(Series X)*
ED TPDU	Expedited data TPDU *(Series X)*
EETDN	End-to-end transit delay notification *(Series T, X)*
EF	Elementary function *(Series I)*
EFdS	Error-free decisecond *(Series X)*
EFS	Error-free seconds *(Series Q, X)*
EGC	Enhanced group call *(Series F)*
EH	External host *(Series T)*
EI	Exchange identification *(Series V)*
EIA	Electronic Industries Association *(Series G)*
EID	End point identifier *(Series I)*
EIR	Equipment identity register *(Series Q)*
EIT	Encoded information type *(Series F, X)*
ELD	Extended scan line description *(Series T)*
ELR	Expected maximum transit delay local-to-remote *(Series X)*
ELT	Emergency-load-transfer signal *(Series Q)*
EM	End mark *(Series T)*
EM	End of medium *(Series T)*
EMI	Electro-magnetic interference *(Series G)*
ENQ	Enquiry *(Series T)*
ENSDU	Expedited Network-service-data-unit *(Series X)*
EOA	End of address *(Series F)*
EOB	End of block marker *(Series H)*
EOC	Embedded operations channel *(Series G)*
EOC	End-of-cluster *(Series H)*
EOC	End-of-contents *(Series Q)*
EOCS	End office connections study *(Series G)*
EOFB	End-of-facsimile block *(Series T)*
EOI	End of input *(Series F, T, U)*
EOL	End-of-line *(Series T)*
EOM	End-of-message *(Series F, T, U)*
EOP	End-of-procedures *(Series T)*
EOR	End of retransmission *(Series T)*
EOS	End-of-selection *(Series U, X)*
EOSR	End of status request signal *(Series U)*
EOT	End of transaction *(Series U)*
EOT	End of transmission *(Series T)*
EOT	End of TSDU mark *(Series X)*
EP	Executive process *(Series I)*
EPR	Earth potential rise *(Series K)*
ER	Error *(Series X)*
ERL	Expected maximum transit delay remote-to-local *(Series X)*
ERP	Ear reference point *(Series P)*
ERR	Response for end of retransmission *(Series T)*
ERT	Equivalent random traffic *(Series E)*
ES	Echo suppressors *(Series G)*
ES	Errored seconds *(Series M)*
ESC	Escape *(Series T)*
ESF	Extended superframe format *(Series O)*
ESTS	Echo suppressor testing system *(Series O)*
ESU	Exchange signalling unit *(Series Q)*
ET	Exchange terminal *(Series G)*
ET	Exchange termination *(Series I, Q)*
ETB	End of transmission block *(Series T)*
ETR	Easy to reach *(Series E, Q)*
ETX	End of text *(Series T)*
EUM	Extended-unsuccessful-backward set-up information message indication *(Series Q)*
EUT	Equipment under test *(Series O)*
F	Final bit *(Series T)*
F	Flag *(Series Q)*
FA	Frame alignment *(Series H)*
FAM	Forward-address message *(Series Q)*
FAS	Frame alignment signal *(Series G, H, I, O)*
FAW	Frame alignment word *(Series H)*
FC	Fault condition *(Series I)*
FC	Functional components *(Series I)*
FCD	Facsimile coded data *(Series T)*
FCF	Facsimile control field *(Series T)*
FCM	Signalling traffic flow control message *(Series Q)*
FCS	Frame check sequence *(Series Q, T, V, X)*
FDM	Frequency division multiplex *(Series Q)*
FDMA	Frequency-division multiple access *(Series Q)*
FDMH	Fixed daily measurement hour *(Series E)*
FDMP	Fixed daily measurement period *(Series E)*
FDT	Formal description technique *(Series X, Z)*
FE	Functional element *(Series G)*
FE	Functional entity *(Series Q)*
FEA	Functional entity action *(Series I, Q)*
FEBE	Far-end-block-error *(Series G)*
FEC	Forward error correction *(Series M, Q, X)*
FEE	Far-end error *(Series M)*
FERF	Far end receive failure *(Series G)*
FEXT	Far-end crosstalk *(Series G, Q)*
FF	Form feed *(Series T, X)*
FFR	Freeze frame request *(Series H)*
FFT	Fast Fourier transform *(Series P)*
FI	Format identifier *(Series V)*
FIB	Forward indicator bit *(Series Q)*
FIF	Facsimile information field *(Series T)*
FIFO	First in, first out *(Series E, P, X)*
FII	Failure indication information *(Series G)*
FISU	Fill-in signal unit *(Series Q)*
FITE	Forward interworking telephone event *(Series Q)*
FM1	Frame mode 1 *(Series H)*
FMEA	Fault modes and effect analysis *(Series E)*
FMECA	Fault modes, effects and criticality analysis *(Series E)*
FMVFT	Frequency-modulated voice frequency telegraph *(Series R)*
FOC	Factor of cooperation *(Series T)*
FOT	Forward-transfer signal *(Series Q)*

FPF	Facility parameter field *(Series X)*
FR	Frame reject *(Series V)*
FRC	Fault reporting centre *(Series N)*
FRMR	Frame reject *(Series G, Q, X)*
FRP	Field repetition *(Series H)*
FRS	Fundamental reference system *(Series P)*
FS	Figure-shift *(Series S)*
FS	Further study *(Series X)*
FSM	Forward set-up message *(Series Q)*
FSN	Forward sequence number *(Series Q)*
FST	Field start *(Series H)*
FTA	Fault tree analysis *(Series E)*
FTAM	File transfer access and management *(Series X)*
FTT	Failure to train *(Series T)*
FUR	Fast update request *(Series H)*
G3	Group 3 *(Series T, X)*
GAT	Group audio terminal *(Series P)*
GBSC	Group of blocks start code *(Series H)*
GC	Global control *(Series I)*
GC	Group command *(Series T)*
GCC	Graphic character composition *(Series T)*
GDCI	General data communications interface *(Series V)*
GES	Ground earth station *(Series Q)*
GF	Global functions *(Series I)*
G3Fax	Group 3 facsimile type *(Series X)*
GFI	General format identifier *(Series X)*
G. Fr.	Gold francs *(Series D)*
GGCA	Geometric graphics content architecture *(Series T)*
GGMV	Group of blocks global motion vector *(Series H)*
GI	Group identification *(Series T)*
GI	Group identifier *(Series T, V)*
GL	Group length *(Series V)*
GMSC	Gateway MSC *(Series Q)*
GMT	Greenwich Mean Time *(Series D, E, F)*
GN	Group number *(Series H)*
GOS	Grade of Service *(Series E, Q)*
GR	Graphic representation *(Series Z)*
GRA	Circuit group reset-acknowledgement message *(Series Q)*
GRM	Circuit group supervision message *(Series Q)*
GRQ	General request message *(Series Q)*
GRS	Circuit group reset message *(Series Q)*
GSM	General forward setup information message *(Series Q)*
GSM	Graphic size modification *(Series T)*
GSTN	General switched telephone network *(Series G, V)*
GT	Give token *(Series T)*
GT	Global title *(Series Q)*
HBA	Hardware failure oriented group blocking-acknowledgement message *(Series Q)*
HBUR	Hardware failure oriented circuit group blocking and unblocking receipt *(Series Q)*
HBUS	Hardware failure oriented circuit group blocking and unblocking sending *(Series Q)*
HDB2	High density bipolar of order 2 *(Series G)*
HDB3	High density bipolar of order 3 *(Series O)*
HDLC	High level data link control *(Series Q, V, X)*
HDRC	Hypothetical digital reference connection *(Series E, I)*
HDTM	Half-duplex transmission module *(Series T)*
HF	High frequency *(Series K)*
HFT	Hands-free telephone *(Series P)*
HGB	Hardware failure oriented group blocking message *(Series Q)*
HGU	Hardware failure oriented group unblocking message *(Series Q)*
HLC	High layer compatibility *(Series E, I, Q, T)*
HLF	High layer function *(Series I)*
HLL	Half-loop loss *(Series G)*
HLR	Home location register *(Series E, Q)*
HMCG	Signalling link congestion *(Series Q)*
HMDC	Message discrimination *(Series Q)*
HMDT	Message distribution *(Series Q)*
HMRT	Message routing *(Series Q)*
HP	High pass *(Series G)*
HPB	Character position backward *(Series T)*
HPLMN	Home public land mobile network *(Series D, Q)*
HPR	Character position relative *(Series T)*
HR	Hypothetical reference *(Series G)*
HRC	Hypothetical reference circuit *(Series G, H, P)*
HRDL	Hypothetical reference digital link *(Series G)*
HRDP	Hypothetical reference digital path *(Series G)*
HRDS	Hypothetical reference digital section *(Series G, M)*
HRPF	Hexadecimal reference publication format *(Series X)*
HRX	Hypothetical reference connection *(Series E, G, I, M)*
HSD	High speed data *(Series E)*
HSD	Honestly significant difference *(Series P)*
HSRC	Hypothetical signalling reference connection *(Series Q)*
HT	Horizontal tabulation *(Series T, X)*
HTR	Hard-to-reach *(Series E, F, Q)*
HUA	Hardware failure oriented group unblocking acknowledgement message *(Series Q)*
I	Information *(Series G, Q, V, X)*
IA	Incoming access *(Series X)*
IA	International alphabet *(Series X)*
IA5	International Alphabet No. 5 *(Series Q, R, T, V)*
IAC	Initial alignment control *(Series Q)*
IACK	Service acknowledgement signal *(Series U)*
IAEA	International Atomic Energy Agency *(Series K)*
IAI	Initial address message with additional information *(Series Q)*

IAM	Initial address message *(Series E, I, Q)*
I/C	Incoming *(Series L)*
IC	Interlock code *(Series E, X)*
ICB	Incoming calls barred *(Series X)*
ICC	Incoming trunk circuit *(Series Q)*
ICCM	Interworking by call control mapping *(Series X)*
ICD	International code designator *(Series X)*
ICN	International CUG number *(Series Q)*
ICS	Identification of character set *(Series T)*
ID	Identification *(Series E, T)*
ID	Identity *(Series Q, T)*
IDC	Insulation displacement connection *(Series L)*
IDD	International direct dialling *(Series E)*
IDI	Initial domain identifier *(Series I, X)*
IDN	Integrated digital network *(Series I, Q)*
IDP	Initial domain part *(Series I, X)*
IDS	Interworking data syntax *(Series T)*
IDSE	International data switching exchange *(Series I, X)*
IE	Information element *(Series Q, T)*
IEC	International Electrotechnical Commission *(Series K)*
IEEE	Institute of Electrical and Electronics Engineers *(Series P)*
IEV	International Electrotechnical Vocabulary *(Series P, S)*
IFM	Intraframe prediction mode *(Series H)*
IFS	International freephone service *(Series D)*
IFW	Inverted frame word *(Series G)*
IGS	Identify graphic subrepertoire *(Series T, X)*
IJ	Identifiction of justification *(Series H)*
ILIL	Input longitudinal interference loss *(Series G, O)*
IM	Interpersonal messaging *(Series X)*
IMA	Input message acknowledgement *(Series F, U)*
IMC	International maintenance centre *(Series E)*
IMDTC	International multiple destination television connection *(Series N)*
IMEI	International mobile equipment identity *(Series Q)*
IMF	International Monetary Fund *(Series D)*
IMSI	International mobile station identity *(Series E, Q)*
INF	Information message *(Series Q)*
INFO	Information element defined at the user network interface *(Series G)*
INIC	ISDN network identification code *(Series E, X)*
INMARSAT	International Maritime Satellite Organization *(Series E, F)*
INR	Information request message *(Series Q)*
I/O	Input/output *(Series F, X)*
IOC	Index of cooperation *(Series T)*
IODC	International operator direct calling *(Series E)*
IP	Interpersonal *(Series F, T, X)*
IPA	Interworking by port access *(Series X)*
IPBX	International PBX *(Series G)*
IPE	In-band parameter exchange *(Series I, V)*
IPM	Interpersonal messaging *(Series D, F, I, T, X)*
IPM-UA	Interpersonal messaging user agent *(Series T)*
IPMAS	Interpersonal messaging abstract *(Series T)*
IPME	Interpersonal messaging environment *(Series T)*
IPMS	Interpersonal messaging service *(Series U)*
IPMS	Interpersonal messaging system *(Series F, T, X)*
IPMS MS	Interpersonal messaging system message store *(Series X)*
IPMS UA	Interpersonal messaging system user agent *(Series X)*
IPN	Interpersonal notification *(Series T)*
IPP	International phototelegraph position *(Series E, F)*
IPP	Interrupted poisson process *(Series E)*
IRE	Institute of Radio Engineers *(Series H)*
IRQ	Interworking service request identifier *(Series U)*
IRS	Intermediate reference system *(Series P)*
IRV	International reference version *(Series T)*
IS1 (US)	Information separator one (unit separator) *(Series T)*
IS2 (RS)	Information separator two (record separator) *(Series T)*
IS3 (GS)	Information separator three (group separator) *(Series T)*
IS4 (FS)	Information separator four (file separator) *(Series T)*
ISC	International switching centre *(Series E, G, I, M, Q)*
ISCC	International service coordination centre *(Series M)*
ISDE	International data switching exchange *(Series X)*
ISDN	Integrated services digital network *(Series E, F, I, Q, X)*
ISDN-SN	ISDN subscriber number *(Series I)*
ISDN-UP	ISDN User Part *(Series Q)*
ISDN PRM	ISDN protocol reference model *(Series I)*
ISET	In-station-echo canceller tester *(Series M)*
ISET	In-station echo canceller test equipment *(Series O)*
ISL	Inter-satellite link *(Series G)*
ISMC	International switching maintenance centre *(Series M)*
ISO	International Organization for Standardization *(Series V, X)*
ISO	International Standard Organisation *(Series Q)*
ISP	Interactive session protocol *(Series T)*
ISP	Intermediate service part *(Series Q)*
ISP	International signalling point *(Series Q)*
ISPBX	Integrated services private branch exchange *(Series I)*

ISPC	International signalling point code *(Series M, Q)*
ISPC	International sound-programme centre *(Series D, M)*
ISTC	International satellite transmission centre *(Series N)*
ISTC	International switching and testing centre *(Series R)*
ISU	Initial signal unit *(Series Q)*
ISU	Instrument signalling unit *(Series Q)*
ISUP	ISDN User Part *(Series E, I)*
IT	Internetwork termination *(Series I)*
ITA	International telegraph alphabet *(Series X)*
ITA2	International Telegraph Alphabet No. 2 *(Series R, S, T, U, V)*
ITC	International television centre *(Series M, N)*
ITC	International transit centre *(Series G)*
ITD	Input transaction accepted for delivery *(Series U)*
ITMC	International transmission maintenance centre *(Series M)*
ITPC	International television-programme centre *(Series D)*
ITS	Insertion test signal *(Series N)*
IUT	Implementation under test *(Series X)*
IVC	International videoconference centre *(Series N)*
IWF	Interworking function *(Series E, I, Q, X)*
IWU	Interworking unit *(Series M, Q)*
J	Justification *(Series H)*
JFY	Justify *(Series T)*
JLR	Junction loudness rating *(Series P)*
JTM	Job transfer and manipulation *(Series X)*
L1	Level 1 *(Series Q)*
LA	Link acknowledgement *(Series V)*
LAN	Local area network *(Series I, Q, X)*
LAP	Link access procedure *(Series X)*
LAPB	Link access procedure – balanced *(Series Q, X)*
LAPB	Link access protocol – balanced *(Series Q, T)*
LAPD	Link access procedure on the D-channel *(Series Q)*
LC	Local control *(Series I)*
LC	Logical channel *(Series X)*
LCL	Longitudinal conversion loss *(Series G, I, K, O, Q, V)*
LCL	Longitudinal conversion ratio *(Series G)*
LCS	Line conditioning signals *(Series T)*
LCTL	Longitudinal conversion transfer loss *(Series G, K, O, Q)*
LD	Link disconnect *(Series V)*
LDE	Length exceeded indication *(Series U)*
LE	Listener echo loss *(Series G)*
LE	Local exchange *(Series E, I, Q)*
LELR	Listener echo loudness rating *(Series G)*
LF	Line feed *(Series T, X)*
LFA	Loss of frame alignment *(Series G)*
LFC	Local functional capabilities *(Series I)*
LH	Line hunting *(Series I)*
LH	Local host *(Series T)*
LI	Length indicator *(Series Q, T, X)*
LIFO	Last in, first out *(Series X)*
LIL	Longitudinal impedance ratio *(Series G)*
LLC	Logical link control *(Series G)*
LLC	Low layer compatibility *(Series I, Q, T, V)*
LLF	Low layer function *(Series I)*
LLI	Logical link identifier *(Series Q, V)*
LLSC	Link set control *(Series Q)*
LMD	Line mode data *(Series H)*
LME	Layer management entity *(Series Q)*
LMSI	Layer management service interface *(Series Q)*
LN	Link attention *(Series V)*
LNA	Link attention acknowledgement *(Series V)*
LOI	Listening opinion index *(Series P)*
LOL	Longitudinal output voltage *(Series G)*
LOS	Line-out-of-service signal *(Series Q)*
LP	Low pass *(Series G)*
LR	Link request *(Series V)*
LR	Loudness rating *(Series G, P)*
LRE	Low rate encoding *(Series G, I, P, Q)*
LRGP	Loudness rating guard ring position *(Series P)*
LS	Letter-shift *(Series S)*
LS	Line sync *(Series H)*
LSAC	Signalling link activity control *(Series Q)*
LSB	Least significant bit *(Series R)*
LSC	Line signalling channel *(Series Q)*
LSC	Link state control *(Series Q)*
LSDA	Signalling data link allocation *(Series Q)*
LSK	Line skip *(Series H)*
LSLA	Signalling link activation *(Series Q)*
LSLD	Signalling link deactivation *(Series Q)*
LSLR	Signalling link restoration *(Series Q)*
LSM	Line service marking *(Series I)*
LSSU	Link status signal units *(Series Q)*
LST	Line start *(Series H)*
LST	Loudspeaking telephone *(Series P)*
LSTA	Signalling terminal allocation *(Series Q)*
LSTR	Listener sidetone rating *(Series G, P)*
LSU	Lone signal unit *(Series Q)*
LT	Line termination *(Series I)*
LT	Link transfer *(Series V)*
LTA	Load-transfer-acknowledgement *(Series Q)*
LTC	Last trunk capacity *(Series E)*
LTC	Local telephone circuit *(Series P)*
LTL	Longitudinal transfer ratio *(Series G)*
LTP	Logical terminal profile *(Series I)*
LTR	Load-transfer signal *(Series Q)*
LTS	Local telephone system *(Series P)*
M	Mandatory *(Series T)*
M	Modem *(Series E)*
M	Modifier function bit *(Series Q)*

M-bit More data bit *(Series X)*

MAD Mean administrative delay *(Series E)*

MADT Mean accumulated down time *(Series E, Q)*

MAE Mean absolute error *(Series E)*

MAF Mode addition flag *(Series H)*

MAIDT Mean accumulated intrinsic down time *(Series Q)*

MAP Mobile Application Part *(Series Q)*

MART Mean active repair time *(Series E)*

MASE Message administration service element *(Series X)*

MATD Maximum acceptable transit delay *(Series X)*

MBA Maintenance oriented group-blocking-acknowledgement *(Series Q)*

MBS M-bit sequence *(Series X)*

MBS Multi-block synchronization *(Series Q)*

MBUR Maintenance oriented circuit group blocking and unblocking receipt *(Series Q)*

MBUS Maintenance oriented circuit group blocking and unblocking sending *(Series Q)*

MC Maintenance centre *(Series V)*

MC Message categories *(Series R)*

MCA Manual-changeover-acknowledgement *(Series Q)*

MCC Mobile country code *(Series Q)*

MCF Message confirmation *(Series T)*

MCI Malicious call identification *(Series I, Q)*

MCO Manual-changeover signal *(Series Q)*

MCU Multipoint conference unit *(Series G)*

MCU Multipoint control unit *(Series F, H)*

MD Management domain *(Series F, X)*

MD Mediation device *(Series G)*

MDF Main distribution frame *(Series K, L)*

MDL Communication between management entity and data link layer *(Series Q)*

MDSE Message delivery service element *(Series X)*

MDT Mean down time *(Series E)*

ME Maintenance entity *(Series I, M)*

ME Mean error *(Series E)*

MEA Maintenance entity assembly *(Series M)*

MEF Maintenance entity function *(Series M)*

MEI Maintenance event information *(Series M)*

MENL Maximum external noise level *(Series P)*

MF Mediation function *(Series M)*

MF Medium frequency *(Series K)*

MF Multi-frequency *(Series O, Q)*

MFC Multi-frequency code *(Series Q)*

MFCE Mode field concentricity error *(Series G)*

MFPB Multifrequency pushbutton *(Series E, Q)*

MGB Maintenance oriented group blocking message *(Series Q)*

MGT Mobile global title *(Series E)*

MGU Maintenance oriented group unblocking message *(Series Q)*

MH Message handling *(Series F, X)*

MHE Message handling environment *(Series X)*

MHS Message handling service *(Series I)*

MHS Message handling system *(Series F, X)*

MHS-SE Message handling system service element *(Series T)*

MIB Management information base *(Series Q)*

MID Maritime identificaiton digit *(Series E, F, U)*

MII Major industry identifier *(Series E)*

MJU Multipoint junction unit *(Series M)*

MLC Multilink control field *(Series X)*

MLD Mean logistic delay *(Series E)*

MLP Multilink procedure *(Series X)*

MM Mixed mode *(Series F, T)*

Mm Modem *(Series V)*

MMH Maintenance man-hours *(Series E)*

MML Man-machine language *(Series M, Z)*

MMM Multiunit network management and maintenance message *(Series Q)*

MNC Mobile network code *(Series Q)*

MNRU Modulated noise reference unit *(Series P)*

MNT Maintenance *(Series V)*

MOS Mean opinion score *(Series E, G, P)*

MPDU Message protocol data unit *(Series X)*

MPE Mean percent error *(Series E)*

MPR Misdialled trunk prefix *(Series Q)*

MPS Multipage signal *(Series T)*

MPX Multiplexer *(Series I)*

MRCC Maritime rescue coordination centre *(Series F)*

MRF Message-refusal signal *(Series Q)*

MRP Mouth reference point *(Series P)*

MRSE Message retrieval service element *(Series X)*

MRT Mean repair time *(Series E)*

MRTIE Maximum relative time interval error *(Series G)*

MRVA MTP routing verification acknowledgement *(Series Q)*

MRVR MTP routing verification result *(Series Q)*

MRVT MTP routing verification test *(Series Q)*

MS Message store *(Series F, T, X)*

MS Mobile station *(Series Q)*

MSB Most significant bit *(Series H, R)*

MSC Maritime switching centre *(Series E)*

MSC Mobile-service switching centre *(Series Q, U)*

MSC-A MSC with call control at handover *(Series Q)*

MSC-B MSC to which a handover is done *(Series Q)*

MSC-B' MSC to which a subsequent handover is done *(Series Q)*

MSDSE Mobile satellite data switching exchange *(Series X)*

MSE Maintenance sub-entitie *(Series M)*

MSIN Mobile station identity *(Series Q)*

MSN Multiple subscriber number *(Series I)*

MSS Maritime satellite service *(Series X)*

MSS Mobile satellite system *(Series X)*

MSSC Maritime satellite switching centre *(Series Q, S)*

MSSE Message submission service element *(Series X)*

MSU Message signal unit *(Series Q)*

MT Message transfer *(Series F, T, X)*

MTA Message transfer agent *(Series F, T, X)*

MTA Multi-protocol terminal adaptor *(Series I)*

MTA Multifunctional adaptor *(Series I)*

MTAS Message transfer abstract service *(Series T)*

MTBF Mean time between failures *(Series E, M, Q)*

MTCN Minimum throughput class negotiation *(Series X)*

MTE Message transfer event *(Series I)*

MTIE Maximum time interval error *(Series G)*

MTP Message Transfer Part *(Series M, Q, X)*

MTRS Mean time to restore service *(Series M)*

MTS Message transfer system *(Series F, T, X)*

MTSE Message transfer service element *(Series X)*

MTT Maritime test terminal *(Series M)*

MTTF Mean time to failure *(Series E, M)*

MTTFF Mean time to first failure *(Series E)*

MTTR Mean time to repair *(Series Q)*

MTTR Mean time to restoration *(Series E)*

MTTS Multitone test signal *(Series O)*

MU Multiple destination *(Series M)*

MUA Maintenance oriented group unblocking-acknowledgement message *(Series Q)*

MUM Multi-unit message *(Series Q)*

MUT Mean up-time *(Series E)*

MUT Multi-terminal *(Series T)*

MUX Multiplexer *(Series G)*

MVD Motion vector data *(Series H)*

N Network *(Series X, T)*

NA Network adapter *(Series I)*

NA Not applicable *(Series X)*

N/A Not applicable *(Series F, X)*

NACK Negative acknowledgement *(Series Q)*

NAE Network address extension *(Series X)*

NAK Negative acknowledge *(Series T)*

NAPI Numbering and addressing plan indicator *(Series X)*

NBH No break here *(Series T)*

NBR Number *(Series F)*

NBTC Non-basic terminal capabilities *(Series T)*

NC Network code *(Series E)*

NC Network connection *(Series T, X)*

NC Noise criterion *(Series P)*

NCCD Network-dependent call connection delay *(Series X)*

NCF Network connection failure *(Series E)*

NCID Network clear indication delay *(Series X)*

NCS Network coordination station *(Series E, M, Q, U)*

NCSA Network coordination station assignment *(Series Q)*

NCSC Network coordination station common *(Series Q)*

NCSI Network coordination station interstation *(Series Q)*

NCSS Network coordination station spot-beam *(Series Q)*

NDC National destination code *(Series E, Q, X)*

NDF New data flag *(Series G)*

NDM Normal disconnected mode *(Series G)*

NDN Negative delivery notification *(Series U)*

NDN Non-delivery notification *(Series F, U)*

NDN Non-delivery status notification *(Series T)*

NDSE National data switching exchange *(Series X)*

NDUB Network determined user busy *(Series I, Q)*

NE Network element *(Series G, M)*

NEE Near-end error *(Series M)*

NEF Network element function *(Series M)*

NESP Near end signalling point *(Series Q)*

NEXT Near-end crosstalk *(Series G, Q)*

NI Network identifier *(Series X)*

NI Network identity *(Series Q)*

NIC Nearly-instantaneous compandored modulation *(Series P)*

NIC Network identification code *(Series U)*

NIC Network independent clock *(Series Q, V)*

NL Network layer *(Series I, X)*

NL New line *(Series T)*

NM Network management *(Series M)*

NMM Network-management and maintenance signal *(Series Q)*

NMSI National mobile station identity *(Series Q)*

NN National network *(Series D)*

NN National number *(Series X)*

NNC National network congestion *(Series E, Q)*

NNI Network node interface *(Series G)*

NOK Not OK *(Series Q)*

NP Network performance *(Series I)*

NPAI Network protocol address information *(Series X)*

NPCID Network portion clear indication delay *(Series X)*

NPDU Network protocol data unit *(Series X)*

NPI Null pointer indication *(Series G)*

NPI Numbering plan identifier *(Series E, I)*

NPI Numbering plan indicator *(Series X)*

NR Noise rating *(Series P)*

NRM Normal response mode *(Series G, Q)*

NRN Non-receipt notification *(Series T)*

NRZ Non-return to zero *(Series G)*

NS Network service *(Series X)*

NSAP Network service access point *(Series I, Q, X)*

NSC Non-standard facilities command *(Series T)*

NSDU Network service data unit *(Series Q)*

NSF Non-standard facilities *(Series T)*

N(S)N National (significant) number *(Series E)*

NSP National signalling point *(Series Q)*

NSP Network service part *(Series X)*

NSS Non-standard facilities set-up *(Series T)*

NSSDU	Normal data session service data unit *(Series X)*
NT	Network termination *(Series I)*
NT1	Network termination 1 *(Series I)*
NTN	Network terminal number *(Series X)*
NUI	Network user identification *(Series D, F, X)*
NUL	Null *(Series T)*
NW	Not-white *(Series T)*
O	Optional *(Series T)*
OA	Outgoing access *(Series X)*
OACSU	Off-air-call-set-up *(Series Q)*
OAM	Operations, administration and maintenance *(Series G, I, Q)*
OA&M	Operations, administration and maintenance *(Series X)*
OAMC	Operations, administration and maintenance centre *(Series I)*
OCB	Outgoing calls barred *(Series X)*
OCC	Operations control centre *(Series M, Q)*
ODA	On-line delivery acknowledgement *(Series F, U)*
ODA	Open document architecture *(Series T)*
ODIF	Open document interchange format *(Series T)*
ODP	Originator detection pattern *(Series V)*
O/G	Outgoing *(Series L)*
OGC	Outgoing trunk circuit *(Series Q)*
OLL	Open-loop loss *(Series G)*
OLR	Overall loudness rating *(Series G, P)*
OLS	Ordinary least squares *(Series E)*
OMAP	Operations and maintenance Application Part *(Series E, Q)*
OMC	Operation and maintenance centre *(Series M)*
ONS	On-premises stations *(Series G)*
ONSD	Optional network specific digit *(Series X)*
OPC	Originating point code *(Series M, Q, X)*
OPI	Overall performance index *(Series P)*
OPINE	Overall performance index model for network evaluation *(Series P)*
OPS	Off-premises station *(Series G)*
O-QPSK	Offset-quadrature phase-shift keying *(Series Q)*
O/R	Originator/recipient *(Series F, T, X)*
OR25E	Objective R25 equivalent *(Series G)*
ORP	Optical reference point *(Series N)*
OS	Operations systems *(Series E, M, Q)*
OSB	Output signal balance *(Series G, O)*
OSDL	Overall specifications and description language *(Series I)*
OSF	Operations system functions *(Series M)*
OSI	Open systems interconnection *(Series F, I, Q, T, X)*
OSI NS	OSI network service *(Series T)*
OSI RM	Open systems interconnection reference model *(Series I)*
OTS	Operator telephone systems *(Series P)*
OWC	One-way communication *(Series I, T)*
P	Poll bit *(Series T)*
PABX	Private automatic branch exchange *(Series I, M, Q)*
PAD	Packet assembly/disassembly *(Series F, X)*
PARAM X	Parameter X *(Series V)*
PBC	Programme booking centre *(Series D, M, N)*
PBX	Private branch exchange *(Series X)*
PCE	Picture control entity *(Series T)*
PCEP	Presentation-connection-end-point *(Series X)*
PCI	Protocol control indicator *(Series Q)*
PCI	Protocol control information *(Series Q)*
PCM	Pulse code modulation *(Series O, P, Q, R)*
PCO	Point of control and observation *(Series X)*
PCR	Preventive cyclic retransmission *(Series Q)*
PCTR	Protocol conformance test report *(Series X)*
PD	Physical delivery *(Series F, X)*
PDAU	Physical delivery access unit *(Series F, X)*
PDF	Probability density function *(Series P)*
PDN	Positive delivery notification *(Series F, U)*
PDN	Public data network *(Series E, F, I, V, X, T)*
PDN	Public switched data network *(Series E)*
PDS	Physical delivery system *(Series F, T, X)*
PDU	Protocol data unit *(Series Q, T, X)*
PE	Protocol entity *(Series Q)*
PED	Prediction error data *(Series H)*
P/F	Poll/final *(Series Q, V, X)*
PFM	Page format selection *(Series X)*
PG	Parameter group *(Series T)*
PGI	Parameter group identifier *(Series T, X)*
PGLI	Parameter group length indicator *(Series T)*
PH	Packet handler *(Series E, I, Q, X)*
PH	Packet handling *(Series I, X)*
Ph	Physical *(Series X)*
PI	Parameter identifier *(Series T, V, X)*
PI	Performance index *(Series P)*
PI	Protocol identifier *(Series I)*
PICS	Protocol implementation conformance statement *(Series X)*
PID	Protocol identification *(Series I)*
PIN	Personal identification number *(Series E, I)*
PIN	Procedure interrupt negative *(Series T)*
PIP	Procedural interrupt positive *(Series T)*
PIS	Procedure interrupt signal *(Series T)*
PIXIT	Protocol implementation extra information for testing *(Series X)*
PKCS	Public key cryptosystem *(Series X)*
PL	Parameter length *(Series V)*
PLD	Partial line down *(Series T, X)*
PLI	Parameter length indicator *(Series T)*
PLMN	Public land mobile network *(Series D, E, I, Q, X)*
PLP	Packet layer protocol *(Series I, X)*
PLU	Partial line up *(Series T, X)*
PM	Per-message *(Series F, X)*
PM	Performance monitoring *(Series M)*
PM1	Processable mode number one *(Series F)*

PM.1 Processable mode number one *(Series T)*

PMA Prompt maintenance alarm *(Series M)*

PML Permitted maximum level *(Series N)*

PNIC Private data network identification code *(Series X)*

PNP Private numbering plan *(Series I)*

POC Processor outage control *(Series Q)*

POH Path overhead *(Series G)*

PP Partial page *(Series T)*

PPC Primary point code *(Series Q)*

PPCI Presentation-protocol-control-information *(Series X)*

PPDU Presentation-protocol-data-unit *(Series X)*

ppm Parts per million *(Series H, I)*

PPM Peak programme meter *(Series P)*

PPM Presentation protocol machine *(Series X)*

PPR Partial page request *(Series T)*

PPS Partial page signal *(Series T)*

PR Per-recipient *(Series F, X)*

PR Phrase representation *(Series Z)*

PRBS Pseudo-random binary sequence *(Series G)*

PRBS Pseudo-random bit sequence *(Series O)*

PRDMD Private directory management domain *(Series F, X)*

PRI-EOM Procedure interrupt- End-of- message *(Series T)*

PRI-MPS Procedure interrupt- Multipage signal *(Series T)*

PRMD Private management domain *(Series F, X)*

PRS Pseudorandom sequence *(Series O)*

PrvDN Private data network *(Series X)*

PS Packet switched *(Series I, X)*

PS Presentation-service *(Series X)*

PS-user Presentation-service-user *(Series X)*

PSAP Presentation layer service access point *(Series Q)*

PSAP Presentation service access point *(Series T, X)*

PSC Picture start code *(Series H)*

PSDAU Packet switched data access unit *(Series X)*

PSDN Packet switched data network *(Series U, X)*

PSDTS Packet switched data transmission services *(Series X)*

PSDU Presentation-service-data-unit *(Series X)*

PSL Power sum loss *(Series G)*

PSPDN Packet switched public data network *(Series E, F, I, Q, T, V, X)*

PSTN Public switched telephone network *(Series E, F, I, Q, T, U, V, X)*

PT Parity data *(Series H)*

PT Pattern transfer *(Series T)*

PTLXAU Public telex access unit *(Series F, U, X)*

PTSP Proceed-to-select protocol *(Series X)*

PTT Postal, telephone and telegraph *(Series X)*

PTTXAU Public teletex access unit *(Series T)*

PTX Parallel texts *(Series T)*

PV Parameter value *(Series T, V, X)*

PVC Permanent virtual circuit *(Series F, I, Q, X)*

PVC Polyvinylchloride *(Series L)*

QA Q-adapter *(Series M)*

QAF Q-adapter function *(Series M)*

qdu Quantizing distortion unit *(Series G)*

QDU Quantizing distortion unit *(Series M, O, P)*

QMF Quadrature mirror filters *(Series G)*

QOS Quality of Service *(Series E, I, M, X)*

QRP QOS reference point *(Series X)*

QRSS Quasi-random signal source *(Series M)*

R Persistence time *(Series X)*

R Reception *(Series T)*

R-TCR Receive TCR event *(Series T)*

R-TDT Receive TDT event *(Series T)*

RA Random access *(Series Q)*

RA Rate adaption *(Series I, V)*

RA1-3 Reanswer signal No. 1-No. 3 *(Series Q)*

RAI Remote alarm indication *(Series I)*

RAJ Receiving ability jeopardized *(Series T)*

RAN Reanswer signal *(Series Q)*

RBA Reset-band-acknowledgement message *(Series Q)*

RBI Reset-band-acknowledgement, all circuits idle signal *(Series Q)*

RC Reception control *(Series Q)*

RC Redrive counter *(Series T)*

RC Retransmission counter *(Series Q)*

RCAT Signalling-route-set-congestion-test control *(Series Q)*

RCB Redrive counter busy *(Series T)*

RCF Remote call forwarding *(Series E)*

RCP Restoration control point *(Series M)*

RCP Return to control for partial page *(Series T)*

RDCLP Response document capability list positive *(Series T)*

RDDP Response document discard positive *(Series T)*

RDEP Response document end positive *(Series T)*

RDGR Response document general reject *(Series T)*

RDI Restricted digital information *(Series I)*

RDN Relative distinguished name *(Series X)*

RDPBN Response document page boundary negative *(Series T)*

RDPBP Response document page boundary positive *(Series T)*

RDRP Response document resynchronize positive *(Series T)*

RDTD Restricted differential time delay *(Series I, Q)*

RE Reference equivalent *(Series G)*

REC Receiver *(Series Q)*

REJ Reject *(Series Q, V, X)*

RESP Reference equivalent speaking position *(Series P)*

REV Reverse charging *(Series I)*

RFS Ready-for-service *(Series M)*

RFS Ready for sending *(Series V)*

RI Related information *(Series M)*

RI Response identifier *(Series T)*

RJ	Reject *(Series X)*
RJ TPDU	Reject TPDU *(Series X)*
RL	Reference loudness *(Series P)*
RLF	Reverse line feed *(Series X)*
RLG	Release-guard signal *(Series Q)*
RLI	Response length indicator *(Series T)*
RLO	Restoration liaison officer *(Series E)*
RLR	Receive loudness rating *(Series G)*
RLR	Receiving loudness rating *(Series P)*
RLRE	A-RELEASE-RESPONSE application-protocol-data-unit *(Series X)*
RLRQ	A-RELEASE-REQUEST application-protocol-data-unit *(Series X)*
r.m.s	Root mean square *(Series O)*
RMSE	Root mean square error *(Series E)*
RN	Receipt status notification *(Series T)*
RNR	Receive not ready *(Series G, Q, T, V, X)*
RO	Remote operation *(Series X)*
ROER	RO-ERROR application-protocol-data-unit *(Series X)*
ROIV	RO-INVOKE application-protocol-data-unit *(Series X)*
ROPM	Remote operations protocol machine *(Series X)*
RORJ	RO-REJECT application-protocol-data-unit *(Series X)*
RORS	RO-RESULT application-protocol-data-unit *(Series X)*
ROS	Remote operation service *(Series X)*
ROSE	Remote operation service element *(Series Q, T, X)*
ROW	Rights of way *(Series D)*
RPOA	Recognized private operating agency *(Series D, F, X)*
RR	Receive ready *(Series G, Q, T, V, X)*
RSAP	Response session abort positive *(Series T)*
RSA PPDU	Resynchronize acknowledge PPDU *(Series X)*
RSB	Reset-band signal *(Series Q)*
RSC	Reset-circuit signal *(Series Q)*
RSCCP	Response session change control positive *(Series T)*
RSCE	Restoration switching control equipment *(Series G)*
RSE	Restoration switching equipment *(Series G)*
RSEP	Response session end positive *(Series T)*
RS PPDU	Resynchronize PPDU *(Series X)*
RSRT	Signalling route set test control *(Series Q)*
RSS	Reset/synchronization signal *(Series G)*
RSSN	Response session start negative *(Series T)*
RSSP	Response session start positive *(Series T)*
RSU	Remote switching units *(Series I)*
RSUI	Response session user information *(Series T)*
RT	Reliable transfer *(Series X)*
RTAB	RT-P-ABORT and RT-U-ABORT application-protocol-data-unit *(Series X)*
RTAC	Transfer allowed control *(Series Q)*
RTB	Retransmission buffer *(Series Q)*
RTC	Return to control *(Series T)*
RTCC	Transfer controlled control *(Series Q)*
RTM	Reference test method *(Series G)*
RTN	Retrain negative *(Series T)*
RTOAC	RT-OPEN-ACCEPT application-protocol-data-unit *(Series X)*
RTORJ	RT-OPEN-REJECT application protocol-data-unit *(Series X)*
RTORQ	RT-OPEN-REQUEST application-protocol-data-unit *(Series X)*
RTP	Retrain positive *(Series T)*
RTPC	Transfer prohibited control *(Series Q)*
RTPM	Reliable-transfer-protocol-machine *(Series X)*
RTRC	Transfer restricted control *(Series Q)*
RTS	Request to send *(Series V)*
RTSE	Reliable transfer service element *(Series T, X)*
RTTP	RT-TOKEN-PLEASE application-protocol-data-unit *(Series X)*
RTTR	RT-TRANSFER application-protocol-data-unit *(Series X)*
RVL	Reference vocal level *(Series P)*
S	Supervisory *(Series Q)*
S	Supervisory function bit *(Series Q)*
S	Supplier *(Series T)*
S-	Sending *(Series T)*
S-	Session *(Series T)*
SA	Service alarm *(Series M)*
SABM	Set asynchronous balanced mode *(Series X)*
SABME	Set asynchronous balanced mode extended *(Series Q, V, X)*
SACS	Set additional character separation *(Series T)*
SAM	Subsequent address message *(Series Q)*
SAM1-7	Subsequent address message No. 1-No. 7 *(Series Q)*
SAME	Subscriber access maintenance entity *(Series I)*
SANC	Signalling area/network code *(Series Q)*
SAO	Subsequent address message with one signal *(Series Q)*
SAP	Service access point *(Series Q, X)*
SAPI	Service access point identifier *(Series Q)*
SASE	Specific application service element *(Series T)*
SB-ADPCM	Sub-band adaptive differential pulse code modulation *(Series G)*
SBA	Software generated group blocking-acknowledgement message *(Series Q)*
SBC	Subsample control *(Series H)*
SBM	Successful-backward-set-up information message *(Series Q)*
SBR	Standby-ready signal *(Series Q)*
SBUR	Software generated circuit group blocking and unblocking receipt *(Series Q)*
SBUS	Software generated circuit group blocking and unblocking sending *(Series Q)*
SC	Service channel *(Series H)*
SCC	Satellite control centre *(Series Q)*

SCCP	Signalling connection control part *(Series E, Q, X)*
SCM	Select coding method *(Series T)*
SCO	Select character orientation *(Series T)*
SCPC	Single-channel-per-carrier *(Series E, M, Q, V)*
SCR	Selective circuit reservation *(Series E, Q)*
SCTR	System conformance test report *(Series X)*
SCU	Signalling system control signal *(Series Q)*
SDC	Select dot composition *(Series T)*
SDL	Specification and description language *(Series Q, X, Z)*
SDR	Special drawing rights *(Series D)*
SE	Structure element *(Series T)*
SE	Support entity *(Series M)*
SEC	Switching equipment congestion *(Series E, Q)*
SEF	Support entity function *(Series M)*
SES	Severely errored seconds *(Series M, Q)*
SES	Ship earth station *(Series E, M, U)*
SESDL	Ship earth station low speed data *(Series Q)*
SESRP	Ship earth station response *(Series Q)*
SESRQ	Ship earth station request *(Series Q)*
SEST	Ship earth station telex *(Series Q)*
SF	Spare frame *(Series H)*
SF	Status field *(Series Q)*
SF	Superframe format *(Series O)*
SFC	Sensitivity/frequency characteristics *(Series P)*
SFU	Store and forward unit *(Series F, S, U)*
SGB	Software generated group blocking message *(Series Q)*
SGC	Signalling grouping channel *(Series G)*
SGR	Select graphic rendition *(Series T, X)*
SGU	Software generated group unblocking message *(Series Q)*
SHS	Select character spacing *(Series T)*
SHS	Select horizontal spacing *(Series T, X)*
SI	Service indicator *(Series Q, X)*
SI	Shift-in *(Series T)*
SI	SPDU identifier *(Series X)*
SID	Session identification *(Series T)*
SIE	Status indication «emergency terminal status» *(Series Q)*
SIF	Signalling information field *(Series Q, X)*
SIN	Status indication «normal terminal status» *(Series Q)*
SIO	Service information octet *(Series Q)*
SIO	Status indication «out of alignment» *(Series Q)*
SIOS	Status indication «out of service» *(Series Q)*
SIPO	Status indication «processor outage» *(Series Q)*
SIS	Sound-in-sync *(Series D)*
SL	Signalling link *(Series Q)*
SL	Stability loss *(Series G)*
SLC	Signalling link code *(Series M, Q)*
SLL	Semi-loop loss *(Series G)*
SLM	Selective level meter *(Series O)*
SLM	Signalling link management *(Series Q)*
SLP	Single link procedure *(Series T, X)*
SLR	Send loudness rating *(Series G, P, Q)*
SLS	Set line spacing *(Series T)*
SLS	Signalling link selection *(Series M, Q)*
SLTA	Signalling link test message acknowledgement *(Series Q)*
SLTC	Signalling link test control *(Series Q)*
SLTM	Signalling link test message *(Series Q)*
SMAE	Systems management application entity *(Series Q)*
SMAP	Systems management application process *(Series Q)*
SMF	Submultiframes *(Series G, H)*
SMH	Signalling message handling *(Series Q)*
SMSI	Systems management service interface *(Series Q)*
SMU	Scaled measurement unit *(Series T)*
SN	Subscriber number *(Series E, I, Q, X)*
SNM	Signalling-network-management *(Series Q)*
SNPA	Subnetwork point of attachment *(Series I, X)*
SNR	Signal-to-noise ratio *(Series O)*
SNRM	Set normal response mode *(Series G)*
SO	Shift-out *(Series T)*
SOA	Start of address *(Series F)*
SOF	Service order form *(Series E)*
SOH	Section overhead *(Series G)*
SOH	Start of heading *(Series T)*
SOM	Start-of-message *(Series F)*
SOS	Start of string *(Series T)*
SP	Signalling point *(Series Q)*
SP	Space *(Series T, X)*
SPADE	Single channel per carrier, PCM, multiple access demand assignment, equipment *(Series M)*
SPC	Secondary point code *(Series Q)*
SPC	Stored program controlled *(Series E, M)*
SPD	Select presentation direction *(Series T)*
SPDU	Session protocol data unit *(Series T, X)*
SPITE	Switching processing interface telephone event *(Series Q)*
SPL	Sound pressure level *(Series N)*
SPLM	Sound pressure level meter *(Series N)*
SPM	Session protocol machine *(Series X)*
SPRC	Signalling procedure control *(Series Q)*
SR	Source reference *(Series T)*
SRA	Standby-ready-acknowledgement *(Series Q)*
SRC-REF	Source reference *(Series X)*
SRCS	Set reduced character separation *(Series T)*
SREJ	Selective reject *(Series V, X)*
SRM	Signalling route management *(Series Q)*
SRS	Select reverse spacing *(Series T)*
SRVT	SCCP routing verification test *(Series Q)*
SS	Session service *(Series X)*
SS	Supplementary service *(Series Q)*
SSAP	Session service access point *(Series X)*

SSB Subscriber-busy signal *(Series Q)*

SSDU Session service data unit *(Series X)*

SSF Subservice field *(Series Q)*

SSN Subsystem number *(Series Q)*

SS No. 6 Signalling System No. 6 *(Series E, I, M, X)*

SST Send-special-information tone signal *(Series Q)*

SST Subscriber-transferred signal *(Series Q)*

SSU Subsequent signal unit *(Series Q)*

SSW Set space width *(Series T)*

ST End-of-pulsing *(Series E, Q)*

ST String terminator *(Series T)*

STAB Selective tabulation *(Series T)*

STC Switching and testing centre *(Series R)*

S-TCA Send TCA action *(Series T)*

STI Statistics time interval *(Series G)*

STM Selective traffic management *(Series Q)*

STM Signalling traffic management *(Series Q)*

STM Synchronous transfer mode *(Series I)*

STM-N Synchronous transport module level n *(Series G)*

STMR Sidetone masking rating *(Series G, P)*

STP Signalling transfer point *(Series M, Q)*

STP Signal transfer point *(Series D, E, I, M)*

STX Start of text *(Series Q, T, X)*

SUA Software generated group unblocking-acknowledgement message *(Series Q)*

SUB Sub-addressing *(Series I)*

SUB Substitute *(Series T)*

SUB Substitute character *(Series T, X)*

SUD Session user data *(Series T)*

SUT System under test *(Series T)*

SVS Select line spacing *(Series T)*

SVS Select vertical spacing *(Series T, X)*

SWEPL Scaled weighted echo path loss *(Series P)*

SYN Synchronous idle *(Series T)*

SYU Synchronization signal unit *(Series Q)*

T Transport *(Series T)*

TA Terminal adapter *(Series E, I, Q, V, X)*

TA Test analyser *(Series R)*

TA Transferred account *(Series D)*

TAA Transfer-allowed-acknowledgement signal *(Series Q)*

TAED Telex automatic emitting device *(Series F, S, U)*

TAP Test access path *(Series M)*

TAPDU Telematic access protocol data unit *(Series T)*

TASI Time assignment speech interpolation *(Series E, G)*

TBR Transport block reject *(Series T)*

TBRL Terminal balance return loss *(Series G)*

TC Terrestrial channel *(Series Q)*

TC Transaction capabilities *(Series E, Q)*

TC Transport connection *(Series T, X)*

TCA Transport connection accept *(Series T)*

TCAP Transaction capabilities application part *(Series Q)*

TCBC Changeback control *(Series Q)*

TCBH Time-consistent busy hour *(Series E)*

TCC Telephone country code *(Series F, I, Q)*

TCC Transport connection clear *(Series T)*

TCCB TC common box *(Series F)*

TCCD Total call connection delay *(Series X)*

TCC PPDU Capability data acknowledge PPDU *(Series X)*

TCF Training check *(Series T)*

TCH Traffic channel *(Series Q)*

TCI Telewriting coding interface *(Series T)*

TCIC Transit centre identification code *(Series U)*

TCL Transverse conversion loss *(Series O)*

TCM Time compression multiplex *(Series G)*

TCN Throughput class negotiation *(Series X)*

TCOC Changeover control *(Series Q)*

TC PPDU Capability data PPDU *(Series X)*

TCR Transport connection request *(Series T)*

TCRC Controlled rerouting control *(Series Q)*

TCS Teleconference service *(Series F)*

TCTL Transverse conversion transfer loss *(Series O)*

TCTS Trans-Canada telephone system *(Series G)*

TDI Transit delay indication *(Series X)*

TDM Time division multiplex *(Series H, M, R)*

TDMA Time division multiple access *(Series M, Q)*

TD PPDU Presentation data PPDU *(Series X)*

TDS Transit delay selection *(Series X)*

TDSAI Transit delay selection and indication *(Series T, X)*

TDT Transport data *(Series T)*

TDX Typed data transfer *(Series T)*

TE Terminal equipment *(Series E, I, Q, X)*

TE1 Terminal equipment type 1 *(Series I, Q, V)*

TEI Terminal end point identifier *(Series I, Q)*

TELR Talker echo loudness rating *(Series G)*

TE PPDU Expedited data PPDU *(Series X)*

TFA Transfer-allowed signal *(Series Q)*

TFM Transfer-prohibited and transfer-allowed messages *(Series Q)*

TFP Transfer-prohibited *(Series E)*

TFP Transfer prohibited signal *(Series Q)*

TFRC Forced rerouting control *(Series Q)*

THD Total harmonic distortion *(Series H)*

3PTY Three party service *(Series I)*

TIA Telematic interworking application *(Series T)*

TIAS Telematic interworking abstract service *(Series T)*

TIC Terminal international centre *(Series M)*

TID Terminal identification *(Series F, I, Q, T)*

TID Terminal identifier *(Series X)*

TIE Time interval error *(Series G, Q)*

TIF Telematic interworking facility *(Series T)*

TIG	Telegram identification group *(Series F)*
TIS	Telematic interworking system *(Series T)*
TIU	Telematic interworking unit *(Series T)*
TLAC	Link availability control *(Series Q)*
TLL	Total scanning line-length *(Series T)*
TLM	Telematic *(Series T)*
TLM-TER	Telematic terminal *(Series T)*
TLMA	Telematic agent *(Series F, T, X)*
TLMAU	Telematic access unit *(Series T)*
TLX	Telex type *(Series X)*
TLXAU	Telex access unit *(Series F, X)*
TM-PDU	Test management PDU *(Series X)*
TMN	Telecommunications management network *(Series E, G, M)*
TMP-IL	Transmission maintenance point (international line) *(Series M)*
TMR	Transmission medium requirement *(Series E, I)*
TMS	Traffic measurement system *(Series E)*
TMSI	Temporary mobile station identity *(Series Q)*
TNIC	Telex network identification code *(Series U)*
TNIC	Transit network identification code *(Series E, X)*
TOA	Type of address *(Series X)*
TOL	Transverse output level *(Series G)*
TON	Type of number *(Series E, I)*
TP	Transport protocol *(Series T)*
TP	Two procedures *(Series V)*
TPA	Telematic protocol architecture *(Series T)*
TPC	Translation point code *(Series Q)*
TPDU	Transport protocol data unit *(Series T, X)*
TPDU-NR	DT TPDU number (field) *(Series X)*
TPIWF	Telex/packet interworking function *(Series F)*
TPRC	Signalling point restart control *(Series Q)*
TR	Temporal reference *(Series H)*
TR	Transit exchange *(Series Q)*
TRCC	Signalling route set congestion control *(Series Q)*
TRL	Transverse return loss *(Series G)*
TRM	Transmission resource management *(Series Q)*
TS	Telecommunication service *(Series I)*
TS	Time slot *(Series H, Q)*
TS	Transport service *(Series T, X)*
TS-user	Transport service user *(Series X)*
TSAP	Transport service access points *(Series T, X)*
TSAP-ID	Transport service access point identifier *(Series X)*
TSDU	Transport service data unit *(Series T, X)*
TSFC	Signalling traffic flow control *(Series Q)*
TSI	Time slot interchange *(Series G, Q)*
TSI	Transmitting subscriber identification *(Series T)*
TSP	Test suite parameter *(Series X)*
TSRC	Signalling routing control *(Series Q)*
TSSDU	Typed data session service data unit *(Series X)*
TT	Test transmitter *(Series R)*
TTB	Temporary trunk blocking *(Series Q)*
TTC	Transit through-connect *(Series X)*
TTCN	Tree and tabular combined notation *(Series X)*
TTCN-GR	TTCN graphical form *(Series X)*
TTCN-MP	TTCN machine processable *(Series X)*
TTD	Target transit delay *(Series X)*
TTD	Transit centres through-connected *(Series X)*
TTD PPDU	Presentation typed data PPDU *(Series X)*
TTL	Transistor-transistor logic *(Series O)*
TTL	Transverse transfer loss *(Series G)*
TTR	Time to try reassignment/resynchronization *(Series X)*
TTX	Teletex *(Series F, T, X)*
TTX	Teletex type *(Series X)*
TU	Tributary unit *(Series G)*
TUG	Tributary unit group *(Series G)*
TUP	Telephone User Part *(Series E, I, M, Q)*
TUT	Terminal under test *(Series T)*
TV	Television *(Series T)*
TVRO	Television receive-only *(Series N)*
TWA	Two-way alternate *(Series I, T)*
TWR	Time to wait for reassignment/resynchronization *(Series X)*
TX	Transmit *(Series Q)*
U	Unnumbered *(Series Q)*
UA	Unnumbered acknowledgement *(Series G, Q, V, X)*
UA	User agent *(Series F, T, X)*
UBA	Unblocking-acknowledgement *(Series Q)*
UBL	Unblocking *(Series Q)*
UC	User class *(Series X)*
UCCD	User-dependent call connection delay *(Series X)*
UCIC	Unequipped circuit identification code *(Series Q)*
UDI	Unrestricted digital information *(Series I, Q)*
UDT	Unitdata *(Series Q)*
UDUB	User determined user busy *(Series I, Q)*
UFI	Upstream failure indication *(Series M)*
UI	Unit interval *(Series G, I, O)*
UI	Unnumbered information *(Series Q)*
UIC	International Union of Railways *(Series K)*
ULL	Usable scanning line-length *(Series T)*
UNC	Unbalanced operation normal response mode class *(Series G)*
UNI	User-network interface *(Series I)*
UNN	Unallocated-number signal *(Series Q)*
UPCH	User packet channel *(Series Q)*
USI	User service information *(Series E, I)*
UTC	Coordinated universal time *(Series D, E, F, G, N, Q, X)*
UUI	User-to-user information *(Series D, I)*
UUS	User-to-user signalling *(Series I)*
VASP	Virtual analogue switching point *(Series G)*
VAT	Validation testing *(Series Q)*

VBR	Variable bit rate *(Series P)*
VC	Virtual call *(Series F, X)*
VC	Virtual circuit *(Series I, Q)*
VC	Virtual container *(Series G)*
VCI	Virtual channel identification *(Series I)*
VD	Vector data *(Series H)*
VDC	Virtual device coordinate *(Series T)*
VDN	Vector data number *(Series H)*
VDT	Video display terminal *(Series I)*
VDT	Visual display terminal *(Series Z)*
VF	Voice-frequency *(Series Q)*
VFT	Voice-frequency telegraph *(Series R)*
VI	Valid data indication *(Series G)*
VIA	Videotex interworking architecture *(Series T)*
VIU	Videotex interface unit *(Series T)*
VLR k	Visited location register *(Series E, Q)*
VLS	Voice load simulator *(Series P)*
VPB	Line position backward *(Series T)*
VPLMN	Visited public land mobile network *(Series D, Q)*
VPR	Line position relative *(Series T)*
VS	Videoconference studio *(Series N)*
VSU	Videotex service unit *(Series T)*
VT	Vertical tabulation *(Series T, X)*
VT	Virtual terminal *(Series X)*
VU	Volume unit *(Series P)*
VWL	Variable word-length *(Series H)*
WB	Wideband *(Series P)*
WEPL	Weighted echo path loss *(Series G, P)*
WSF	Workstation function *(Series M)*
XID	Exchange identification *(Series Q)*
XOR	Exclusive OR *(Series T)*
X.25/PLP	X.25 packet layer protocol *(Series X)*
XRLR	Crosstalk receive loudness rating *(Series G)*
XSSDU	Expedited session service data unit *(Series X)*
YR-ETDU-NR	ED TPDU number response (field) *(Series X)*
YR-TU-NR	Sequence number response (field) *(Series X)*

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