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INTERNATIONAL TELECOMMUNICATION UNION

CCITT

THE INTERNATIONAL
TELEGRAPH AND TELEPHONE
CONSULTATIVE COMMITTEE

RED BOOK

VOLUME X – FASCICLE X.1

TERMS AND DEFINITIONS



VIIITH PLENARY ASSEMBLY

MALAGA-TORREMOLINOS, 8-19 OCTOBER 1984

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ISBN 92-61-02381-9





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APPLICABLE AFTER THE EIGHTH PLENARY ASSEMBLY (1984)**

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- Volume IX** – Protection against interference. Series K Recommendations (Study Group V). Construction, installation and protection of cable, and other elements of outside plant. Series L Recommendations (Study Group VI).

Volume X – (2 fascicles, sold separately)

- FASCICLE X.1 – Terms and definitions.
- FASCICLE X.2 – Index of the Red Book.

PRELIMINARY NOTES

1 Part I contains the terms and their definitions as found in the Red Book, and some definitions from the Yellow Book (1980) which are not cited in the Red 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 Red 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 Yellow Book definitions not quoted in the Red Book but still considered active by the Study Group have their source information asterisked. The source refers to the Yellow 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 IV.

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

5 The specialized computer language definitions from the CCITT High Level Language (CHILL) are not reproduced here, but can be found in Fascicle VI.12.

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

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

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PART I

LIST OF TERMS AND DEFINITIONS

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.

abbreviated address calling

*Series X **

A facility which enables a user to employ an address having fewer characters than the full address when initiating a call.

Note — Networks may allow a user to designate up to Y abbreviated address codes. The allocation of abbreviated address codes to a destination or group of destinations may be changed as required by means of a suitable procedure.

abbreviated dialling prefix

Rec. E.131

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

abbreviated dialling services

Sup. 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.

absent subscriber service

Sup. 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.

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.

abstract data type

Glos. (VI.11)

An *abstract data type* is a *type* defined by algebraic relationship between values of the *type* and the application of operators on these *values*.

abstract syntax

Glos. (VI.11)

The *abstract syntax* of *SDL* is given in Recommendations Z.101, Z.102, Z.103 and Z.104 and summarized in Annex B to Recommendations Z.101 to Z.104 to describe the conceptual structure of an *SDL* definition as compared with the *concrete syntaxes* which exist for each form of *SDL*, that is *SDL/GR*, *SDL/PR* and *SDL/PE*.

accelerated test

Rec. G.106

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)

Rec. G.106

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 SS-user

See:

acceptor; accepting SS-user.

acceptor ; accepting SS-user

Rec. X.215

An SS-user that accepts a particular action.

access

Glos. (VI.11)

The predefined *operator* implicit with all data types which is applied wherever a variable yields the value associated with it.

access barred

Rec. X.15

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

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

See:

channel.

access channel and rate

Rec. I.130

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

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 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 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 protocol ; signalling access protocol ; information access coding/protocol

Rec. I.130

These attributes characterize the protocol on the signalling and/or user information transfer channel at a given access point or reference point.

access to supplementary services

Rec. E.131

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

accessibility of a connection to be established

Rec. G.106

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

Rec. Z.341

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

accounting authority

Recs. D.90, F.111

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)

Recs. D.90, F.111

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

accounting rate

Recs. D.000, D.150, D.200 R, F.67

The accounting rate is the rate per traffic unit(s) agreed between the Administrations in a given relation that is used for the establishment of international accounts.

accounting rate

Rec. D.40

The accounting rate is composed of the terminal shares and the transit share(s), if any.

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 service.

In the binary tariff system, the accounting rate has the two components described in the definition *binary tariff system*. In this system, no minimum rate for a certain number of words is applied.

accounting rate

Rec. D.302 R

In the per word tariff system, the accounting rate is the rate per single word of an ordinary private telegram, without any special service, agreed between the Administrations in a given relation, and used for the establishment of international accounts.

In the binary tariff system, the accounting rate is the fixed rate per ordinary private telegram without any special service plus the rate per word of such a telegram, both rates being agreed between Administrations in a given relation and being used for the establishment of international accounts.

accounting rate share

D.200 R

The accounting rate share is that part of the total accounting rate per traffic unit (minute of telephone call) corresponding to the facilities made available in each country; this share is fixed by agreement among the Administrations

accounting rate share

Rec. D.302 R

The accounting rate share is that 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.150

The accounting revenue division procedure is the procedure whereby accounting revenue is shared only between terminal Administrations.

accumulated down time

Rec. G.106

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

accumulated time

Rec. G.106

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

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)

Glos. (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

Rec. T.62

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

acoustic artificial voice

Recs. P.10, P.51

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 telephony)

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 coupling (to telephone line)

*Series X **

A method of coupling a data terminal equipment or similar device to a telephone line by means of transducers which utilize sound waves to or from a telephone handset or equivalent.

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*.

action

Rec. Z.341

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

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*.

active corrective maintenance time

See:

active repair time; active corrective maintenance time.

active maintenance time

Rec. G.106

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/G.106.

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

active operator

Glos. (VI.11)

An *operator* which requires one or more *variables* as parameters since it may change the *values* associated with these *variables*.

active position

Rec. T.61

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

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

Rec. G.106

That part of the *active maintenance time* during which actions of *preventive maintenance* are performed on an *item*.

See Figure 3/G.106.

active redundancy

Rec. G.106

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

active repair time; active corrective maintenance time

Rec. G.106

That part of the *active maintenance time* during which actions of *corrective maintenance* are performed on an *item*.

See Figure 3/G.106.

active signalling link

Glos. (VI.7, VI.8)

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

actual parameter

Glos. (VI.11)

An *actual parameter* is a *value* handed to either a *process* or a *procedure* for the corresponding *formal parameter* when the *process* (or *procedure*) is *created* (or *called* respectively).

actual parameter list

Glos. (VI.11)

An *actual parameter list* is the list of *values* associated with a *create request* or a *procedure call*.

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 channel allocation

*Series X **

A method of multiplexing where the information capacities of channels are not predetermined but are assigned on demand.

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 / remove

Rec. I.130

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.

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-save-set

Glos. (VI.11)

An *additional-save-set* is the set of additional signals saved in a *procedure*.

address

Q.711

A name which indicates the source or destination (in the sense of current location) of an intended instance of communication.

address (in circuit switching)

*Rec. U.140, Series X**

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

address (in information processing)

Recs. Q.9, U.140

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

address (in network addressing)

Recs. E.164, I.331

The information which is necessary to identify a point in the subscriber's installation (group of terminals, terminal or specific function of terminal equipment). The point unambiguously defines:

- a port where the information flow of the connection concerned passes in outgoing or incoming direction, or
- the point of origin or destination for that information flow, e.g. (N)-Service-Access-Point (Recommendation X.200).

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 (Signalling System R2)

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 delimiter

Recs. E.164, I.331

A coded character which indicates different parts in an address, e.g. beginning of address, end of address, etc.

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-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 separator

*Rec. Q.9, Series X**

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

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

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 (Signalling System R1)

Rec. Q.310

This register signal is sent (in the forward direction) 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 (Signalling System R2)

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.

addressing

Rec. I.112

The process by which a calling user indicates the identity of the called user on a particular call. It includes a network addressing (numbering) component to identify the called user-network interface, and may also include further information (sub-address) to identify a particular terminal beyond the public network.

addressing (network addressing)

Recs. E.164, I.331

The provision of the address by allocation or indication of a number and possibly one or more non-numeric characters.

adjacent signalling points

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

Two signalling points that are directly interconnected by a signalling link(s).

Administration management domain (ADMD)

Rec. X.400

A management domain managed by an Administration.

Administration of destination

See:

country (or administration) of destination.

Administration of origin

See:

country (or administration) of origin.

Administration terminal

See:

terminal country (or Administration).

Administration transit

See:

transit country (or Administration).

administrative delay (for corrective maintenance)

Rec. G.106

The *accumulated time* during which an action of *corrective maintenance* on a *faulty item* is not performed due to administrative reasons.

See Figure 3/G.106.

administrative processor

Rec. Q.9

A centralized *processor* for administrative purposes, e.g. billing, which serves several switching centres.

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.35, V.36, V.37

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

ageing failure; wearout failure

Rec. G.106

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

Rec. G.106

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

aggregate signal

Rec. R.140

Signal transmitted over the common multiplex channel.

alarm call services

Sup. 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)

Recs. G.701, M.300

A signal that replaces the normal traffic signal when a maintenance alarm indication has been activated.

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.

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.

aligner

*Series X **

A device used to align the elements of one data structure to particular elements of another structure and, in some cases, also to change between the two structures.

alignment error rate monitoring

Glos. (VI.7, VI.8)

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

allocation symbol

Glos. (VI.11)

The *symbol* in a *process tree diagram* of *SDL/GR* attached to a *process symbol*. The *process* or *sub-process* associated with the *process symbol* is allocated to the *block* whose *name* is contained in the *allocation symbol*.

allow

Recs. Z.333, 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*.

alphabet (telegraph or data)

*Series X **

A table of correspondence between an agreed set of characters and the signals which represent them.

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.

alternating code (deprecated)

See:

paired-disparity code.

alternating current (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

Rec. G.106

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

alternative (alternate) route

Rec. E.600

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

alternative routing (of signalling)

Glos. (VI.7, VI.8)

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

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.

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 modulation

*Series X **

- i) Modulation in which the amplitude of an alternating current is the characteristic varied.
- ii) Modulation in which the significant conditions are represented by 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.

amplitude quantized control

Rec. Q.9

Synchronization control in which the functional relationship between actual phase error and derived error signal includes discontinuities.

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 control

Rec. Q.9

Synchronization control in which the relationship between the actual phase error between *clocks* and the error signal device is a continuous function, 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 of which one of the characteristic quantities follows continuously the variations of another physical quantity representing information.

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. Q.9

A *signal* is anisochronous if the time interval separating any two significant instants is not necessarily related to the time interval separating any other two significant instants.

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.

anisochronous transmission

*Series X **

A transmission process such that between any two significant instants in the same group (in data transmission this group is a block or a character; in telegraphy this group is a character), there is always an integral number of unit intervals. Between two significant instants located in different groups, there is not always an integral number of unit intervals.

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

Glos. (VI.11)

An *annotation* in *SDL/GR* is a *comment*. An *annotation* in *SDL/PR* is a *comment* or a *note*. *Annotations* do not change the meaning of *SDL*.

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.

answer bid ratio (ABR)

Rec. E.411

ABR gives the relationship between the number of bids that result in an answer signal and the total number of bids. ABR is measured 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 from the point of measurement. It is similar to ASR except that it includes bids that do not result in a seizure.

answer bid ratio (ABR)

Rec. E.425

Gives the relationship between the number of bids that result in an answer signal and the total number of bids.

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

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

answer seizure ratio (ASR)

Recs. E.411, 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 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 route or on a destination basis.

answer seizure ratio (ASR)

Rec. G.106

Either 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.

Note — It is usually expressed as a percentage.

answer seizure ratio

See:

completion ratio; efficiency ratio; answer seizure ratio.

answer signal

Rec. E.411

A signal sent in the backward direction indicating that the call is answered. (Based on Recommendation Q.254.)

answer signal (sent in the backward direction)

Recs. Q.120, Q.140

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

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.

answer signal (Signalling System R1)

Rec. Q.310

This line signal is sent to the outgoing exchange to indicate that the called party has answered.

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, if this is desired.

answer signal (Signalling System R2)

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

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, Series X **

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 delay

Rec. E.600

Time interval between the setting-up of an end-to-end connection between the calling and called stations, and the detection of an answer signal.

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.

application

Rec. Q.711

The set of a user's requirements.

application-entity

Rec. X.200

The aspects of an application-process pertinent to OSI.

application-management

Rec. X.200

Functions in the Application Layer (see Rec. 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-process

Rec. X.200

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

application-service-element

Rec. X.200

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

applied data bit

Recs. V.35, 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.

ARAEN speech level meter

Sup. No. 8

A *speech level meter* used for the adjustment of the test operator's speech power during articulation test measurements, and whose essential characteristics are specified in the description of the CCITT Laboratory installation.

arc

Glos. (VI.11)

An *arc* is a directed connection between the *nodes* of a *process graph*.

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.

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 delimiters*, *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

Glos. (VI.11)

The *predefined generator* used to introduce the concept 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

Recs. P.10, P.51

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 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

Recs. P.10, P.51

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.

to assemble

Rec. Q.9

To translate a program expressed in an assembly language and perhaps to link subroutines.

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.

assignment statement

Glos. (VI.11)

An *assignment statement* is an *action* which associates a *value* with a *variable*.

associated mode (of signalling)

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

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

Glos. (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.

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

Rec. G.106

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 $\bar{A}$

Rec. G.106

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

$$\bar{A} = \lim_{t_2 \rightarrow \infty} \bar{A}(t_1, t_2)$$

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

asymptotic mean unavailability $\bar{U}$

Rec. G.106

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

$$\bar{U} = \lim_{t_2 \rightarrow \infty} \bar{U}(t_1, t_2)$$

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

asymptotic unavailability, U

Rec. G.106

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/heterochronous (deprecated)

See:

non-synchronous.

attenuation coefficient

Rec. G.651

- 1) It is the real part of the propagation coefficient
- 2) In an optical fibre it is the attenuation per unit length

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

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

where

$P(z)$ = power at distance z along the guide

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

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

From this equation:

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

This assumes that α is independent of z .

attenuation, $A(\lambda)$

Rec. G.651

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

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

where P_1 is the optical power traversing the cross section 1 and P_2 is the optical power traversing the cross section 2.

attenuation/frequency distortion

Recs. Q.507, Q.517

The attenuation/frequency distortion (loss distortion) is the logarithmic ratio of output voltage at the reference frequency (nominally 1000 Hz), $U(1000 \text{ Hz})$, divided by its value at frequency f , $U(f)$:

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

attribute

Recs. T.72, T.73

A property of a document or a constituent of a document expressing a characteristic of the document or constituent concerned, or a relationship with one or more other documents or constituents.

Note — In Recommendations T.61 and T.62 related properties and characteristics of devices as well as presentation attributes are called parameters.

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.

audio of 7 kHz

See:

seven kHz audio.

audio of 3.1 kHz

See:

three point one kHz audio.

audio of 15 kHz

See:

fifteen kHz audio.

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

*Series X **

A facility by which the called DTE automatically responds to the calling signal and the call may be established whether or not the called DTE is attended.

automatic booked call service

Sup. 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

*Series X **

A facility by which selection signals must be entered contiguously at the full character rate. The address characters will be generated in the DTE.

Note — A limit may be imposed by the Administration to prevent more than a permitted number of ineffective call attempts to the same address within a specified period.

automatic credit card service

Sup. 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 maintenance

Rec. G.106

Maintenance accomplished without human intervention.

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

E.421

Monitoring of telephone calls without an observer.

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 sequential connection

*Series X **

A facility provided by a public data service to automatically connect, in a predetermined sequence, the DTEs at each of a set of specified addresses to a single DTE at a specified address.

automatic service

Rec. E.100

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

automatic switching equipment

Rec. M.700

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 transferred charge call service

Sup. 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

Sup. 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 throughout 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

Sup. 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 (performance)

Rec. G.106

The ability of an *item* to be in a 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*.

availability

See:

(asymptotic) availability, A.

availability in analogue cable transmission systems

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 this Recommendation, 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.

average ... (deprecated)

See:

mean ...; average

axiom

Glos. (VI.11)

A *Boolean expression* which holds true for all possible values of the variables used in the *axiom*.

B

B'

Glos. (VI.11)

The *SDL/PR* keyword introducing a binary denotation of a numerical *value*.

babyphone service

Sup. 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.

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*.

backward channel

*Series X **

A data-transmission channel used for supervisory and/or error-control signals and associated with the forward channel, but with a direction of transmission opposite to that in which information is being transferred.

Note — In case of simultaneous transfer of information in both directions, this definition applies with respect to the data source under consideration.

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

Glos. (VI.7, VI.8)

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

Glos. (VI.7, VI.8)

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 return loss

Rec. P.10

Value of the return loss at a termination given by:

$$20 \log_{10} \left| \frac{Z_b + Z_a}{Z_b - Z_a} \right| \text{ dB}$$

where:

Z_a is the impedance of terminated line, or apparatus,

Z_b is the impedance of network.

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 one half, of the zero frequency value.

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

barred signal

Rec. 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 attribute set

Rec. X.400

A minimum set of attributes whose values unambiguously identify a particular management domain.

base station (in mobile station networks)

Rec. Q.9

A fixed arrangement of radio emitters and receivers installed in a suitable site of a geographical area for the purpose of operating radio channels with mobile stations circulating in the geographical area concerned.

base station area

Recs. Q.9, Q.70

The part of the network covered by a base station. Every mobile station in a base station area can be reached by the radio equipment of the base station.

basic access

Rec. I.112

A term used to describe a simple standardized combination of access channels that constitute the access arrangements for the majority of ISDN users.

basic (error correction) method

Glos. (VI.7, VI.8)

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 measurement unit (BMU)

Recs. T.72, T.73

A unit of measurement used for positioning and dimensioning of layout objects.

basic object

Recs. T.72, T.73

An object that is not subdivided.

Note — A basic object may be structured internally according to a presentation architecture.

basic SDL

Glos. (VI.11)

The minimum subset of *SDL* defined by Recommendation Z.101.

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.

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 service

Rec. I.112

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.

behaviour

Glos. (VI.11)

The *behaviour* or *functional behaviour* of a system in *SDL* is described as discrete responses to discrete stimuli.

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 route or to a destination. A bid may be successful or unsuccessful in seizing a circuit in that route or to that destination.

bid

Rec. E.600

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

Note 1 — In a network management context, the absence of qualification implies a bid to a circuit-group, a route or a destination.

Note 2 — A bid may be unsuccessful for reasons other than the unavailability of the resources under consideration, due to other constraints such as the need to seize other types of resources simultaneously.

bidirectional

Recs. E.600, Q.9

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

bidirectional asymmetric

Rec. I.130

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

bidirectional symmetric

Rec. I.130

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 route, 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 compute BCH.

bilateral control

Recs. G.701, Q.9

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. G.106

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

billing integrity (probability)

Rec. G.106

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

binary digit

*Rec. G.701, Series X**

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 i th channel expressed in seconds, and

n_i is the number of significant conditions of the modulation in the i th 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 serial signalling rate

*Series X **

In the particular case of a serial two-state transmission this is expressed as the reciprocal of the unit interval measured in seconds and expressed in bits per second.

binary tariff system

Recs. D.40, D.302

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).

bipolar signal (deprecated)

See:

alternate mark inversion signal.

bipolar violation (deprecated)

See:

alternate mark inversion violation.

bit

See:

binary digit.

bit combination

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

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

bit error rate

*Series X **

The ratio of the number of bits incorrectly received to the total number of bits sent.

bit error ratio (BER)

Rec. G.106

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

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-order of transmission

*Series X **

The property of a serial transfer of data which concerns the arrangement of digits, e.g. most significant digit first, least significant digit first, or any other desired order.

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 sequence independence

*Series X **

A facility which enables the transfer of digital data in the form of a sequence of binary digits from one user to another without placing any restriction upon the sequence of the binary digits.

Note — This implies that an indefinitely long string of consecutive binary ones or zeros is admitted in the data signal.

block

Rec. Q.9, Glos. (VI.3)

A group of 12 signal units on the signalling channel.

block

*Series X **

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

Glos. (VI.11)

A *block* is a synonym for a *block instance*.

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 (text block)

Recs. T.72, T.73

A basic layout object corresponding to a rectangular area within a page or within a frame with its sides parallel to the sides of the enclosing page or frame, in which only one category or graphic element is to be imaged.

block-acknowledged counter

Glos. (VI.3)

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

block check

*Series X **

A system of error-control based on the check that some preset rules for the formation of blocks are observed.

block-completed counter

Glos. (VI.3)

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

block definition

Glos. (VI.11)

A *block definition* defines the structural and connection properties of a named *block* type.

block error rate

*Series X **

The ratio of the number of blocks incorrectly received to the total number of blocks sent.

block interaction diagram

Glos. (VI.11)

The *block interaction diagram* of *SDL/GR* represents the structure of *blocks*, *channels*, *signal lists*, *data lists*, *processes* and *signal flow* between *processes*. A *block interaction diagram* may also show the partitioning of a *system* into *blocks*, *sub-blocks*, *channels* and *sub-channels*.

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 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

Glos. (VI.11)

A *block substructure* for a *block* is the *partitioning* of the *block* into *sub-blocks* and new *channels* at lower levels of abstraction.

block substructure definition

Glos. (VI.11)

A *block substructure definition* is optionally part of a *block definition* and defines a *block substructure*.

block symbol

Glos. (VI.11)

The *block symbol* represents the concept of a *functional block* in a *block interaction diagram* of *SDL/GR*.

block tree diagram

Glos. (VI.11)

A *block tree diagram* is the *SDL/GR* representation of the partitioning of a *system* into *blocks* at lower levels of abstraction by means of an inverted tree diagram.

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 signal

Rec. Q.254

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

blocking ; congestion

Rec. E.600

The state when the immediate establishment of a new connection is impossible owing to the inaccessibility of any of the resources of the system being considered.

Note 1 – When blocking or congestion is used as an abbreviation for probability of blocking or probability of congestion, it should always be made clear whether it refers to time congestion or call congestion probabilities.

Note 2 – Blocking does not necessarily result in the loss of a call attempt, because it may be possible to establish the connection after a certain delay or by using alternative resources.

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 (Signalling System R2)

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

Rec. X.400

The body of the IP-message is the information the user wishes to communicate.

Boolean

Glos. (VI.11)

The logical *data type* having the values TRUE and FALSE, and the normal set of logical *operators*.

border area

Rec. F.300

The part of the screen which is outside the defined display area. (See Figure 1/F.300.)

border area

Rec. Z.341

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

both way

Rec. E.600

A qualification applying to traffic or circuits which implies that the call set-up occurs in both directions.

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

both-way

Rec. Q.9

A qualification applying to traffic which implies that the 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.

bouncing busy hour

See:

peak busy hour; bouncing busy hour; post selected busy hour.

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.

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.

broadcast communication

Rec. I.130

This value applies when more than two access points 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 repeater

Rec. R.140

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

broadcast videography, teletext

Sup. 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

Rec. X.15

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

Recs. Z.333, 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

Rec. G.106

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.

bureaufax

Sup. 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

Rec. G.106

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 isochronous

Series X *

A transmission process which may be used where the information bearer channel rate is higher than the input data signalling rate. The binary digits being transferred are signalled at the digit rate of the information bearer channel and the transfer is interrupted at intervals in order to produce the required mean data signalling rate. The interruption is always for an integral number of digit periods.

Note — This has particular application, e.g. where envelopes are being transmitted and received by the data circuit-terminating equipment but only the bytes contained within the envelopes are transferred between the data circuit-terminating equipment and the data terminal equipment.

bus

See:

highway;
(time division) highway.

busy

Recs. E.600, Q.9

Condition of a resource which is in use, following its seizure.

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 busy hour refers to the traffic volume or number of call attempts, and is that continuous 1-hour period lying wholly in the time interval concerned for which this quantity (i.e. traffic volume or call attempts) is greatest.

busy period

Rec. E.600

The time interval between the seizure of the last available resource in a pool of resources and the next release and resultant idle state of a resource in that pool.

busy signal

See:

engaged; busy signal.

busy state

Rec. G.106

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.

See Figure 2/G.106.

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.

byte

*Series X **

A group of binary digits normally operated upon as an entity.

byte-serial transmission

*Series X **

Transmission in which successive bytes follow one another in sequence.

Note — The individual bits of each byte may be transmitted serially (described as serial by bit and byte) or simultaneously (described as parallel by bit, serial by byte).

C

call

Rec. E.600

A single continuous connection.

call

Rec. P.10

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

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 *communication* from Recommendation Q.9).

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

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. 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

Rec. U.140

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

call abandonment probability

Rec. G.106

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

call accepted

*Series X **

A call control signal sent by the called DTE to indicate that it accepts the incoming call.

call accepted signal

Rec. U.140

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

call attempt

Rec. E.600

A call attempt is always generated by a user. At a given measurement point it is manifested by a single unsuccessful bid, or a successful bid and all subsequent identifiable activity related to the establishment of a connection using the resource seized and ending not later than its release.

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.

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 attempt, abandoned

Rec. E.600

A call attempt aborted by the calling party.

call attempt answered

See:

call attempt, completed; call attempt, effective; call attempt, answered.

call attempt, completed ; call attempt, effective ; call attempt, answered

Rec. E.600

A call attempt answered by a called station; in international service this should always be followed by an answer signal.

Note — The station reached might not be the one wanted by the caller, due to dialling error or network malfunction.

call attempt effective

See:

call attempt, completed; call attempt, effective; call attempt, answered.

call attempt fully-routed

See:

call attempt, successful; call attempt, fully-routed.

call attempt, lost

Rec. E.600

A call attempt that is rejected due to an equipment shortage, error or failure in the network.

call attempt, successful ; call attempt, fully-routed

Rec. E.600

A call attempt, in which the calling station is either switched through to the exchange line terminating unit of the dialled number, or receives busy tone when the dialled number is busy.

Note — A successful call attempt does not necessarily result in a successful call.

call-back when busy terminal installation becomes free

*Series X **

A facility which enables the originator of a call attempt to a busy terminal installation to request the network to establish the call when the busy terminal installation becomes free.

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

Rec. X.15

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 ; probability of loss ; loss

Rec. E.600

The probability that a bid to a particular group of resources is blocked.

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 character

*Series X **

A character of an alphabet, or a part of it, which is used for call control. It may be used in conjunction with defined signal conditions on other interchange circuits.

call control procedure

Rec. U.140

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

call control procedure

*Series X **

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

call control signals*Series X **

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

call demand*Rec. E.600*

A call intent that results in at least one call attempt.

call establishment*Rec. X.15*

The sequence of events for establishment of a data connection.

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-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 identifier*Rec. X.15*

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 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 intensity*Rec. E.600*

The number of call attempts at a given point, over a period of time, divided by the duration of the period.

call intent*Rec. E.600*

The desire to establish a call. This would normally be manifested by one or more call attempts. However, this need not necessarily be the case since attempts may be suppressed or delayed by the calling customer's expectation of poor network performance at a particular time.

call node

See:

procedure call node.

call not accepted

*Series X **

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

call not accepted signal

Rec. U.140

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

call phases

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 progress signal

Rec. X.15

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 of the reason why the call has been cleared;
- for the permanent virtual circuit service, to inform the DTEs of 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 release time

*Series X **

The time from the initiation of a clearing signal by a terminal installation until the free circuit condition appears on the originating data terminal equipment.

call request

Rec. E.100

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

Rec. X.15

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. 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 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 set-up time

*Series X **

The overall length of time required to establish a circuit switched call between data terminal equipments. It is the summation of:

- a) *Call request time* = the time from the initiation of a calling signal to the delivery to the caller of a "proceed-to-select" signal.
- b) *Selection time* = the time from the delivery of the proceed-to-select signal until all the selection signals have been transmitted.
- c) *Post selection time* = the time from the end of the transmission of the selection signals until the delivery of the call-connected signal to the originating data terminal equipment.

Note 1 — The selection time may be minimized by the use of the direct call or abbreviated address facility.

Note 2 — The call set-up time for a given connection depends upon the network topology, user data rate, mode of working, grade of service, distance between users and the procedure employed (e.g. direct call).

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 call intent.

call waiting services

Sup. 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 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 line identification facility

*Series X **

A facility provided by the network which enables a calling terminal to be notified by the network of the address to which the call has been connected.

called line identification signal

*Series X **

A sequence of characters transmitted to the calling DTE to permit identification of the called line.

called network service (NS) user

Rec. X.213

An NS user with whom a calling NS user wishes to establish a Network-connection (NC).

Note — Calling NS users and called NS users are defined with respect to a single NC. An NS user can be both a calling and a called NS user simultaneously.

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. An SS-user can be both a calling and called SS-user simultaneously.

called terminal

Recs. F.200, T.62

That terminal to which a call is made.

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.

called/calling party address

Q.711

Addresses within SCCP messages. They may consist of one or any combination of the following elements:

- Signalling Point Code,
- Global Title,
- Sub-system Number.

calling line identification facility

*Series X **

A facility provided by the network which enables a called terminal to be notified by the network of the address from which the call has originated.

calling line identification signal

*Series X **

A sequence of characters transmitted to the called DTE to permit identification of the calling line.

calling network service (NS) user

Rec. X.213

An NS user that initiates a Network-connection (NC) establishment request.

Note — *Calling NS users* and *called NS users* are defined with respect to a single NC. An NS user can be both a calling and a called NS user simultaneously.

calling number indication service

Sup. 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.

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 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 signals (Signalling System R2)

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 signal

Rec. 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

An SS-user that initiates a session connection establishment request.

calling station response

Rec. V.25

A tone or signal transmitted from the calling DCE in response to its detection, as defined in Recommendation V.25, of answering tone.

calling terminal

Recs. F.200, T.62

That terminal that initiates the procedures to establish a call.

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 DCE in use.

calling TS user

Rec. X.214

A transport service user that initiates a transport connection establishment request.

calls barred

*Series X **

A facility which permits a terminal installation to make outgoing or to receive incoming calls only (but not both).

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 also Figure 4/G.165.

capability

Rec. G.106

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*.

carrier transmission

Rec. R.140

A transmission in which the telegraph signals from a transmitter modulate an alternating current.

cataleptic failure; catastrophic failure (deprecated)

Rec. G.106

A *sudden failure* which results in a *complete fault*.

catastrophic failure (deprecated)

See:

cataleptic failure; catastrophic failure.

category of access

Rec. X.15

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.

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).

CCITT 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*.

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 control signalling

*Series X **

The system of exchanging call control signals relating to a group of data transmission circuits by means of a transmission channel (or channels) dedicated to control signalling.

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

Rec. X.15

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.

centrex service

Sup. 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).

CF national number

Rec. F.201, Sup. No. 1 (II.4)

In the second 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 (see Recommendation F.201, § 4).

CF prefix

Rec. F.201, Sup. No. 1 (II.4)

In the first 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 (see Recommendation F.201, §§ 3.1 and 3.2).

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

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

The procedure of transferring signalling traffic from one or more alternative signalling links to a signalling link which has become available.

changeback

Glos. (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 code

Glos. (VI.7, VI.8)

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.

changeover

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

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

Glos. (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 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

Rec. E.600

A means of unidirectional communication.

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 ; access channel

Rec. I.112

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, bidirectional.

Note 2 — See also the definition *transmission channel*.

channel

Rec. I.412

A specified portion of the information-carrying capacity of an interface.

channel

Rec. Q.9

A means of unidirectional communication.

Note — Several channels may share a common carrier 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

Glos. (VI.11)

A *channel* is the class of entity which conveys *signals* from one *block* to another *block*. *Channels* also convey *signals* to and from the *environment*. *Channels* are unidirectional, that is they only convey signals in one direction.



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

Rec. 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

Glos. (VI.11)

A *channel definition* defines the properties of a named *channel*. These properties are the origin *block*, the destination *block*, the set of signals which the channel may convey, and optionally a *channel substructure definition*. The destination *block* may be the *environment of the system*.

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

Glos. (VI.11)

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

Glos. (VI.11)

A *channel substructure definition* is an optional part of a *channel definition* which defines the *channel substructure*.

channel substructure diagram

Glos. (VI.11)

A *channel substructure diagram* is the *SDL/GR* representation of a *channel substructure*.

channel switching

Rec. Q.9

The switching of single channels for the exclusive use of the connection for the duration of a call.

channel symbol

Glos. (VI.11)

The *symbol* on a *block interaction diagram* of *SDL/GR* representing a *channel* or *sub-channel*. The arrowhead of the symbol points to the destination *block* and the other end of the symbol identifies the origin *block*. The set of *signals* conveyed by the *channel* may be represented by an associated *signal list symbol*.

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

Recs. T.72, T.73

A member of a set of elements (upon which agreement has been reached and that is) used for the organization, control or representation of information (data).

character

*Series X **

1. A printed symbol such as a letter, figure, punctuation sign and, by extension, a non-printing function such as a space shift, carriage return or line feed contained in a message.

2. Information corresponding to such a symbol or function.

Character

Glos. (VI.11)

The *predefined data type* for which the *literals* are *charstring literals* of length one, and the operators are equal, not equal, and concatenation to form a *charstring value*.

character alignment

Rec. X.15

The identification of groups of contiguous bits which constitute characters.

character base line

Recs. T.72, T.73

A positioning reference for the placement of symbols within a character box.

character box

Recs. T.72, T.73

1) A rectangular area on the presentation medium that can be used for the rendition of one graphic character.

2) A rectangular area within which a graphic character is contained. The nominal spacing between symbols, if any, is included within the character box.

character box element

Recs. T.72, T.73

Either language character or pictorial character that is presented within a character box.

Note — This term is also used as an alternative term for graphic character.

character check

*Series X **

A system of error-control based on a check that some preset rules for the formation of characters are observed.

character coded text

Rec. T.72

The coded representation for text interchange of graphic characters and associated control functions. This coded representation is specified in Recommendation T.61.

character cycle

Rec. R.140

The period in which each tributary channel of a time-division multiplex has completed one character in the common channel.

character error rate

*Series X **

The ratio of the number of characters incorrectly received to the total number of characters sent.

character error rate of a telegraph connection

Rec. R.140

Ratio of the number of characters of a message incorrectly received (after automatic translation where applicable) to the number of characters of the message.

Note 1 — A telegraph connection may have a different character error rate for the two directions of transmission.

Note 2 — The statement of the error rate will be accompanied by that of the time interval, generally limited, during which the observation was made. For a connection established for a sufficiently long time, the probability of exceeding an assigned value of error rate could be considered.

character format

Rec. R.140

A general description of a character signal, indicating for example the number of unit elements it contains.

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 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 path

Recs. T.72, T.73

The direction of progression of successive character boxes along a line.

character rate

Rec. R.140

The average number of characters transferred per unit time between two points.

character-serial transmission

*Series X **

Transmission in which successive characters follow one another in sequence.

Note — The elements (bits) of each character may be transmitted serially (described as serial by bit and character) or simultaneously (described as parallel by bit, serial by character).

character set (in MML)

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.

character switching

Rec. 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

Rec. G.106

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.

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 semi-automatic 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 semi-automatic operation, is the chargeable duration rounded upwards:

- a) either to a 3-minute charge, if the chargeable duration of the conversation is less than 3 minutes; or
- b) to the whole number of minutes if the chargeable duration is greater than 3 minutes.

charged duration

See:

chargeable duration; charged duration.

charging in progress PE

Glos. (VI.11)

A *pictorial element* indicating that charging is currently taking place.

Charstring

Glos. (VI.11)

The *predefined data type* for which the *literals* are strings of CCITT No. 5 alphabet characters, and the *operators* are those of the *string predefined generator* instantiated for *characters*.

check bit

*Rec. Q.9, Glos. (VI.7, VI.8), Series X**

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)

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

Rec. G.106

That part of *active repair time* during which *function check-out* is performed.

See Figure 3/G.106.

checkpoint

Rec. T.62

A checkpoint is a numbered mark inserted by the sender in the text stream to provide a reference point for error recovery.

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 Appendix 6 to Recommendation Z.200.

(chromatic) dispersion

Rec. G.651

The dependence of a propagation parameter on wavelength resulting in distortion of the transmitted signal.

Note — Examples of dispersion are:

- material dispersion (i.e., the variation of refractive index with wavelength);
- waveguide dispersion (negligible in multimode fibres);
- profile dispersion.

circuit

Rec. E.411

A circuit connects two switching centres. A national circuit connects two switching centres in the same country. An international circuit connects two international switching centres situated in different countries. (Based on Recommendation D.150 and Recommendation F.68.)

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.

(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.

... 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 access points

Rec. 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.723

The circuit control station is the point within the general maintenance organization for the international automatic and semi-automatic service that fulfils the control responsibilities for the automatic circuits assigned to it.

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 assigned to it such as voice-frequency telegraph, facsimile and phototelegraph.

circuit group

Recs. E.600, Q.9

A group of circuits which are traffic-engineered as a unit.

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 sub-control station

Rec. M.724

The circuit sub-control station is a point within the general maintenance organization for the international automatic and semi-automatic service that assists the circuit control station and fulfils the control responsibilities for a circuit section assigned to it.

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 subgroup

Recs. E.600, Q.9

A number of circuits with similar characteristics (e.g. type of signalling, type of path transmission, etc.).

It is not engineered as a unit, but as a part of a circuit group. Circuit subgroups are provided for reasons of service, protection, equipment limitation, maintenance, etc.

circuit-switched connection

*Series X **

A connection which is established on demand between two or more DTEs giving the exclusive use of a data circuit and which is maintained until the connection is released.

circuit-switched data communication service

Rec. D.20

A service requiring the establishment of a circuit-switched data connection before data can be transferred between data terminal equipments.

circuit-switched data transmission service

Rec. X.15

A service requiring the establishment of a circuit switched data connection before data can be transferred between data terminal equipment.

circuit switching

Rec. Q.9

The switching of circuits for the exclusive use of the connection 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; telecommunication circuit

Rec. Q.9

A combination of two transmission channels permitting bidirectional telecommunication 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 for association together throughout a call.

Note 5 — The term circuit may be preceded by other qualifiers than telecommunication e.g. telephone, digital, etc.

circuit test access point

Rec. 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.

cladding

Rec. G.651

That dielectric material of an optical fibre surrounding the core.

cladding mode stripper

Rec. G.651

A device that encourages the conversion of cladding modes to radiation modes.

cladding surface center

See:

core centre; cladding surface centre.

cladding surface diameter

See:

core diameter; cladding surface diameter.

cladding surface diameter deviation

See:

core diameter deviation; cladding surface diameter deviation.

cladding surface tolerance field

See:

core tolerance field; cladding surface 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

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 of service

Rec. Q.711

A set of services provided by the SCCP and offered to the user of the SCCP. Five classes are provided by the SCCP, two of them connectionless and three of them connection oriented. The five classes are:

- 0 : Basic connectionless class
- 1 : Sequenced (MTP) connectionless class
- 2 : Basic connection-oriented class
- 3 : Flow control connection-oriented class
- 4 : Error recovery and flow control connection oriented class.

(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.

clear-back signal

Rec. Q.9

A signal sent in the backward direction indicating that the called party has cleared.

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 measurement of call duration if, between 1 and 2 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.

clear-back signal (Signalling System R2)

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 signal

See:

hang-up signal.

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

*Series X **

A call control signal to acknowledge reception of the DTE clear request by the DCE or the reception of the DCE clear indication by the DTE.

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.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

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 (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 (Signalling System R2)

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-forward signal

See:

disconnect signal.

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

*Series X **

A sequence of events to disconnect a call and return to the ready state.

clearing signal

Rec. U.140

The switching signal transmitted over a circuit to release a switched connection.

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-circuit working

Rec. R.140

Single-current transmission in which a current flows in the circuit while the transmitting device is at rest.

closed user group

Rec. F.300

A group of users who are permitted access to parts of a data base or other Videotex service facilities that are not available to other users.

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

*Series X **

A facility assigned to specified users of a public data network transmission service(s), which permits such users to communicate with each other but precludes communication with all other users of the service or services.

See Figure 1/X.

Note — A user (DTE) may belong to more than one closed user group.

closed user group with outgoing access

*Series X **

A facility assigned to a user in a closed user group to enable that user to communicate with other users of a public data network transmission service where appropriate and/or to users having a data terminal equipment connected to any other public switched network to which interworking facilities are available.

See Figure 1/X.

closed window

Rec. X.224

A transmit window which contains no sequence number.

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.)

coast earth station

Recs. E.210, F.120, Q.11 ter

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, F.120 and Q.11 *ter*, 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)

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

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, Q.11 ter

A land station in the Maritime Mobile Service.

coast station identity

Recs. E.210, F.120, Q.11 ter

The coast station identification $X_1, X_2 \dots X_k$ transmitted on the radio path.

Note — In Recommendations E.210, F.120 and Q.11 *ter*, the term coast station identity is also intended to include, for simplicity, coast earth station.

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:

coded character set; code.

code 15 (Signalling System No. 4)

See:

end-of-pulsing signal.

code (telegraph or data)

*Series X **

A system of rules and conventions according to which the telegraph signals forming a message or the data signal forming a block should be formed, transmitted, received and processed.

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 is 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 conversion

*Series X **

Automatic conversion of character signals or groups of character signals in one 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 dependent system

*Series X **

A system which depends, for its correct functioning, upon the character set or code used for transmission by the data terminal equipment.

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 independent channel

Rec. R.140

Telegraph channel capable of transmitting telegraph signals irrespective of the code used.

code independent system

*Series X **

A system which does not depend, for its correct functioning, upon the character set or code used for transmission by the data terminal equipment.

code table

Recs. T.50, T.51

A table showing the character allocated to each bit combination in a code.

code table

Rec. 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 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 in PCM (deprecated)

See:

encoding.

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 with the information and its associated timing signal are transmitted in the same direction (see Figure 3/Q.9).

coherent significant instant

*Series X **

In parallel transmission the significant instant of a modulation or restitution which normally occurs at the same instant on all channels.

collection charge

Recs. D.000, D.40, D.150, D.200 R, D.302 R

The collection charge is the charge in its national currency collected by an Administration from its customers for the use of the international service. The establishment of the collection charge is a national matter.

collection charge

Rec. F.67

The collection charge is the charge collected by an Administration from its public for the use of the international telex service. The establishment of that charge is a national matter.

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 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:

$$L_{RET} = L_{Rin} - A_{COM}, \text{ where } A_{COM} = A_{ECHO} + A_{CANC} + A_{NLP}.$$

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.

combined signalling sender and receiver PE

Glos. (VI.11)

A *pictorial element* corresponding to a combined signalling sender and signalling receiver.

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 DTE to the 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

Glos. (VI.11)

Information which is in addition to or clarifies the *SDL* graph. In *SDL/GR comments* may be attached by a single square bracket connected by a dashed line to a *flow line* of a *process diagram* or any symbol. In *SDL/PR comments* are introduced by the keyword *COMMENT*.

comment (in MML)

Recs. Q.9, Z.341

A character string enclosed between the separator strings/* (solidus asterisk) and */ (asterisk solidus). 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*. (Recommendation Z.102, §§ 2.6, 2.7.2.)

common channel exchange

Glos. (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

Glos. (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

Glos. (VI.3)

A transit exchange when interworking between common channel signalling systems takes place.

common channel exchange, last

Glos. (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

Rec. Q.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

Glos. (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

Glos. (VI.7, VI.8)

A signalling method in which a single channel conveys by the means of labelled messages, signalling information relating to a multiplicity of circuits or calls and other information such as that used for network management.

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.

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 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. 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 definitions of *call*, *(complete) connection in telecommunication* and *connection*).

communication configuration

Rec. I.130

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.

communications network provider

Rec. F.300

A party responsible by agreement with a Videotex service provider for providing telecommunication services for interconnecting user terminals, information provider equipment and/or Videotex host computers.

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.

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 ; continuous compelled)

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 acknowledgement 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).

to compile

Rec. Q.9

To translate a program expressed in a high level language into a program expressed in a computer language.

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

See:

(complete) connection.

complete fault ; function-preventing fault

Rec. G.106

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 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.

completion of calls to busy subscribers service

Sup. 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. G.106

The ratio of completed call attempts to the total number of call attempts, as measured at a given point of a network.

completion ratio ; efficiency ratio ; answer seizure ratio

Rec. E.600

The ratio of the number of completed (or effective) call attempts to the total number of call attempts, at a given point of a network.

completion time

See:

holding time; completion time.

compliance test

Rec. G.106

A *test* used to show whether or not a *characteristic* of an *item* complies with the stated requirements.

component

Rec. Z.341

A *decomposition meta-language* symbol for an *information entity* that cannot be divided further.

composite gain

See:

composite loss.

composite loss (or gain)

Recs. G.101, Q.43

The composite loss of a quadripole inserted between two impedances Z_E (of the 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 object

Rec. T.73

An object that is subdivided into other composite objects and/or basic objects.

Note — Composite layout objects are termed document, page set, page, or frame.

composite operations

Glos. (VI.11)

A shorthand notation representing a standard combination of primitive *SDL* concepts. A *composite operation* can be mapped to concepts in the *SDL abstract syntax* in a systematic way.

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 limiter

Sup. No. 9 (V)

An electronic system which will linearly limit signals above a certain threshold by controlling (lowering) the gain of the system. It is typically used in telephone receiver systems to limit the loudness of high level signals.

computer language ; machine language

Rec. Q.9

A low level language whose instructions consist only of computer instructions.

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.

concrete syntactical form

Glos. (VI.11)

SDL/GR, *SDL/PR* and *SDL/PE* are the *concrete syntactical forms* of *SDL* which can be mapped one to another by considering the conceptual underlying mathematical *SDL* graph.

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

Glos. (VI.11)

The *concrete syntax* for the various representations of *SDL* is the actual symbols used to represent *SDL* in the *SDL/GR*, the *SDL/PR* or the *SDL/PE* forms.

concurrent

Rec. I.130

The configuration of a connection is described as concurrent when all of the connection elements involved are established simultaneously and released simultaneously.

conditional (parameter)

Rec. X.215

A parameter whose presence in a request or response depends on conditions defined in the text of this Recommendation; 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 expression

Glos. (VI.11)

An *expression* with a *Boolean expression* after IF which controls whether the consequence *expression* after THEN or the alternative *expression* after ELSE is interpreted.

conference call services

Sup. No. 1 (II.2)

The service provides the possibility to connect a number of specified subscribers on the same telephone call.

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

Rec. G.106

The value $1 - \alpha$ of the *probability* associated with a *confidence interval* or a *statistical tolerance interval*.

confidence interval

Rec. G.106

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 $1 - \alpha$.

confidence level

See:

confidence coefficient; confidence level.

confidence limit

Rec. G.106

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

Rec. U.140

Return switching signal which indicates that the clearing signal has been executed.

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.

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

See:

blocking; congestion.

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 signal (Signalling System R1)

Rec. Q.310

This line signal is transmitted (in the forward direction) 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 switching path pictorial element (PE)

Glos. (VI.11)

A *pictorial element* indicating connectivity between terminal equipment and/or signalling devices.

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

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.

connection

Rec. Q.9

An association of transmission channels or circuits, switching and other functional units set up to provide a means for a transfer of information between two or more points in a telecommunication network.

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.

connection (communication path)

Rec. E.600

A temporary association of channels and other functional units providing means for a communication between two or more devices in, or attached to, a telecommunication network.

(complete) connection

Rec. P.10

A *connection* between users' terminals.

(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.

(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 accessibility

Rec. G.106

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.130

This attribute describes the spatial arrangements for transferring information on a given connection. It consists of three sub-attributes. Therefore no value is required.

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 identity

Rec. Q.711

A number which identifies unambiguously a certain connection at the interface between the SCCP and a user function.

connection in progress

*Series X **

A call control signal at the DCE/DTE interface which indicates to the DTE that the establishment of the data connection is in progress and that the ready for data signal will follow.

connection performance

Rec. I.130

This attribute describes the network performances that relate to an ISDN connection.

connection retainability

Rec. G.106

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

Rec. Q.711

A section of a SCCP connection between the endpoint and such type of intermediate point where a coupling has to be provided between two adjacent sections.

connection through an exchange

Rec. G.123, Q.45

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 (points A and D of Figure 1/Q.45) 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.

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

Glos. (VI.1)

A *connector* is a *symbol* used in *SDL/GR*. A *connector* (a circle) 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*.

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*. (Recommendation Z.102, §§ 2.4, 2.5.2.)

constant expression

Glos. (VI.11)

A *constant value* or an *operator* with only *constant expressions* as parameters.

constant failure intensity period

Rec. G.106

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

Rec. G.106

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 value

Glos. (VI.11)

Either a *literal* or a *synonym*.

constituent

Recs. T.72, T.73

A layout or logical object below the level of document or a content portion.

constructor

Rec. T.73

A data element whose content is itself a data element, or a series of data elements.

consumer's risk (point)

Rec. G.106

A point on the *operating characteristic curve* corresponding to a predetermined and usually low *probability of acceptance*.

content

Rec. T.73

The actual information conveyed by the document, independent of layout structure and logical structure.

content

Rec. X.400

The piece of information that the originating UA wishes delivered to the recipient UA. For IPM UAs, the content consists of either an IP-message or an IPM-status-report.

content portion

Recs. T.72, T.73

A part of the content of the document associated with at most one basic layout object and one basic logical object.

Note — Other terms in use are “portion of text” and “portion of document content”.

contents

Rec. T.73

Substance of a data element containing the primary information the data element is intended to convey.

Note — Sometimes the contents is termed “value”.

continental circuit

Recs. D.150, F.67

An international circuit between two international exchanges situated in two different countries in the same continent.

continental circuit

Rec. F.68

A circuit 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

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

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

Glos. (VI.3)

A check made of the circuit or circuits in a connection to verify that a speech path exists.

continuity check transceiver

Glos. (VI.3)

A combination of the check-tone transmitter and receiver.

continuity check transponder

Glos. (VI.7, VI.8)

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 transmits another check tone to permit a continuity checking of a 2-wire circuit.

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 signal

Glos. (VI.11)

A *continuous signal* is a *composite operation* containing a *condition*. When the *condition* becomes true, the *state* which has the *continuous signal* attached is left.

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).

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

*Series X **

A character whose occurrence in a particular context initiates, modifies or stops a control operation. Such a character may be recorded for use in a subsequent action; it may have a graphic representation in some circumstances.

control character

Rec. 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 character (in MML)

Rec. Q.9

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. More than one such control circuit may be required for association with a single television circuit.

control circuit

Rec. N.3

A control circuit is 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 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

Recs. T.72, T.73

An action that affects the recording, processing, transmission, or interpretation of data and that has a coded representation consisting of one or more octets of bits.

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 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

Rec. M.80

A control station is that point within the general maintenance organization which fulfils the control responsibilities for the circuit, group, supergroup, digital section, etc., assigned to it.

controlled maintenance

Recs. G.106, M.700

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

Glos. (VI.7, VI.8)

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.

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 designate 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 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.

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

Glos. (VI.11)

In a *process diagram* of *SDL/GR* when two or more symbols are followed by a single symbol the *flow lines* converge on the symbol. Convergence may appear as one *flow line* flowing into another or as more than one *out-connector* associated with a single *in-connector* or as separate *flow lines* entering the same symbol.

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.

conversational mode

Rec. F.200

The alternate exchange of user information during a call or series of calls between calling and called terminals.

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.

conversion facility (CF)

Rec. F.201, Sup. No. 1 (II.4)

Fully automatic system performing the necessary conversion between the Teletex service and the telex service (see Recommendation F.201, § 2.1).

cooperating user agent

Rec. X.400

A UA that cooperates with another recipient's UA in order to facilitate the communication between the originator and recipient.

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 — 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

$$n_3 = n_2 + k (n_1 - n_2) \text{ (see Figure A-1/G.651)}$$

where:

- n_1 = maximum refractive index of the core
- n_2 = refractive index of the innermost homogenous cladding
- k = a constant

Note — Unless otherwise specified a k value of 0.05 is assumed.

core centre ; cladding surface 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 surface).

Note 1 — These centres may not be the same.

Note 2 — The method of best fitting has to be specified.

core diameter ; cladding surface diameter

Rec. G.651

The diameter of the circle defining the core (cladding) centre.

core diameter deviation ; cladding surface diameter deviation

Rec. G.651

The difference between the actual and the nominal values of the core (cladding surface) diameter.

core tolerance field ; cladding surface 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).

core/cladding surface concentricity error

Rec. G.651

The distance between the core centre and the cladding surface centre divided by the core diameter.

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.

$$\Delta_k = \Delta_e / \sqrt{L} \text{ } \Omega \cdot \text{km}^{-1/2}$$

corrected reference equivalent (CRE)

Rec. G.111

The corrected reference equivalent (CRE) of a local system or a complete system is termed y :

$$y = 0.0082 q^2 + 1.148 q + 0.48 \text{ dB} \quad (\text{A-1})$$

which can also be written:

$$y = 0.0082 (q + 70)^2 - 39.7 \text{ dB},$$

where q is the reference equivalent.

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 A 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

Rec. M.700

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; repair

Rec. G.106

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 (Signalling System R2)

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 (or Administration) of destination

Recs. D.40, D.302 R

The country of destination is the country in which the telegram is to be delivered.

country (or Administration) of destination

Recs. D.150, D.200 R

The country of destination is the country in which the called subscriber is located.

country (or Administration) of origin

Recs. D.40, D.200 R

The country of origin is the country in which the telegram is handed in.

country (or Administration) of origin

Rec. D.150

The country of origin is the country in which the calling subscriber is located.

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.

create

Recs. Z.333, Z.341

An *action* to establish in the *system* a new *data set*; opposite of *delete*.

create request action

Glos. (VI.11)

An *action* which causes the creation and starting of a new *process instance* from a specified *process definition*.

create request node

Glos. (VI.11)

A *node* in a *transition* in a *process graph* or a *procedure graph* where a *create request action* takes place.

create request symbol

Glos. (VI.11)

The *symbol* on a *process diagram* of *SDL/GR* representing a *create request*.

create symbol

Glos. (VI.11)

The *symbol* on a *block interaction diagram* of *SDL/GR* connecting the *process symbol* of the *creating process* with the *process symbol* of the *created process*. The arrowhead identifies the *offspring process* and other end of the create request symbol identifies the *parent process*.

critical defect

Rec. G.106

A *defect* that is assessed likely to result in injury to persons or significant material damage.

critical defective

Rec. G.106

An *item* which contains one or more *critical defects*.

critical failure

Rec. G.106

A *failure* which is assessed likely to result in injury to persons or significant material damage.

critical fault

Rec. G.106

A *fault* which is assessed likely to result in injury to persons or significant damage to material.

critical region

Rec. G.106

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

Rec. G.106

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

Rec. G.106

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

Glos. (VI.3)

A check made across the exchange to verify that a speech path exists.

cross-office check

Glos. (VI.7, VI.8)

A check made across the exchange to verify that an acceptable speech path exists.

cross-office check

See:

cross-exchange check.

cross-office transfer time, T_{cu}

Recs. Q.725, Q.766, X.61

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 or 19/X.61.)

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 system

Rec. Q.9

An automatic switching system in which the selecting mechanisms are *crossbar switches*.

cumulative exchange service unaccessibility

Rec. E.550

The fraction of time the exchange in question cannot perform the required function under stated conditions over a prespecified observation period.

current turnoff time

Rec. K.12

The time required for the gas discharge tube to return itself to a non-conducting 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 customer is 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

Sup. 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 recorded information service

Sup. 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 second order LP₁₁ mode ceases to propagate.

cyclic code

*Series X **

A code in which every cyclic shift of a code word is itself a code word.

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.

D

D'

Glos. (VI.11)

The *SDL/PR* keyword introducing a decimal denotation of a numerical *value*. Since this is the default denotation, *D'* is optional.

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

See:
data item.

data base

Rec. F.300

A set of information and/or transaction facilities that can be accessed by, or made available to, users.

data carrier failure detector

Glos. (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 failure detector

Glos. (VI.3)

A data carrier failure detector or loss of frame alignment detector.

data channel propagation time T_p

Rec. Q.706

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 channel, analogue

Glos. (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

Glos. (VI.3)

A one-way path for data signals which includes a digital channel and associated interface adaptors at each end.

data circuit

*Series X **

A means of two-way data transmission between two points comprising associated "transmit" and "receive" channels.

Note 1 — Between data switching exchanges, the data circuit may or may not include data circuit-terminating equipment depending on the type of interface used at the data switching exchange.

Note 2 — Between the data terminal installation and a data switching exchange and/or concentrator, the data circuit includes the data circuit-terminating equipment at the data terminal installation end and may also include equipment similar to a data circuit-terminating equipment at the data exchange or concentrator location.

Note 3 — Either physical or virtual data circuits may be established.

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. X.15

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 collection

*Series X **

A facility for gathering small quantities of data from a nominated group of addresses, assembling them within the network into a single message for delivery to another nominated address.

data communication

Rec. X.15

Transfer of information between functional units by means of data transmission according to a protocol.

data communication networks

Rec. X.15

Data networks established and operated either by Administrations, or by private organizations.

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 connection

*Series X **

The interconnection of a number of data circuits on a tandem basis by means of switching equipment to enable data transmission to take place between data terminal equipments.

Note 1 — Where one or more of the data circuits which are interconnected is a virtual data circuit the overall connection is known as a virtual data connection.

Note 2 — The overall connection includes the data circuit terminating equipment at the respective data terminal installation locations.

data element

Rec. T.73

A sequence of data elements serves for the coded representation of a document or its constituents. A data element consists of three components that always appear in the following order: identifier, length, indicator, contents.

Note — See also the definition of *data structure*.

data item

Glos. (VI.11)

A *data item* is either a *variable* or *value*.

data link

Rec. Q.9

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

*Series X **

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.

data phase

*Series X **

That phase of a data call during which data signals may be transferred between DTEs which are interconnected via the network.

data processing

Rec. F.300, Sup. 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.

data security

*Series X **

The protection of data against unauthorized disclosure, transfer, modifications, or destruction, whether accidental or intentional.

data-sensitive fault

Rec. G.106

A *fault* that is revealed as a result of the processing of a particular pattern of data.

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 signal

*Series X **

Signal representing a set of digits used to convey information and/or service functions and which may include check digits.

data signal quality detection

*Series X **

Determination that a received data signal has departed from an acceptable form, based on criteria such as amplitude of signal, signal-to-noise ratio or telegraph distortion, without involving checks of the significance or the value of the restituted digital signal.

data signalling rate

Rec. X.15

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 signalling rate transparency

*Series X **

A network parameter which enables the transfer of data between one user and another without placing any restriction, within certain limits, on the data signalling rate used.

data sink

Rec. X.15

The functional unit that accepts transmitted data.

data source

Rec. X.15

The functional unit that originates data for transmission.

data station

Rec. X.15

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.73

A set of data items representing an object, a content portion, a part of an object or content portion, or the document description concerned.

Note — The term *data structure* might be replaced by *data element* or *constructor* (element).

data switching exchange

*Series X **

The set of equipments installed at a single location to switch data traffic.

Note — A data switching exchange may provide only circuit switching, only packet switching or both.

data terminal equipment (DTE)

Rec. X.15

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

Rec. X.15

The result of the transmission of data signals from a data source to data sink.

data transfer rate

Rec. X.15

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 transfer requested

*Series X **

A call control signal transmitted by the DCE to the DTE in leased circuit service to indicate that the distant DTE is wishing to exchange data.

data transmission

Rec. X.15

The conveying of data from one place for reception elsewhere by telecommunication means.

data type

Glos. (VI.11)

A *data type* of *data items* determine the *range*, the meaning of *values* in that *range* and the valid set of *operators* which may be used with items of that *data type*. (See also *predefined data type*.)

data type definition

Glos. (VI.11)

Defines the *name*, *data values* and *operators* for a *data type*.

data User Part

Glos. (VI.7, VI.8)

The User Part specified for data services.

Data User Part handling time, T_{hu}

Rec. X.61

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.

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

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

Weighted noise level measured with a quasi-peak measuring instrument complying with CCIR Recommendation 468-3 and referred to a point of zero relative sound-programme level.

dBq0s

Rec. J.16

Unweighted noise level, measured with a quasi-peak measuring instrument complying with CCIR Recommendation 468-3 and referred to a point of zero relative sound-programme level.

dBr

Rec. J.14, Series P

The relative power level, in decibels.

dBm

Rec. O.41

Decibels referred to -90 dBm or decibels above a reference power of 10^{-12} watts.

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.)

DCE clear indication

*Series X **

A call control signal transmitted by the DCE to indicate that it is clearing the call.

DCE waiting

*Series X **

A call control signal at the DCE/DTE interface which indicates that the DCE is waiting for another event in the call establishment procedure.

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*.

dead time

Rec. 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.

to debug (in programming)

Rec. Q.9

To detect, to trace, to eliminate mistakes in programs or in other software.

decentralized control signalling

*Series X **

The system of exchanging call control signals relating to a particular data transmission circuit by transmitting signals over that circuit.

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

Rec. X.15

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

Glos. (VI.11)

A *decision* is an *action* at a *decision node* within a *transition* which asks a question to which the answer can be obtained at that instant and chooses one of the several outgoing *arcs* from the *node* to continue the *transition*.

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*. (Recommendation Z.101, § 1.3.7.)

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 name

Glos. (VI.11)

A *decision name* is the *name* associated with a *decision*. The name of a *decision* must be a question which is well understood by the interpreter. The *names* of the *decision arcs* leading from a *decision* must constitute all possible results from the question.

decision node

Glos. (VI.11)

A *decision node* is a *node* in a *transition* in a *process graph* or a *procedure graph* where a *decision* takes place.

decision symbol

Glos. (VI.11)

A *symbol* representing the SDL concept of a decision in a *process diagram* of *SDL/GR*.

decision value

Rec. G.701

A value defining the boundary between adjacent quantizing intervals. (See Figures 2/G.701 and 4/G.701.)

declare!

Glos. (VI.1)

The predefined *operator* implicit with all data types associated with the instantiation of *variable instances*.

decoder

Rec. G.701

A device that performs decoding.

decoding

Rec. G.701

The generation of reconstructed samples.

decomposition meta-language

Rec. Z.341

A graphical *meta-language* to describe the structure of the *information entities* associated with an *MML function*.

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*.

defect

Rec. G.106

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*.

defective; defective item

Rec. G.106

An *item* which contains one or more *defects*.

deferred maintenance

Rec. G.106

Such *corrective maintenance* which is not immediately initiated after a *fault recognition* but is delayed in accordance with given maintenance rules.

defined display area

Rec. F.300

The rectangular part of the screen that can be used by the Videotex service. Its structure may be redefined. (See Figure 1/F.300.)



definition

See:

type definition.

degradation failure

See:

gradual failure; degradation failure; drift failure.

degree of early anisochronous parallel distortion

*Series X **

Ratio to the theoretical duration of the significant interval of the maximum measured difference between this theoretical duration and the duration of the interval between the earliest of all coherent significant instants of a modulation (or restitution) and the earliest of the following set of coherent significant instants.

See Figure 3/X.

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 gross start-stop distortion

*Series X **

Degree of start-stop distortion determined when the unit interval and the theoretical intervals assumed are exactly those appropriate to the standardized modulation rate.

Note — As for definition *degree of isochronous distortion*.

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 isochronous distortion

*Series X **

1. Ratio to the unit interval of the maximum measured difference, irrespective of sign, between the actual and the theoretical intervals separating any two significant instants of modulation (or of restitution), these instants being not necessarily consecutive.



2. Algebraical difference between the highest and the lowest values of individual distortion affecting the significant instants of an isochronous modulation. (This difference is independent of the choice of the reference ideal instant.)

The degree of distortion (of an isochronous modulation or restitution) is usually 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.

In accordance with the definition *theoretical duration of a significant interval*, in practical measurements the unit interval and the theoretical significant intervals considered are those corresponding to the actual average rate of modulation.

degree of late anisochronous parallel distortion

*Series X **

Ratio to the theoretical duration of the significant interval of the maximum measured difference between the latest and the earliest coherent significant instants of a modulation (or restitution) within all parallel channels.

See Figure 3/X.

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

*Series X **

a) Ratio to the unit interval of the maximum measured difference, irrespective of sign, between the actual and theoretical intervals separating any significant instant of modulation (or of restitution) from the significant instant of the start element immediately preceding it.

b) The highest absolute value of individual distortion affecting the significant instants of a start-stop modulation.

The degree of distortion of a start-stop modulation (or restitution) is usually expressed as a percentage.

Note 1 — Same as the note to the definition *degree of isochronous distortion*.

Note 2 — Distinction can be made between the degree of late (or positive) distortion and the degree of early (or negative) distortion.

Note 3 — The theoretical intervals are related to the mean actual incoming modulation rate and not necessarily to the nominal modulation rate.

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 (Signalling System R1)

Rec. Q.310

This line signal is transmitted (in the backward direction) 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 mode of operation

Rec. E.600

A mode of operation in a system in which bids which find no suitable resources, free and accessible, are permitted to wait until service can begin.

delay time

Rec. E.600

The interval between the registration or arrival of a demand for a resource and the completion of the requested action, or the abandonment of the demand if earlier.

delay time

See:

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

delayed delivery

*Series X **

A facility which employs storage within the data network whereby data from a user destined for delivery to one or more addresses may be held for subsequent delivery at a later time.

Note – Two modes may be required

- 1) where the called data terminal equipment is busy when called and the network holds the data until the destination is free;
- 2) where the network accepts data and undertakes to deliver them at some predetermined time.

delete

Recs. Z.333, Z.341

An *action* to eliminate a *data set* from the *system*; opposite of *create*.

delimiter

Rec. Z.341

A character that organizes and separates items of data.

delivery

Rec. X.400

The interaction by which the Message Transfer Agent transfers to a recipient User Agent the content of a message plus the delivery envelope.

delivery confirmation

*Series X **

A user facility which will provide information to the sending DTE that a given packet has been delivered to the nominated address(es).

delivery envelope

Rec. X.400

The envelope which contains the information related to the delivery of the message.

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.

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.

demand (communication)

Rec. I.130

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 I-1/I.130).

demand operating

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) **semi-automatic 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 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.

democratic (mutually synchronized) network

Rec. Q.9

A mutually synchronized network in which all *clocks* in the network 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 the population of *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

Rec. G.106

The collective term used to describe the *availability performance* and its influencing factors: *reliability performance*, *maintainability performance* and *maintenance support performance*. See Figure 1/G.106.

Note — Dependability is used only for general descriptions in non-quantitative terms.

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.

descrambler

Rec. G.701

A device that performs the complementary operation to that of a scrambler.

description (in SDL)

Rec. Q.9, Glos. (VI.1)

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.

descriptive name

Rec. X.400

A name that denotes exactly one user in the MHS.

descriptor

Recs. T.72, T.73

A data element representing a layout object or a logical object.

deserializer

See:

serial to parallel converter;

serial to parallel converter; deserializer .

design defect

Rec. G.106

A *defect* due to an inadequate design of an *item*.

design failure

Rec. G.106

A *failure* due to a *design defect*.

design fault

Rec. G.106

A *fault* due to a *design defect*.

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.

designation method

Recs. Q.9, Q.70

The calling subscriber must know the actual location area of the 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 (synchronized) network

Rec. Q.9

A synchronized network in which a unique master *clock* exists with full power of control of all other *clocks*.

despotic network (deprecated)

See:

monarchic network.

despotic synchronized network (deprecated)

See:

monarchic 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 station. 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. F.67

The destination country is the country in which the called subscriber is located.

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 PDN

Rec. X.110

A set of equipment and/or circuits which enable connection of a destination IDSE to the called DTE.

destination point

See:

(signalling) destination point.

destination point code

Glos. (VI.7. VI.8)

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 μ s 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.

determinate fault

Rec. G.106

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

Rec. G.106

A *test* used to establish the value of a *characteristic*.

deterministic failure

See:

systematic failure; reproducible failure; deterministic failure.

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 code in Recommendation X.25

Rec. X.15

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.

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 subscriber off hook and reception of dial tone.

dialling mistake probability

Rec. G.106

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 subscriber.

dialogue

See:

dialogue procedure.

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

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 window

Rec. Z.341

That part of a VDT *display area* where related *input* and *output* is displayed during the *dialogue*.

diary service

Sup. 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.

dichotomizing search

Rec. Q.9

A search in which an ordered set of items is partitioned into two parts, 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 modulation

*Series X **

A type of modulation in which the choice of the significant condition for any signal element is dependent on the choice for the previous signal element.

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 dB, 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, Series X**

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 block

Recs. G.701, M.300

The combination of a digital path and associated digital multiplex equipments.

See Figures 6/M.300, 2/Q.9.

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

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

Rec. Q.9

A circuit which transmits information signals in digital form between two exchanges. It includes termination equipment but not switching stages.

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 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 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

Recs. M.300, Q.9

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 or 2/Q.9.

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 with specified characteristics between two points.

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 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 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 ; 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 network ; integrated 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.

digital node ; digital switching node

Recs. I.112, Q.9

A point at which digital switching occurs.

digital padding (deprecated)

See:

digital filling.

digital path

Rec. 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 path

Rec. Q.9

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 2/Q.9).

Note 1 — A digital path comprises one or more digital sections.

Note 2 — Where appropriate, the bit rate should qualify the title.

Note 3 — The description always applies to the combination of “go” and “return” directions of transmission, unless stated otherwise.

Note 4 — Digital paths interconnected by digital switches form a digital connection.

digital path (deprecated)

See:

digital link; digital transmission link.

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.

digital radio system

Rec. M.300

A specific means of providing a digital radio section.

See Figure 6/M.300.

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

Rec. Q.9

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 2/Q.9).

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.

Note 3 — The description always applies to the combination of “go” and “return” directions of transmission, unless stated otherwise.

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 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

See:

digital node; digital switching node.

digital telecommunication circuit

See:

digital 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 channel; digital transmission channel.

digital transmission system

Rec. G.701

A specific means of providing a digital section.

digital transparency

See:

transparency.

digroup

See:

primary block; digroup;

primary PCM group.

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 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

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 service

Sup. No. 1 (II.2)

Calls can be dialled from a telephone line connected to the public network directly to extensions in a PABX.

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 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 transit country

Recs. D.150, D.200 R, F.67

A direct transit country is one through which traffic is routed on direct circuits, i.e. on circuits provided for the exclusive use of other countries.

directive

Rec. Z.341

User 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 inquiry service

Sup. No. 1 (II.2)

Callers can be informed of subscribers' telephone numbers, and, possibly, also of their names and addresses.

directory number of a land mobile station

Rec. Q.70

The international number of a mobile station is the number to be dialled following the international prefix to obtain a mobile station in another country. It consists of the country code of the country in which the mobile station is registered followed by the national (significant) mobile number of the called mobile station. The national (significant) mobile number is defined in Recommendation E.213.

disabled state ; outage

Rec. G.106

A state of an *item* characterized by its inability to perform a *required function*, for any reason.

See Figure 2/G.106.

disabled time

Rec. G.106

The *time interval* during which an *item* is in a *disabled state*.

See Figure 3/G.106.

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 signal (Signalling System R1)

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 the definition *hang-up signal (Signalling System R1)* occurs.

discretely-timed signal

Rec. G.701

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.

discretely-timed signal

Rec. 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 delay

Rec. X.140

Disengagement delay is the value of elapsed time between the start of a disengagement attempt for a particular user and successful disengagement of that user.

The disengagement request notifies the system of a user's desire to terminate an established data communications session. It is complementary to the access request in most networks.

disengagement denial probability

Rec. X.140

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

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

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.

dispersion

See:

(chromatic) dispersion.

display area

Rec. Z.341

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

display area format

Rec. Z.341

Expression specifying the *display area* in terms of the number of lines and columns available.

display area size

Rec. Z.341

Expression specifying the height and width dimensions of the *display area*.

display memory

Rec. Z.341

A memory containing characters, of which a certain number is displayed somewhere in the *display area*.

display memory recall functions

Rec. Z.341

Control functions used for recalling information from the *display memory* not currently displayed in the *display area*.

distributed frame alignment signal

Recs. G.701, Q.9

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

distribution frame

Rec. Q.9

A structure for terminating wires and connecting them together in any desired order.

distribution function

Rec. G.106

A function giving, for every value x , the *probability* that the *random variable* X is less than or equal to x :

$$F(x) = \Pr(X \leq x).$$

divergence

Glos. (VI.11)

In *SDL/GR* where a *symbol* is followed by two or more *symbols*, a *flow line* leading to that symbol may *diverge* into two or more *flow lines*.

diversion if number busy service

Sup. No. 1 (II.2)

The possibility for a subscriber who cannot receive calls, because his number is busy, to have these calls diverted.

do not disturb service

Sup. 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.

document

Rec. T.62

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

Recs. T.72, T.73

An amount of text that can be interchanged as a unit defined by the originator between applications.

document body

Rec. T.73

The content of a document and the attributes of the layout and logical objects, excluding the document profile.

document class

Recs. T.72, T.73

A category of documents defined by a set of common properties, e.g. letter, memorandum, report, invoice.

document descriptor

Recs. T.72, T.73

A set of attributes describing the layout or logical structure of a document.

document profile

Recs. T.72, T.73

A set of attributes associated with a document, for the purpose of handling the document as a whole.

document structure

Recs. T.72, T.73

The result of dividing and subdividing the content of a document into increasingly smaller parts, the parts being called layout objects, logical objects, and text units.

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 defined in Annex G to Recommendation T.62.

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*.

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

Recs. G.701, Q.9

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.

double, triple,... error

*Series X **

A group of 2, 3,... etc., consecutive erroneous bits, preceded and followed by at least one correct bit.

down state ; internal disabled state

Rec. G.106

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*.

See Figure 2/G.106.

down time

Rec. G.106

The *time interval* during which an *item* is in a *down state*.

See Figure 3/G.106.

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

Glos. (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.

DTE busy

Rec. X.15

Status of DTE which is unavailable because it cannot accept an additional call.

DTE clear request

*Series X **

A call control signal sent by the DTE to initiate clearing.

DTE controlled not ready

Rec. X.15

Indicates that, although the DTE is operational, it is temporarily unable to accept incoming calls.

DTE uncontrolled not ready

Rec. X.15

Indicates that the DTE is unable to accept incoming calls, generally because of abnormal operating conditions.

DTE waiting

*Series X **

A call control signal condition at the DCE/DTE interface which indicates that the DTE is waiting for a call control signal from the DCE.

DTE/DCE interface

Rec. X.15

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)

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

Sup. 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.

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.

duplex ; full duplex (deprecated)

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 operation

*Series X **

1. In the telegram service a method of working between two telegraph sets in which the transmission of telegrams may take place simultaneously in both directions.

2. In data transmission, a method of working between two data terminal equipments in which the transmission of digital data may take place simultaneously in both directions.

durability

Rec. G.106

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

Rec. G.106

The difference between the end points of a *time interval*.

duration

Glos. (VI.11)

The *predefined data type* representing 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 semi-automatic 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.

dynamically redefinable character sets (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 .

dynamics

Rec. I.130

This attribute refers to the way the connection elements are established, and released in time.

E

ear reference point (ERP)

Recs. P.10, P.64

A point located at the entrance of 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.35, 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 failure period

Rec. G.106

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

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.601

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 canceller

Rec. G.165

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 corrected reference equivalent

Rec. G.122

The sum of the sending corrected reference equivalent and receiving corrected reference equivalent of the talker's national system, twice the CRE of the international chain, and the echo loss (*a-b*) of the listener's national system.

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 suppressor

Rec. G.164

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.

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

Rec. X.15

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

Rec. T.73

The carrying out of operations associated with altering the content of a document, e.g. replace, insert, delete.

editing

Rec. X.15

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.

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 ratio

See:

completion ratio; efficiency ratio; answer seizure ratio.

effective traffic

Rec. E.600

The traffic intensity corresponding only to the conversational portion of successful calls.

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 Recommendation 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. G.106

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

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 kHz integrity

Rec. I.130

This value applies when:

- i) at each user-network interface, intervals of 125 μ s are implicitly or explicitly demarcated, and
- ii) all bits submitted within a single demarcated 125 μ s interval are delivered within a corresponding single demarcated 125 μ s interval.

electric circuit

See:

(electric) circuit.

electrical artificial voice

Recs. P.10, P.51

The artificial voice produced as an electric signal, used for testing transmission channels or other electric devices.

electrical speech level meter

Sup. No. 8 (V)

Any direct reading instrument by means of which, on a telephone conversation or a broadcast programme transmission, the *volume* can be kept within assigned limits. In giving the result of a measurement on the instrument, the type must also be stated.

element error rate

*Rec. R.2, Series X**

The ratio of the number of incorrectly received elements to the number of emitted elements.

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.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 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 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

Rec. G.106

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 repeated 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).

emergency call service

Sup. 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)

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

Glos. (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

Rec. 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

Glos. (VI.11)

An *enabling condition* is a *composite operation* for a method of conditionally accepting for *input* or alternatively *saving a signal* depending on a *condition*.

enabling condition symbol

Glos. (VI.11)

The *symbol* in a *process diagram* or *procedure diagram* of *SDL/GR* representing an *enabling condition* (when it follows an *input symbol*) or a *continuous signal* (when it follows a *state symbol*).

encoded information type

Rec. X.400

The code and format of information that appears in the body of an IP-message. Examples of encoded information types are Teletex, TIF0 (Group 4 facsimile) and voice.

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 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-of-block signal

*Series X **

Signal which identifies the end of a block.

end of dialogue

Rec. Z.341

The indication that *dialogue* has finished.

end of output

Rec. Z.341

The indication that *output outside dialogue* has finished.

end-of-pulsing (ST) signal

Recs. Q.9, Q.254

An address signal sent in the forward direction indicating that there are no more address signals to follow.

end-of-pulsing signal (sent in the forward direction)

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)

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 signal (Signalling System R2)

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 selection

*Series X **

The character which indicates the end of the selection signals.

end-of-selection signal

Rec. 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-to-end signalling

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.

endurance test

Rec. G.106

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

Rec. 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.

enquiry (in a transaction)

Rec. Q.9

A signal or signals (possibly sent as a sequence of messages) requesting specific information.

entity

See:

item; entity.

envelope

*Series X **

A group of binary digits formed by a byte augmented by a number of additional bits which are required for the operation of the data network.

envelope

Rec. X.400

A place in which the information to be used in the submission, delivery and relaying of a message is contained.

enveloping data

Rec. T.73

Information added to a document to ensure its interchange.

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

See:

environment of a system.

environment of a system

Glos. (VI.11)

The *environment of a system* is a part of the system whose behaviour is not shown in SDL but interacts with the rest of the system by sending *signal instances* to the *system*.

environment symbol

Glos. (VI.11)

The symbol in a process diagram of SDL/GR representing the environment of a system.

equal-length code

Rec. R.140

A code, the character signals of which are composed of the same number of unit elements.

equipment

Rec. X.224

Hardware or software or a combination of both; it need not be physically distinct within a computer system.

equivalent behaviour

See:

equivalent functional behaviour.

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 functional behaviour

Glos. (VI.11)

Two systems (or blocks or processes) have *equivalent functional behaviour* if they have the same response to a given sequence of *signal instances* as seen from outside the systems (or blocks or processes respectively).

equivalent lip position

Rec. P.10

A plane perpendicular to, and on the axis of, an artificial mouth 6 mm in front of the virtual source position.

equivalent random circuit group

Rec. E.600

A number of theoretical circuits used in conjunction with an equivalent random traffic intensity to permit traffic theories that do not explicitly recognize peakedness to be used in peakedness engineering (see the definition of *equivalent random traffic intensity*).

equivalent random traffic intensity

Rec. E.600

The theoretical pure chance traffic intensity that, when offered to a number of theoretical circuits (equivalent random circuits), produces an overflow traffic with a mean and variance equal to that of a given offered traffic. The equivalent random concept permits traffic theories that do not explicitly recognize peakedness to be used in peakedness engineering (see the definition of equivalent random circuit group).

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.

Erlang

Rec. E.600

The unit of carried traffic intensity (see definition of *traffic carried*).

erroneous bit

*Series X **

A bit which is not in accordance with that which should have been received.

erroneous block

*Series X **

A block in which there are one or more erroneous bits.

error

Rec. G.701

An inconsistency between a digit in a transmitted digital signal and the corresponding digit in the received digital signal.

error

Rec. G.106

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

See:

mistake; error.

error burst

*Rec. Q.9, Glos. (VI.7, VI.8), Series X**

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 control

Rec. V.7

That part of a protocol controlling the detection and possibly the correction of transmission errors.

error control loop

Glos. (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 code

*Series X **

A code in which each telegraph or data signal conforms to specific rules of construction so that departures from this construction in the receive signals can be automatically detected, permitting the automatic correction, at the receiving terminal, of some or all of the errors.

Such codes require more signal elements than are necessary to convey the basic information.

error correcting system

*Series X **

A system employing an error detecting code and so arranged that some or all of the signals detected as being in error are automatically corrected at the receiving terminal before delivery to the data sink or to the telegraph receiver.

Note — In a packet switched data service the error correcting system might result in the retransmission of at least one or more complete packets should an error be detected.

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 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-detecting code

*Series X **

A code in which each telegraph or data signal conforms to specific rules of construction, so that departures from this construction in the received signals can be automatically detected. Such codes require more signal elements than are necessary to convey the fundamental information.

error-detecting system

*Series X **

A system employing an error-detecting code or a data signal quality detector and so arranged that any signal detected as being in error is:

- a) deleted from the data delivered to the data sink, in some cases with an indication that such deletion has taken place, or

- b) delivered to the data sink together with an indication that it has been detected as being in error.

error free seconds (EFS)

Rec. G.106

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

Rec. G.106

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

Rec. G.106

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 parameters

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

Glos. (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 rate of a telegraph communication

Rec. R.140

Ratio of the number of alphabetic signals of a message incorrectly received (after automatic translation, where applicable) to the number of alphabetic signals of the message, the keying being correct.

Note 1 — A telegraph communication may have a different error rate for the two directions of transmission.

Note 2 — The notion of error rate could be applied to any operation taking place in a telegraph communication (e.g. keying, translation, etc.).

Note 3 — The statement of the error rate will be accompanied by that of the time interval, generally limited, during which the observation was made. For a communication established for a sufficiently long time, the probability of exceeding an assigned value of error rate could be considered.

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.

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

Recs. T.51, 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 bit combinations represents the character ESCAPE (1/11).

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.130

This attribute associated with a telecommunication service describes the mode of establishment used to establish and release a given communication.

establishment of connection

Rec. I.130

This attribute describes the mode of establishment used to establish and release the connections in an ISDN.

estimate

Rec. G.106

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 ...

Rec. G.106

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

Rec. G.106

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

Rec. G.106

A *statistic* intended to estimate a population parameter.

even parity check (odd parity check)

*Series X **

A check which tests whether the number of digits in a group of binary digits is even (even parity check) or odd (odd parity check).

Note — In some cases the control may be done on the number of digits “0”.

exchange

Rec. I.112

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

Rec. Z.341

SPC switching system.

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

Rec. E.543

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. 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, or to the instant when the ringing signal is sent to the appropriate user.

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 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

Rec. I.112

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 input and output

Rec. Q.507

The interfaces identified in Recommendation Q.507, § 1.1 and shown in Figure 1/Q.507 for a connection through a digital transit exchange constitute the exchange input and output.

exchange input and output

Rec. Q.517

The exchange input and output for a connection through a digital local exchange are located at the interfaces identified in Recommendation Q.517, § 1.1 and shown in Figure 1/Q.517.

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 callers. (See Figure 1/Q.9.)

exchange test points

Recs. Q.507, Q.517

The exchange test points, shown in Figure 1/Q.507 and 1/Q.517 are defined for specification purposes. They may not actually exist in an exchange. They are located such that end-to-end performance can be determined by suitably combining performances between each interface and the exchange test points.

execution character

Rec. Z.341

A character which requests that the *command* be executed.

execution error ; generated error

Rec. G.106

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.

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)

Rec. G.106

- a) For a discrete *random variable* X taking the values x_i with the *probabilites* p_i ,

$$E(X) = \sum p_i x_i$$

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 (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.

EXPORT

Glos. (VI.11)

The syntactic construct EXPORT (variable name) is used both in *SDL/GR* and *SDL/PR* to represent the *export* of the *value* of a *variable*.

export

See:

export operation.

export operation

Glos. (VI.11)

An *export operation* is the *composite operation* which allows one process to *export* the *values* of *data items* so that another process can access the *values*.

EXPORTED

Glos. (VI.11)

The *SDL/PR* keyword indicating in a *variable definition* that the *variable* is *exported*.

exporter

Glos. (VI.11)

An *exporter* of a *variable* is the *process instance* which owns the *variable* whose *value* is *exported*.

exposure

*Series X **

The vulnerability multiplied by the probability of occurrence within a given time.

expression

Glos. (VI.11)

An *expression* is either a *value name*, a *synonym name*, a *variable name*, a *conditional expression* or an *operator* applied to one or more *expressions*.

external blocking

Rec. E.600

When referring to a switching stage, the condition in which no suitable resource, connected to that switching stage, is accessible.

external disabled state

Rec. G.106

That subset of the *disabled state* when the *item* is in an *up state*, but lacks required external resources.

See Figure 2/G.106.

external disabled time ; external loss time

Rec. G.106

The *time interval* during which an *item* is in an *external disabled state*.

See Figure 3/G.106.

external information provider

Rec. F.300

An information provider whose data bases are stored on and/or whose facilities are provided by means of host computers not provided by the service provider.

external loss time

See:

external disabled time; external loss time.

external Videotex host computer

Rec. F.300, Sup. No. 1 (II.4)

A host computer not operated by the Videotex service provider.

extra user information delivery probability

Rec. X.140

Extra user information delivery probability is the ratio of total (unrequested) extra information units to total information units received by a destination user in a specified sample.

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

An information unit received by a particular destination user is declared to be an extra information unit when none of the bits in the unit were input to the system by the source user for delivery to that destination.

extract!

Glos. (VI.11)

The *operator* which is implied outside *axioms* when a *variable* is *immediately* followed by bracketed *expressions* (except if this is followed by *:=* in which case *insert!* is implied).

extrapolated ...

Rec. G.106

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

facility request

*Series X **

The part of the selection signals which indicates the required facility.

facility request separator

*Series X **

The character which separates the different facility requests in the selection signals.

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 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 terminal (facsimile machine)

Rec. F.160

Machine used for the transmission and/or receipt of documents in facsimile services.

fail safe

Rec. G.106

A designed property of an *item* which prevents its *failures* from resulting in *critical faults*.

failure

Rec. G.106

The termination of the ability of an *item* to perform a *required function*.

Note — After *failure* the *item* has a fault.

failure cause

Rec. G.106

The circumstances during design, manufacture or use which have led to a *failure*.

failure intensity acceleration factor

Rec. G.106

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

Rec. G.106

The physical, chemical or other process which has led to a *failure*.

failure mode (deprecated)

See:

fault mode; failure mode.

failure rate

See:

(instantaneous) failure rate $\lambda(t)$.

failure rate acceleration factor

Rec. G.106

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*.

fault

Rec. G.106

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

Rec. G.106

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. G.106

Actions taken after *fault localization* intended to restore the ability of the *faulty item* to perform a *required function*.

fault correction time

Rec. G.106

That part of *active repair time* during which *fault correction* is performed.

See Figure 3/G.106.

fault coverage

Rec. G.106

The proportion of *faults* of an *item* that can be recognized under given conditions.

fault diagnosis

Rec. G.106

Actions taken for *fault recognition*, *fault localization* and cause identification.

fault localization ; fault location (deprecated in this sense)

Rec. G.106

Actions taken to identify the faulty sub-item or sub-items at the appropriate *indenture level*.

fault localization time ; fault location time (deprecated)

Rec. G.106

That part of *active repair time* during which *fault localization* is performed.

See Figure 3/G.106.

fault location

See:

fault localization; fault location.

fault location time (deprecated)

See:

fault localization time; fault location time.

fault masking

Rec. G.106

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 ; failure mode (deprecated)

Rec. G.106

One of the possible states of a *faulty item*, for a given *required function*.

fault modes and effects analysis (FMEA)

Rec. G.106

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)

Rec. G.106

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

Rec. G.106

The event when a *fault* is recognized.

fault report point (circuit)

Rec. M.715

The fault report point (circuit) is an element within the general maintenance organization for the international automatic and semi-automatic 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)

Rec. M.716

The fault report point (network) is an element within the general maintenance organization for the international automatic and semi-automatic 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 principal 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 organizations 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 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 tolerance

Rec. G.106

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

Rec. G.106

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)

Rec. G.106

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

Rec. G.106

Property of having a *fault*.

faulty link information

Glos. (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

Sup. No. 1 (II.4)

International facsimile service between subscribers with Group 4 terminals (see Recommendation F.161).

field

Rec. Q.9

In a record, a specified area used for a particular category of data.

field

Glos. (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. 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* (sometimes the entire *window*), which is used either for entering or displaying information.

field data

Rec. G.106

Observed data obtained during field operation.

field maintenance

See:

on-site maintenance; in situ maintenance; field maintenance.

field test

Rec. G.106

A *compliance test* or *determination test* made in the field where operating, environmental, maintenance and measurement conditions are recorded.

fifteen kHz audio

Rec. I.130

Digital representation of audio information with a bandwidth of 15 kHz, the encoding rule being specified.

fifteen 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 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. It is the equivalent of the “supermastergroup link” concept of the translating procedure 1 (900 telephone channels).

fifteen 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 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 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 2/M.300 to 4/M.300.

file

Rec. Q.9

A set of related records treated as a unit.

fill-in signal unit

Glos. (VI.7, VI.8)

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.

filter

Recs. Z.333, 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*.

final character

Rec. T.51

The character the bit combination of which terminates an escape sequence.

final circuit group

Rec. E.600

A circuit-group which receives overflow traffic and from which there is no possible overflow.

It may also carry first choice parcels of traffic, for which it is said to be fully provided.

first call attempt

Rec. E.600

At a given measurement point in the network, a first call attempt is the first attempt of a call demand that reaches that point.

first choice circuit group

Rec. E.600

With respect to a particular traffic stream, the circuit group to which this stream is first offered.

first choice set of circuits

Rec. U.140

A set of circuits to be used on a first priority basis if a free circuit from this set is available.

first data multiplexer

*Series X **

The equipment that accepts a number of streams of binary digits at the same or different standard data signalling rates and combines these on a time division basis into a single stream of binary digits signalled at a rate equivalent to that of a PCM channel time slot.

fixed destination call services

Sup. No. 1 (II.2)

The possibility for a subscriber to set up a call to a predetermined telephone number by lifting the handset only.



flag

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

The unique pattern on the signalling data link used to delimit a signal unit.

flat-rate price (per circuit) procedure

Recs. F.67, D.150

The flat-rate price procedure is a procedure that consists of remunerating an Administration on the basis of a flat-rate price per circuit.

flow control

Rec. X.15

In data communication, control of the data transfer rate.

flow control

*Series X **

The procedure for controlling the rate of transfer of packets between two nominated points in a data network, for example between a DTE and a data switching exchange.

flow control

Rec. X.200

A function which controls the flow of data within a layer or between adjacent layers.

flow control parameter selection/negotiation and indication for virtual call service

Rec. X.15

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

Glos. (VI.11)

A *flow line* connects every *symbol* to the *symbol* (s) it follows on a *process diagram* of *SDL/GR*.

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. (Recommendation Z.102, § 2.5.1.)

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.

forced rerouting

Glos. (VI.7, VI.8)

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.

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*, that lists all the *parameters* of a requested *command*, and submitting the *block of parameters* contained in 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 parameter

Glos. (VI.11)

A *formal parameter* is a *variable name* contained in a *process definition* or *procedure definition* for which *actual parameters* are assigned to the *variables* when the *process* is created or *procedure* is called respectively.

formal parameter list

Glos. (VI.11)

A list of *formal parameters* in a *process definition* or *procedure definition*. The *actual parameters* are matched by position in their respective lists.

format

Rec. Q.9

The arrangement or layout of data on a data medium.

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.



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 channel

*Series X **

A data-transmission channel in which the direction of transmission coincides with that in which information is being transferred.

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

Glos. (VI.7, VI.8)

A bit in a signal unit which indicates the start of a retransmission cycle.

forward sequence number

Glos. (VI.7, VI.8)

A signal unit used to identify the transmitted message signal units.

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

Rec. U.140

A switching signal transmitted in the direction from the caller to the called party.

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 in 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 (see definition of *assistance operator*) into the circuit if the call is automatically set up at that exchange. When a call is completed via an operator (incoming operator or delay operator) at the incoming international exchange, the signal will cause this operator to be recalled.

forward-transfer signal (Signalling System R2)

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 Specifications of Signalling System R2, Part III, Fascicle VI.4.

forward-transfer signal

See:

ring-forward signal.

four concentric circles near field template

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-wire chain

Recs. G.101, Q.40

A four-wire chain (see Figure 3/G.101) 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. Q.9, Series X**

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 time slots constituting a complete cycle of a signal in which the relative position of each time slot 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.73

A composite layout object within a page or within another frame with its sides parallel to the sides of the enclosing page or frame, intermediate at one or more levels between the page and the block in a layout structure.

frame

Glos. (VI.11)

(1) A frame in a block interaction diagram of SDL/GR represents the *block* whose *partitioning* is defined by the *block interaction diagram*.

(2) A frame in a *channel structure diagram* of SDL/GR represents the *channel* whose *partitioning* is defined by the *channel substructure diagram*.

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 time slots in each frame can be uniquely identified.

frame alignment recovery

Rec. G.701

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 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 alignment

Rec. G.701

The state in which the frame of the receiving equipment is synchronized with that of the received signal.

frame resynchronization

Rec. R.140

The act of re-establishing lost frame alignment.

framing bit

*Series X **

A binary digit which is used for frame synchronization.

free circuit condition

Rec. 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

Sup. 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.

frequency departure (normalized)

Rec. G.811

The (normalized) frequency departure, $\Delta f/f$, is the time interval error (TIE) divided by the duration of the period (i.e. in S seconds).

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 modulation

*Series X **

- i) Modulation in which the frequency of an alternating current is the characteristic varied.
- ii) Modulation in which two or more particular frequencies correspond each to one significant condition.

The representative function of the modulated wave 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 keying (FSK)

*Series X **

Frequency modulation method in which the frequency is made to vary at the significant instants:

- a) by smooth transitions. The modulated wave and the change in frequency are continuous at the significant instants;
- b) by abrupt transitions. The modulated wave is continuous but the frequency is discontinuous at the significant instants.

frequency shift modulation

See:

frequency shift keying.

frozen reference

Rec. X.224

A reference which is not available for assignment to a connection because of the requirements of Rec. 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 duplex (deprecated)

See:

duplex; full 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 terminals are 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.

fully automatic reperforator transmitter distributor (FXRD)

See:

coupled reperforator and tape reader; fully automatic reperforator transmitter distributor.

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

Glos. (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 parcel of traffic, a circuit group which is the first choice circuit group for this traffic and which is not traffic engineered as a high usage group.

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

Rec. Q.711

A logical object which accepts one or more inputs (arguments) and produces a single output (value) uniquely determined by the combination of the inputs 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

Rec. G.106

Such 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

Rec. G.106

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-degrading maintenance

Rec. G.106

Such 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 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 the *man-machine terminal* or 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

Rec. G.106

Such 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

Rec. G.106

Such a *maintenance action* that prevents a maintained *item* from performing a *required function* by causing complete loss of all the functions.

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 block

Glos. (VI.11)

A *functional block* is an object of manageable size and relevant internal relationship, which has a name, a set of *channels* connecting it with other *blocks* (or the *environment*), and either internal *processes* or *block definition*.

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*. (Recommendation Z.101, § 1.2.4.)

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. (Recommendation Z.101, § 1.2.3.)

functional group

Rec. I.112

A set of functions that may be performed by a single equipment.

functional grouping (deprecated)

See:

functional group.

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 mode

Rec. G.106

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. (Recommendation Z.101, § 1.2.3.)

functional test

Rec. M.700

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.

functional unit

Rec. Q.9

An entity of hardware or software, or both, capable of accomplishing a special purpose.

G

gas discharge tube

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)

Recs. Q.9, Q.70

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 public land mobile network (PLMN)

Recs. Q.9, Q.70

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 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 parameters (in SDL)

Rec. Q.9, Glos. (VI.11)

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. (Recommendation Z.101, § 1.2.2. c.)

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

Sup. No. 1 (II.2)

A service given by an operator or a machine using the most common languages explaining the telecommunications services and facilities in a country.

generated error

See:

execution error; generated error.

generator

Glos. (VI.11)

The term *generator* is a synonym for *data type generator*.

generic

Recs. T.72, T.73

Term qualifying a layout or logical structure, a layout or logical object, or an attribute pertaining to a document class.

generic address

Rec. X.213

An address which identifies a set of network-service-access-points (NSAPs) rather than a single specific NSAP.

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 element

Rec. T.73

A collection of drawing primitives including points, arcs, lines, rectangles, and polygons used to construct drawing in a predescribed area.

global title

Rec. Q.711

An address such as dialled digits which does not explicitly contain information that would allow routing in the signalling network, i.e. the translation function of the SCCP is required.

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.

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*, Nairobi, 1982.

grade of service

Rec. E.600

A number of traffic engineering parameters used to provide a measure of adequacy of plant under specified conditions; these grade of service parameters may be expressed as probability of loss, probability of delay, etc.

The numerical values assigned to grade of service parameters are called grade of service standards.

The achieved values of grade service parameters under actual conditions are called grade of service performances.

Note — When there is no likelihood of ambiguity, the term grade of service may be used as an abbreviation for the term grade of service performance.

grade of service

*Series X **

The grade of service is a measure of the traffic handling capability of the network from the point of view of sufficiency of equipment and trunking throughout a multiplicity of nodes.

Note 1 — The criteria for specifying grade of service for circuit switched systems are described in the Series E.500 Recommendations.

Note 2 — The criteria for specifying grade of service for packet switching networks remain to be defined and are the subject of further study.

gradual failure; degradation failure; drift failure

Rec. G.106

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*.

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 handwritten, 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.72

A character, other than a control function, that has a visual representation normally handwritten, printed or displayed. Graphic characters include simple alphanumeric characters, composite characters (e.g. accented letters) and pictorial characters (e.g. mosaics).

graphic characters

Recs. Q.9, Z.341

Graphic characters are 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.73

A character, other than a control function, that has a virtual representation normally handwritten, printed, or displayed. Graphic characters include simple alphanumeric characters, composite characters (e.g. accented letters) and pictorial characters (e.g. mosaics).

graphic element (of text)

Recs. T.72, T.73

The smallest individually specified element used to construct an image. There are three categories of graphic elements of text, namely character box elements, geometric elements and photographic elements.

graphic syntax

See:

SDL/GR.

graphic terminals

Rec. Z.341

Terminals which provide graphic capability (line drawing, circles, etc.) using other than alphanumeric means.

group 2

Sup. 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 CCITT Recommendation T.3.

group 3

Sup. 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 CCITT Recommendation T.4.

group 4

Sup. 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 CCITT 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)

Sup. No. 1 (II.4)

Set of compatible facsimile terminals which conform to certain CCITT Recommendations.

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 calls

Rec. F.121

Group calls to ship earth stations are calls comprising a message sent simultaneously to all ships within a predetermined group. There will be no return link from the ship earth station and the calling subscriber will therefore not know which ship earth stations within the group have actually received the message.

group delay

Rec. H.22

The time of propagation between two points of a certain point (for example the crest) of the envelope of a wave.

For a given frequency it is equal to the first derivative of the phase shift measured in radians, between three points, with reference to the angular frequency measured in radians per second.

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 3/G.211 and 1/M.300 to 4/M.300.

group link

Rec. H.14

A group link is composed of one or more group sections in tandem, generally prolonged at each end by "local lines" (denoted terminal group sections in Figure 1/H.14). These terminal group sections connect the group distribution frames of the terminal national centres with the equipment for sending and receiving wide-spectrum signals (modems, etc.) which may be situated either in the subscriber's premises or in any other place. In the latter case they are normally switched over the local telephone cable network, or sometimes over a special cable line or radio-relay link. Only local lines carrying the 60-108 kHz wide-spectrum signal are termed "terminal group sections" and are included in the definition of a group link. The other case in which a baseband signal occupying a frequency band other than 60-108 kHz is transmitted over the local lines, the frequency translation to the 60-108 kHz band being made at the terminal national centres, is not dealt with in Recommendation H.14.

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

Rec. 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

One 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 which appears as a *comment* in *output* providing assistance to the *user* in a *man-machine* communication.

guidelines

Rec. Z.341

General directions by which the purpose of one or more phases of the *methodology* may be accomplished.

H

H'

Glos. (VI.11)

The *SDL/PR* keyword introducing a hexadecimal denotation of a numerical *value*.

half duplex (deprecated)

See:

simplex; half duplex.

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 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.

Hamming distance

*Series X **

1. The number of digit positions in which the corresponding digits of two binary words of the same length are different.

2. By extension, the number of digit positions in which the corresponding digits of two words of the same length in any radix are different. For example, the Hamming distance between 21415926 and 11475916 is 3.

Note — In the CCITT context, the term “signal distance” which is synonymous for this term in data processing may cause confusion and therefore is deprecated.

hand-off

Recs. Q.9, Q.70

The action of switching a call in progress from one base station to another base station. Hand-off is used to allow established calls to continue when mobile stations move from one base station area to another base station area.

handling time

See:

switching delay; processing time; handling time.

hands free (telephone) set

Rec. P.10

A loudspeaking telephone set which may be used without a handset.

hang-up signal (Signalling System R1)

Rec. Q.310

This line signal is sent (in the backward direction) 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 (13 to 32 seconds, in world numbering zone 1) 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.

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.

head-on collision

Rec. 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.

head telephone set

See:

headset; operator telephone set.

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.

heading

Rec. X.400

The heading of an IP-message is the control information that characterizes the IP-message.

headset ; operator telephone set

Sup. No. 9 (V)

Telephone apparatus comprising essentially a "hands-free" handset. It is typically secured to the head of the wearer. It includes a telephone microphone and a telephone receiver. It is by definition a 4-wire device having a pair of wires for sending and a second pair for receiving. Also termed "head telephone sets", "speaking sets".

Note — When referring to a headset tested using a 4-wire to 2-wire network, such as tested by CCITT procedures, the term "headset" includes the network.

help output

Rec. Z.341

The *output* resulting from a request for *user 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

Rec. Q.9

Signals are heterochronous if their corresponding significant instants do not necessarily occur at the same rate.

Note — Two signals having different nominal digit rates, and not stemming from the same *clock* or from homochronous *clocks* are usually heterochronous.

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.

heterogeneous multiplex

*Series X **

A multiplex structure in which all the information bearer channels are not at the same data signalling rate.

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).

hierarchical 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.

hierarchical 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.

hierarchical (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*.

hierarchical synchronized network

See:

hierarchical network.

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 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 usage circuit group

Rec. E.600

A circuit group that is traffic engineered to overflow to one or more other circuit groups: that is, a circuit group which is deliberately sized so that without these (i.e. overflow routes) it would offer a level of congestion considered unacceptable.

higher layer functions

Rec. I.112

Functions in layers 4 to 7 of the open systems interconnection (OSI) protocol reference model. They usually relate to information storage, processing or message facilities. Capabilities necessary to support these functions are normally provided within the user terminals, but the network may contain the physical entities necessary to provide the functions.

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.

holding time

Rec. E.411

The time interval between seizure and release of a circuit or switching equipment.

holding time; completion time

Rec. E.600

The time interval between the seizure of a resource and its next release.

Note — Interruptions by higher-priority demands should not be counted as releases.

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.

home mobile service switching centre (MSC)

Recs. Q.9, Q.70

The MSC to which a mobile station is assigned for record purposes such as subscriber information.

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 (PLMN)

Recs. Q.9, Q.70

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.

homochronous

Rec. Q.9

Signals are homochronous if their corresponding significant instants have a constant, but uncontrolled, phase 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 multiplex

*Series X **

A multiplex structure in which all the information bearer channels are at the same data signalling rate.

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 the tropospheric-scatter radio-relay systems.)

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.

housekeeping digits (deprecated)

See:

service digits.

housekeeping information

*Series X **

Signals which are added to a digital signal to enable the equipment associated with that digital signal to function correctly, and possibly to provide ancillary facilities.

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 (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 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 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.

II

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 for identification and authorization of a user. The identification can provide access to groups of commands which can have different security or functional classifications e.g. traffic measurement function. The identification invitation may request the user to identify himself by means of a password or an identity card. The password must be input following a ready indication.

identifier

Rec. Q.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

Glos. (VI.11)

An *identifier* is a unique *name* for a *type* or an *instance* of a *type*, and is formed from a *qualifying part* and a *name part*.

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.

idle character

*Series X **

A control character that is sent when there is no information to be sent.

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

Rec. G.106

A non-operating *up state* during *non-required time*.

See Figure 2/G.106.

idle time; free time

Rec. G.106

The *time interval* during which an *item* is in a *free state*.

image

Recs. T.72, T.73

Visual presentation of a text.

image area

Recs. T.72, T.73

That part of a page that is available for assured reproduction of text.

imperfection

See:

minor defect; imperfection.

implicit transition

Glos. (VI.11)

In a *SDL/GR* process diagram, if neither explicit *input symbols* nor explicit *save symbols* are shown attached to a *state symbol* for one of the *valid input signals*, then there is an *implicit transition* which is an *input node* connected directly back to the same *state*. Thus these *signals* are discarded.

IMPORT

Glos. (VI.11)

The syntactic construct **IMPORT** (variable name, process instance) is used both in *SDL/GR* and *SDL/PR* to represent the *import* of the *value* from a *process instance*.

import operation

Glos. (VI.11)

An *import operation* is the *composite operation* which allows one process to *import* and access the *values* of *variables* owned by another *process*.

IMPORTED

Glos. (VI.11)

The *SDL/GR* keyword indicating in a *variable definition* that the *variable* is used to contain *values* which are *imported*.

imported value

Glos. (VI.11)

The *value* seen by a *process* for a *data item* which is *imported*.

importer

Glos. (VI.11)

An *importer* of an *imported value* 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 $x \mu\text{s}$ and a decay time to half value of $y \mu\text{s}$ as standardized in IEC Publication 60.

in

Glos. (VI.11)

The *formal parameter* attribute denoting the case when a *value* is passed to a *procedure*.

in situ maintenance

See:

on-site maintenance; in situ maintenance; field maintenance.

inaccessible field

Rec. Z.341

A field for writing only by the *system*.

inactive character

Rec. X.15

A character that is sent in the data transfer phase as a filler which does not represent information.

inactive signalling link

Glos. (VI.7, VI.8)

A signalling link which has been deactivated and cannot therefore carry signalling traffic.

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.

in-band signalling

Rec. V.7

The exchange of control signals between interconnected 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

Rec. Q.9

A call in progress, the initial switching at a given exchange having been completed.

in-call rearrangement

Rec. Q.9

Reassignment of the switched path of an in-call during the call.

incoming call barring service

Sup. No. 1 (II.2)

The ability of the Administration or the subscriber to prevent all or certain incoming calls to a telephone line.

incoming channel

Glos. (VI.11)

An *incoming channel* is a new *channel* formed when a *channel* is *partitioned*. An *incoming channel* conveys to the new *blocks* formed by *channel partitioning* all the *signals* which the *partitioned channel* conveys.

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 this Recommendation, 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 signal has arrived at the incoming side of the exchange to the instant when the exchange is ready to receive the signalling, or to the instant when a proceed-to-send signal is returned to the preceding exchange by the receiving exchange. This definition is only applicable in 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 recognized until a proceed-to-send signal is sent backwards by the exchange.

incoming traffic

Rec. E.600

Traffic entering the network considered, generated by sources outside it, whatever its destination.

in-connector

Glos. (VI.11)

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*.

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.

incorrect charging or accounting probability

Rec. G.106

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.

indenture level (for maintenance)

Rec. G.106

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

Rec. G.106

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 profile

See:

(refractive) index profile.

indication

Rec. V.25 bis

An instruction or response issued by the DCE to the 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.

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.

infix operator

Glos. (VI.11)

One of the predefined dyadic *operators of SDL/PR* ($= >$ OR XOR AND IN/ $= = > < < = > = + - // \# / \text{MOD REM}$) which are placed between the two parameters rather than before bracketed parameters, or one of the monadic prefix *operators* ($+ - \text{NOT}$).

information

*Series X **

In the special context of teleprocessing, information is deemed to mean any transmission of signals via telecommunication channels. This information may take the form of data or message.

information access coding/protocol

See:

access protocol; signalling access protocol, information access coding/protocol.

information bearer channel

*Series X **

A channel provided for data transmission which is capable of carrying all the necessary information to permit communication including users' data synchronizing sequences, control signals, etc. It may therefore operate at a greater signalling rate than that required solely for the users' data.

information bits

*Series X **

Those bits which are generated by the data source and which are not used for error-control by the data-transmission system.

information channel

*Series X **

The transmission media and intervening equipment involved in the transfer of information in a given direction between two terminals.

An information channel includes the modulator and demodulator, and any error-control equipment irrespective of its location, as well as the backward channel when provided.

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 (inquiry) facility

*Series X **

A facility whereby a user, by sending a predetermined address from the terminal installation, may gain access to general information regarding data communication services.

Note — Access may be provided, for example, for directory inquiry, charging inquiry, fault reporting.

information feedback system

*Series X **

An error-control system using message feedback with repetition of the erroneous group from the sending station.

information field

Recs. T.72, T.73

Part of a text unit, that contains the content portions (i.e. the textual information).

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 security

*Series X **

The protection of information against unauthorized disclosure, transfer, modifications, or destruction, whether accidental or intentional.

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 transfer

*Series X **

The final result of a data transmission from a data terminal equipment (source) to another data terminal equipment (sink).

For example:

- remote reproduction of a magnetic tape;
- remote translation from punched cards to magnetic tape.

information transfer capability

Rec. I.130

This attribute describes the capability associated with the transfer of different types of information through the ISDN.

It can be used to characterize a telecommunication service or connection.

information transfer mode

Rec. I.130

This attribute describes the operational mode for transferring (transportation and switching) user information through the ISDN.

It can be used to characterize a telecommunication service or a connection in the network.

information transfer rate

Rec. I.130

This attribute describes either the bit rate (circuit mode) or the throughput (packet mode). It refers to the transfer of digital information between two access points or reference points.

It can be used to characterize a telecommunication service or a connection.

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 ...

See:

intrinsic ...; inherent

inherent weakness failure

See:

(inherent) weakness failure.

inherent weakness fault

See:

(inherent) weakness fault.

inhibit

Recs. Z.333, 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.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 (IAM)

Glos. (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 alignment

Glos. (VI.7, VI.8)

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 signal unit (ISU)

Glos. (VI.3)

The first signal unit of a multi-unit message.

initial signal unit alignment

Glos. (VI.7, VI.8)

Signal unit alignment applicable to activation and to restoration of the link.

initialize

Recs. Z.333, Z.341

An *action* to put specified data or equipment into a predefined initial (normal) condition or value.

initiator

Rec. X.224

A transport entity that initiates a CR TPDU.

initiator

Rec. X.225

An SPM that initiates a CONNECT SPDU.

inlet

Rec. Q.9

Point through which the incoming traffic flow enters a switching stage.

inlet

Glos. (VI.11)

An *inlet* of a *macro* is the point where a line enters the *macro*.

IN/OUT

Glos. (VI.11)

The *formal parameter* attribute denoting the case when a *formal parameter name* is used as a *synonym* for the *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 (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*. (Recommendation Z.101, § 1.3.2.)

input

See:

input action.

input acknowledgement

Rec. Z.341

Termination of *information entry* through *menu-item selection* or *form filling*.

input action

Glos. (VI.11)

An *input action* is an *action* which receives and consumes an *input signal* corresponding to a *signal name* and allows the *process instance* interpreting the *input action* to access the information contained in the *input signal*.

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 message acknowledgement (IMA)

Rec. F.201, Sup. 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 (see Recommendation F.201, § 4.1.5).

input node

Glos. (VI.11)

An *input node* is a *node* in a *process graph* or a *procedure graph* where an *input action* takes place and has the same *name* as the *signal* which the *input action* consumes.

input port

Glos. (VI.11)

The *input port* of a *process* receives and retains *signals* in the order of arrival until the *signals* are consumed by an *input action*.

input signal

Glos. (VI.11)

An *input signal* of a *process* is one of the set of named *signals* that the *process* can receive at any of its *state nodes*. The set of valid *input signals* a *process* can receive is the set of all *signal names* which appear in any *input node* of the process.

input symbol

Glos. (VI.11)

The symbols in a *process diagram* in *SDL/GR* representing the SDL concept of an *input*.

insert!

Glos. (VI.11)

The *operator* which is implied outside *axioms* when a *variable* is immediately followed by bracketed *expressions* and then $:=$.

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.

instance

Glos. (VI.11)

An *instance* of a *type* is a value which has all the properties of the *type* and can be distinguished from other *instances* of the same type by an *identifier*.

instant of time

Rec. G.106

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 availability A(t)

Rec. G.106

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

Rec. G.106

The *probability* that, under stated operating conditions, a leased circuit can perform a *required function* when requested by the subscriber.

instantaneous exchange unaccessibility

Rec. E.550

The *probability* that the exchange in question cannot perform the required function under stated conditions at the time a request for service is placed.

(instantaneous) failure intensity z(t)

Rec. G.106

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:

$$z(t) = \lim_{\Delta t \rightarrow 0+} \frac{E[N(t + \Delta t) - N(t)]}{\Delta t}$$

where $N(t)$ is the number of *failures* in the *time interval* $(0, t)$.

(instantaneous) failure rate $\lambda(t)$

Rec. G.106

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:

$$\lambda(t) = \lim_{\Delta t \rightarrow 0+} \frac{\Pr(t < T \leq t + \Delta t)}{\Delta t}$$

where T is the *instant of time of failure*.

The formula is also applicable if T denotes the *time to failure*.

instantaneous ...

Rec. G.106

The value of a *measure* determined for a given *instant of time*.

(instantaneous) repair rate $\mu(t)$

Rec. G.106

The limit if this exists, of the ratio, of the conditional *probability* that the corrective *maintenance action* terminates in a *time interval*, $(t, t + \Delta t)$ and 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:

$$\mu(t) = \lim_{\Delta t \rightarrow 0} \frac{\Pr(t < T \leq t + \Delta t | T > t)}{\Delta t}$$

where T is the *instant of time of restoration*.

T may also represent the *time to restoration*.

instantaneous unavailability $U(t)$

Rec. G.106

The probability that an *item* is in a *down-state* at a given *instant of time*, t .

instantiation

Glos. (VI.11)

Instantiation is the creation of *instance* of an entity from a *type*.

Integer

Glos. (VI.11)

The *integer type* is defined by the set of values $-(\text{infinity}), \dots, -2, -1, 0, +1, +2, \dots, +(\text{infinity})$ and their normal mathematical operations, i.e. $+$, $-$, multiply, divide, etc.

integrated digital network

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

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 transmission and switching

Recs. I.112, Q.9

The direct (digital) concatenation of digital transmission and digital switching, that maintains a continuous digital telecommunication path.

integrated services digital network

Glos. (VI.7, VI.8)

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 digital network (ISDN)

Rec. I.112

An integrated services network that provides digital connections between user-network interfaces.

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.

integrity at 8 kHz

See:

eight kHz integrity.

intelligible crosstalk components

Rec. G.242

Transferred speech currents which can introduce intelligible crosstalk into certain channels at the point considered.

inter-telex SFU messages (IM)

Rec. U.82

Messages transferred between telex SFUs to complete the function of message transfer.

interaction error (man-machine)

Rec. G.106

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 mode

This mode allows only for interactive dialogue. No document transfer can take place. Procedures applying to this mode are defined in Annex G to Recommendation T.62.

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.

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

Sup. 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

Recs. T.72, T.73

The process of providing a duplicate of a document to a receiving person or device.

interchange format

Recs. T.72, T.73

A representation of a document by a collection of data elements for the purpose of interchange.

inter-character rest condition

*Series X **

In a data system which contains no clock, the distinctive condition which exists for a time between two successive transfers of data characters.

interconnected store and forward

Sup. 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

Sup. 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

Recs. D.150, F.67

An international circuit between two international exchanges in different continents.

intercontinental circuit

Rec. F.68

A circuit 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

Recs. G.701, I.112

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

Rec. X.15

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

Glos. (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 control functions

Rec. Z.341

Functions used to force specific *actions* relating to the interface.

interface rate

Rec. V.7

The transfer rate of the bit stream found on the physical interchange circuits.

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.

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

Rec. X.15

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.

intermittent fault; volatile fault; transient fault

Rec. G.106

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 condition in which a connection cannot be made between a given inlet and any suitable free outlet owing to the impossibility of establishing a path, within the switching element being considered.

internal disabled state

See:

down state; internal disabled state.

internal information provider

Rec. F.300

An information provider whose data bases are stored on and/or whose facilities are provided by means of the service provider's host computer(s).

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 traffic

Rec. E.600

Traffic originating and terminating within the network considered.

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 Recommendation V.3 (1972).

international automatic circuit

Rec. M.700

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 § 2 of Recommendation M.565).

international chain

Recs. G.101, Q.40

An international chain is made up of one or 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

Rec. 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

Recs. D.150, D.200 R, F.67

A circuit between two international exchanges situated in different countries is called an international circuit.

international circuit

Rec. F.68

A circuit connecting two exchanges in different countries, whether or not they are in different continents.

international connection

Rec.F.68

Any connection between two stations situated in different countries, whether established between different continents or one continent.

international connection

Rec. M.700

Whole of the means joining temporarily two subscribers and enabling them to exchange information (see Recommendation G.101).

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.

international exchange

Rec. F.68

A centre where international circuits, and in general national circuits, terminate.

international leased circuit

Rec. 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

Rec. M.700

The transmission system contained between the line access 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 to the international centre.

international line

Rec. M.1010

The whole of the assembly of international and national circuit sections between terminal international centres. See Figure 2/M.1010.

international link

Rec. M.1010

The whole of the assembly of international and national circuit sections between terminal national centres. See Figure 2/M.1010.

international main section

Rec. 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 (IMSI)

Recs. E.212, Q.9, Q.70

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 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 to Recommendation N.1 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

The function of supervising the international network and taking action to control the flow of traffic so as to ensure the maximum utilization of the network in all situations.

Network management requires "real-time" monitoring and measurement of network status and performance, and the ability to take prompt action to control the flow of traffic when necessary.

international number

Recs. E.160, 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.

Examples:

<i>Subscriber</i>	<i>International number</i>
123 45 67 in Bruxelles	32 2 123 45 67
12 34 56 in Düsseldorf	49 211 12 34 56
21 34 56 in Nice	33 93 21 34 56
870 12 34 in Montreal	1 514 870 12 34
12 34 in Perranporth	44 872 57 12 34

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 of mobile station

Rec. Q.9

The number to be dialled following the international prefix to obtain a mobile station in another country. It consists of the country code of the country in which the mobile station is registered followed by the national (significant) mobile number of the called mobile station.

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 defined group of countries (see the definition, *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 *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 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

Rec. U.140

First sequence of digits in an international two-stage selection.

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 (see its definition) terminates and in which international sound-programme connections (see definition) 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, compressors, etc.). See Figure 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 Figure 2/J.13.

international sound-programme link

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

Sup. 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 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

Rec. M.560

A complete international telephone connection has three parts, as shown in Figure 1/M.560:

- an international chain
- two national systems, one at each end.

international telephone connection

Recs. G.101, Q.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 Figure 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 television centre (ITC)

Rec. N.51

A centre at which at least one international television circuit (see its definition) terminates and in which international television connections (see definition) 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 and maintaining international television connections and for the supervision of the transmissions made on them.

The centre at the end of a 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 service

Rec. F.41

A service in which the Administrations concerned agree that the charge for telegraph services be paid by a party that has accepted responsibility for payment, instead of being paid by the sender.

This service shall be known as 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

Sup. 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

Rec. 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

Rec. X.15

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.

interpersonal messaging (IPM)

Rec. X.400

Communication between persons by exchanging messages.

interpersonal messaging service

Rec. X.400

The set of service elements which enable users to exchange interpersonal messages.

interpersonal messaging system (IPMS)

Rec. X.400

The collection of UAs and MTAs, which provide the Interpersonal Messaging Service.

interrogate

Recs. Z.333, 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

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

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 ; break (of service)

Rec. G.106

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 the *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 demand.

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, noise level, signal distortion, *error* rate, etc.

interruption control

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

A system which monitors a pilot for interruptions on FDM systems and which transmits an indication to the switching equipment.

interruption duration

Rec. G.106

The *time duration* of an *interruption*.

interruption of a call in progress service

Sup. No. 1 (II.2)

Intervention by an operator, interrupting a call in progress, in order to allow another incoming call to be offered.

interworking

Rec. Q.602

Interworking is defined as:

- 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 between networks

*Series X **

The means whereby a data terminal equipment connected to one public network may communicate to a data terminal equipment in another public network.

Note — The networks referred to may be public data networks, public telephone networks or public telex networks.

interworking between Teletex and other services

Rec. F.200, F.201, Sup. No. 1 (II.4)

The facility of sending and receiving information between a Teletex terminal and a terminal of another service, e.g. telex.

interworking between user classes of services

*Series X **

The means whereby a data terminal equipment belonging to one user class of service may communicate with a data terminal equipment belonging to a different user class of service.

interworking in the Teletex service between different networks

Rec. F.200

The facility of making calls from a Teletex terminal served by one network to a Teletex terminal served by a different (and possibly a different type of) network.

interworking with other Telematic services

Rec. F.300

Videotex service facilities which allow users to access the facilities and/or users of other telematic services and vice versa.

intra-concha (receiver to ear) coupler

Sup. No. 9 (V)

A device which adapts the IEC-711 occluded ear simulator to provide simulation of an extension of the occluded ear canal to its entrance, together with the concha cavity. Its purpose is to facilitate objective performance measurements on intra-concha types of receivers.

intra-concha receiver

Sup. No. 9 (V)

A receiver intended to couple directly into the concha of the human ear and essentially filling the concha cavity but without entering the ear canal.

intradband 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.

intrinsic ...; inherent ...

Rec. G.106

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 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.

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.

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

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.

IP-message

Rec. X.400

An IP-message carries information generated by and transferred between IPM UAs. An IP-message contains a heading and a body.

IPM-status-report

Rec. X.400

The pieces of information generated by an IPM UAE and transferred to another IPM UAE, either to be used by that UAE or to be conveyed to a user.

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 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 connection type

See:

connection type; ISDN connection type.

ISDN user-network interface structure

See:

interface structure; ISDN user-network interface structure.

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. Q.9

A *signal* is isochronous if the time interval separating any two significant instants is theoretically equal to the unit interval or to a multiple of the unit interval.

Note — In practice, variations in the time intervals are constrained within specified time 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.

isochronous transmission

*Series X **

A transmission process such that between any two significant instants there is always an integral number of unit intervals.

item description

Rec. Z.341

A brief description of the nature of the item in a *menu*.

item ; entity

Rec. G.106

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 selection procedure

Rec. Z.341

A procedure to select an item out of a list of items on a *menu output*.

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.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.

juncter (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.

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

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.

keyboard perforator

Rec. S.140

A perforator in which the punching is controlled by an alphanumeric keyboard.

keyboard selection

Rec. 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).

KP signal (Signalling System No. 5)

See:

start-of-pulsing signal.

KP signal (Signalling System R1)

Rec. Q.310

This register signal is sent (in the forward direction) 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

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

Information within a signalling message used to identify typically the particular circuit, call or management transaction to which the message is related.

label

Glos. (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

Glos. (VI.11)

A *label* is an optional *name* attached to either an *inlet* or *outlet* from a *macro*.

label

See:

key; tag; label.

laboratory test

Rec. G.106

A *compliance test* or a *determination test* made under prescribed and controlled conditions which may or may not simulate field conditions.

land station charge

Recs. D.90, F.111

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

Recs. D.90, F.111

The charge relating to transmission over the general network of telecommunication channels, national and international.

language or discriminating digit (Signalling System R2)

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).

last choice circuit group

Rec. E.600

With respect to a particular traffic stream, a circuit group from which there is no possibility of overflow.

latent fault

Rec. G.106

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.711

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 interface

Rec. I.112

The interface between adjacent layers of hierarchy of layers.

layer interface

Rec. Q.711

The boundary between two adjacent layers in 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.711

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 element

Rec. Q.711

An indivisible component of the layer service made visible to the service user via layer service primitives.

layer service primitives

Rec. Q.711

Layer service primitives are a means for specifying in detail the adjacent layer interactions.

layout directive

Rec. T.73

An attribute of a logical object that specifies the manner of presentation (e.g. rendition, positioning), optionally in relation to a layout object.

layout object

Recs. T.72, T.73

One of the parts pertaining to the layout structure, e.g. page, block.

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 structure

Recs. T.72, T.73

The result of dividing and subdividing the content of a document into increasingly smaller parts, on the basis of the presentation, e.g. into pages and blocks.

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

Rec. G.106

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

Rec. X.15

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

Sup. 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.

length field

Rec. T.73

The field in a data element that contains the length indicator.

length indicator

Glos. (VI.7, VI.8)

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)

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 indicator

See:

length, length indicator.

length, length indicator

Rec. T.73

Component of a data element specifying the length of the contents in octets.

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.

level (deprecated)

See:

layer.

level

See:

level of abstraction.

level of abstraction

Glos. (VI.11)

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

Rec. G.106

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.

limit test

Rec. M.700

A test made to indicate whether a quantity would fall within or outside a pair of limits or boundaries.

The required degree of precision of expression is to be achieved by extending the term to state:

- on what the limit test is made, for example, *circuit limit test*,
- the function or characteristic that is tested, for example, *limit test of signalling*,
- for what purpose the limit test is intended, for example, *limit test for readjustment purposes*.

line access points

Rec. 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 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

Rec. 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 generally 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 link (using symmetric pairs, coaxial pairs, radio-relay link, etc.)

Recs. G.211, 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/G.211 and 3/G.211, and 2/M.300 to 4/M.300.

line of maintenance

See:

maintenance echelon; line of maintenance.

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 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-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.

link

Rec. Q.9

A telecommunication path with specified characteristics between two points.

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.

to link (in programming)

Rec. Q.9

To provide a link.

link access protocol (LAP)

Rec. I.112

The formal set of procedures applied at the user-network interface to convey information between the corresponding layer 3 entities of the user and of the network. These procedures are within layer 2 of the OSI model.

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 status signal unit

Glos. (VI.7, VI.8)

A signal unit which contains status information about the signalling link in which it is transmitted.

link ; transmission link

Rec. I.112

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.

literal

Glos. (VI.11)

A *literal* denotes a *value identity*. The *literals* 12, B'1100, 0'14 and H'C all denote the same *integer value identity*.

load capacity

Rec. G.701

The level of a sinusoidal signal whose positive and negative peaks coincide with the virtual decision values.

load-sharing (general)

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

A process by which signalling traffic is distributed over two or more signalling or message routes, in view of traffic equalization or security.

load transfer

Glos. (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.

local central office

See:

local exchange.

local end (with its termination)

Rec. S.3

The whole apparatus, lines, telegraph repeaters and any control units between the apparatus and the first (or last) point of the communication where the transmission quality may be measured.

local exchange

Rec. Q.9

An exchange in which subscribers' lines terminate. (See Figure 1/Q.9.)

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 mode

Rec. F.200

That state of a terminal that permits operation of some of the functions of the terminal independently of any network functions.

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 reference

Rec. Q.711

A number identifying locally within one SCCP entity unambiguously a SCCP-connection.

local telephone circuit

See:

local (telephone) system; local (telephone) circuit.

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

Rec. 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-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.

localization of faults

Rec. M.700

The *broad localization* of a fault consists of finding the general part of the equipment in which it exists. *Fault finding* consists of determining the faulty item of the equipment.

location area

Recs. Q.9, Q.70

An area in which a mobile station may move freely without updating the location register. A location area may comprise several base stations.

location information

Recs. Q.9, Q.70

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. public land mobile network (PLMN), mobile services switching centre (MSC) area, location area, as required).

location register

Rec. Q.9

A function that stores the location information of the radio mobile system.

location register

Rec. Q.70

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.

logical channel

Rec. X.15

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 object

Recs. T.72, T.73

One of the parts pertaining to the logical structure, e.g. chapter, section, paragraph.

logical structure

Recs. T.72, T.73

The result of dividing and subdividing the content of a document into increasingly smaller parts, on the basis of the meaning of the content, e.g. into chapters, sections, paragraphs.

logistic delay

Rec. G.106

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/G.106.

Note — *Logistic delays* can be due to, e.g. travelling to unattended installations, to awaiting the arrival of spare parts, specialists or test equipment.

lone signal unit (LSU)

Glos. (VI.3)

A signal unit carrying a one-unit message.

long-term bit error rate

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

Bit error rate measured over a sufficiently long time period, e.g. one month.

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

See:

call congestion; probability of loss; loss.

loss mode of operation

Rec. E.600

A mode of operation in a system in which bids which find no suitable resources, free and accessible, are lost.

loss of frame alignment detector

Glos. (VI.3)

A monitoring unit, designed to indicate to the signalling terminal that frame alignment of the PCM system has been lost.

lost call

*Rec. U.140, Series X**

A request for a connection which is rejected due to network congestion.

lost traffic

Rec. E.600

That part of the traffic offered to a pool of resources which is not carried and has no additional resource provided to handle such traffic.

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 — The CCITT is studying how to implement the principles described in Recommendation P.76 so as to overcome certain serious difficulties experienced in applying reference equivalents.

Note 2 — 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.

loudspeaking (telephone) set

Rec. P.10

A *telephone set* using a *loudspeaker* associated with an amplifier as a *telephone receiver*.

low level language

Rec. Q.9

A programming language that reflects the structure of a computer or that of a given class of computers.

lower layer functions

Rec. I.112

Functions in layers 1 to 3 of the OSI model. They are concerned mainly with the establishment, holding and release of a telecommunication path.

lower window edge

Rec. X.224

The lowest sequence number in a transmit window.

M

machine

See:
system.

machine language

See:
computer language; machine language.

macro

Glos. (VI.11)

A *macro* is a named collection of syntactic items defined by the SDL user, which replace the use of the *macro name* BEFORE the meaning of the SDL representation is considered.

macro definition

Glos. (VI.11)

A *macro definition* in *SDL/GR* is a named part of any *SDL/GR* diagram with *inlets* and *outlets* represented by lines indicated as flowing to and from (respectively) the part diagram. These lines may be *labelled*.

macro symbol

Glos. (VI.11)

The *symbol* used in *SDL/GR* to denote a reference to a *macro definition* by name.

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 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 repeater station

Rec. G.211

A station, always the terminal of a line link [see definition *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

Rec. G.106

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 (performance)

Rec. G.106

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 allocation ; maintainability apportionment

Rec. G.106

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

Rec. G.106

A *maintainability verification* performed as a *compliance test*.

maintainability model

Rec. G.106

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 prediction

Rec. G.106

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

Rec. G.106

A detailed plan, including the human and material resources, procedures, tasks and responsibilities during the life of an *item*, intended to ascertain the fulfilment of the requirements for *maintainability performance measures* for an *item* and facilitate the planning of the *maintenance*.

maintainability verification

Rec. G.106

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. G.106

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.700

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 international automatic 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 action ; maintenance task

Rec. G.106

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 echelon ; line of maintenance

Rec. G.106

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

Rec. G.106

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 referable to the sub-item.

maintenance man-hours (MMH)

Rec. G.106

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. G.106

A system of underlying principles for the organization and execution of the *maintenance*.

maintenance policy

Rec. G.106

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 support (performance)

Rec. G.106

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.

maintenance task

See:

maintenance action; maintenance task.

maintenance time

Rec. G.106

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/G.106.

Note — *Maintenance* may be carried out while the *item* is performing a *required function*.

maintenance tree

Rec. G.106

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

Rec. G.106

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

Rec. G.106

An *item* which contains one or more *major defects*.

major fault

Rec. G.106

A *fault* which affects a function considered to be of major importance.

malicious call identification services

Sup. 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 *dialogue 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.

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.

management domain (MD)

Rec. X.400

The set of MHS entities managed by an Administration or organization that includes at least one MTA.

management inhibit

Glos. (VI.7, VI.8)

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

Glos. (VI.3)

Signals concerning the management or maintenance of the speech circuit network and the signalling network.

manual answering

*Series X **

A facility by which a call is established only if the called user signals his readiness to receive it by means of a manual operation.

manual calling

*Series X **

A facility which permits the entry of selection signals from a calling terminal installation at an undefined character rate. The characters may be generated at the DTE or the DCE.

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.

manufacturing defect

Rec. G.106

A *defect* due to nonconformance in manufacture to the design of an *item* or to specified manufacturing processes.

manufacturing failure

Rec. G.106

A failure due to a manufacturing defect.

manufacturing fault

Rec. G.106

A fault due to a manufacturing defect.

to map (over)

Rec. Q.9

To establish a set of values having a defined correspondence with the quantities or values of another set.

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.

margin of a synchronous receiver

*Series S **

Margin, as in the definition *margin of a telegraph apparatus*, when the degree of distortion taken into account is the degree of isochronous distortion.

maritime account

Recs. D.90, F.111

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 centre

Rec. G.473

A satellite earth station which provides a 4-wire analogue interface for connection to a maritime terrestrial circuit.

Note 1 — For some nontransmission functions, a maritime centre may be classified as a CT. For the purpose of this Recommendation, 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 is defined as *coast earth station* in the Radio Regulations (Article 1, No. 71).

maritime local circuit

Rec. X.350

A circuit between the *ship earth station* and an on-board DTE. See Figure 1/X.350.

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, Q.11 ter

As defined in the *Radio Regulations*: "A mobile-satellite service in which mobile earth stations are located on board ships; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service."

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, Q.11 ter

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

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 circuit

Rec. X.350

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*. See Figure 1/X.350.

maritime satellite data switching exchange (MSDSE)

Rec. X.352

The functional interface between the maritime 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 maritime satellite data transmission system and the PSPDN;

- routing and call control for calls to and from ships;
- charging.

maritime satellite data switching exchange (MSDSE)

Rec. X.350

The functional interface between the *maritime satellite data transmission system* and a public data network. See Figure 1/X.350.

The MSDSE provides the following functions:

- interworking between the signalling systems used in the *maritime satellite data transmission system* and the PDN,
- routing and call control for calls to and from ships,
- charging.

maritime 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 an on-board DTE. The maritime satellite data transmission system comprises a *maritime satellite circuit*, a *maritime local circuit*, a *maritime satellite data switching exchange (MSDSE)*, and a *maritime terrestrial circuit*. The general configuration is shown in Figure 1/X.350.

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.

Note — The term *maritime terminal* used for the purpose of Recommendation G.473 is defined as *ship earth station* in the Radio Regulations (Article 1, No. 73).

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 terrestrial circuit

Rec. X.350

A circuit between the *coast earth station* and the *maritime satellite data switching exchange*. See Figure 1/X.350.

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 condition (in Morse code only)

Rec. R.140

Designation given to one of the two significant conditions in Morse code.

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"

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.
2. In printing telegraphy, corresponds to the significant condition that results in an active selecting operation in a receiving apparatus.

Note 1 — In start-stop automatic transmission, the term corresponds to the perforation of a hole in the tape.

Note 2 — In standardized start-stop telegraphy the term corresponds to the "stop" element.

3. In isochronous systems, the term that is arbitrarily assigned to one or the other of the two signalling conditions.

The English term "spacing" or "space"

1. In Morse, corresponds to the spaces separating marking signals and to the spaces separating complete characters.
2. In printing telegraphy, corresponds to the significant condition that results in a passive selecting operation in a receiving apparatus.

Note 1 — In start-stop automatic transmission the term corresponds to the absence of perforation in the tape.

Note 2 — In standardized start-stop telegraphy the term corresponds to the "start" element.

3. In isochronous systems, the term that is assigned to the non-marking signalling condition.

French term

1. Travail

2. Repos or travail
according to the
system

idem

Repos

3. Repos or travail
according to
the system

1. Repos

2. Travail or repos
according to
the system

French term

Travail or repos
according to
the system

Travail

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:

1. In Morse corresponds to the recording of an impression on the paper;
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.

English term

1. Mark

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

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

Rec. G.211

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 Figure 3/G.211.

Note — As translating procedure 2 described in Recommendation G.211, § 1 does not enable mastergroups to be set up, the "mastergroup link" concept applies only in procedure 1.

mastergroup link

Rec. 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 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 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.

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:

$$NA_{\max th} = (n_1^2 - n_2^2)^{\frac{1}{2}}$$

where

n_1 = maximum refractive index of the core

n_2 = refractive index of the innermost homogeneous cladding

mean (of a random variable)

See:

expectation (of a random variable): mean.

mean access delay

Rec. G.106

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)

Rec. G.106

The *expectation* of the *accumulated down time*.

mean active repair time (MART)

Rec. G.106

The *expectation* of the *active repair time*.

mean administrative delay (MAD)

Rec. G.106

The *expectation* of the *administrative delay*.

mean availability $\bar{A}(t_1, t_2)$

Rec. G.106

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

$$\bar{A}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} A(t) dt.$$

mean busy hour

See:

time consistent busy hour; mean busy hour.

mean down time (MDT)

Rec. G.106

The *expectation* of the *down time*.

mean failure intensity $\bar{z}(t_1, t_2)$

Rec. G.106

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 $\bar{\lambda}(t_1, t_2)$

Rec. G.106

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 route basis or for switching equipment.

mean interruption duration

Rec. G.106

The *expectation* of the *interruption duration*.

mean logistic delay (MLD)

Rec. G.106

The *expectation* of the *logistic delay*.

mean maintenance man-hours

Rec. G.106

The *expectation* of the *maintenance man-hours*.

mean ...; average ... (deprecated)

Rec. G.106

- 1) The value obtained as the *expectation* of a *random variable*.
- 2) The normalized integral of a time dependant quantity.

mean repair rate, $\bar{\mu}(t_1, t_2)$

Rec. G.106

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)

Rec. G.106

The *expectation* of the *repair time*.

mean service access delay

Rec. G.106

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. G.106

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 time between failures (MTBF)

Rec. G.106

The *expectation* of the *time between failures*.

mean time between interruptions

Rec. G.106

The *expectation* of the *time between interruptions*.

mean time to failure (MTTF)

Rec. G.106

The *expectation* of the *time to failure*.

mean time to first failure (MTTFF)

Rec. G.106

The *expectation* of the *time to first failure*.

mean time to recovery (MTTR)

See:

mean time to restoration; mean time to recovery (MTTR); mean time to repair.

mean time to repair (deprecated)

See:

mean time to restoration; mean time to recovery (MTTR); mean time to repair.

mean time to restoration; mean time to recovery (MTTR); mean time to repair (deprecated)

Rec. G.106

The *expectation* of the *time to restoration*.

mean unavailability $\bar{U}(t_1, t_2)$

Rec. G.106

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

$$\bar{U}(t_1, t_2) = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} U(t) dt.$$

mean up time (MUT)

Rec. G.106

The *expectation* of the *up time*.

measure (as applied in the field of reliability and related areas)

Rec. G.106

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.700

The numerical assessment in suitable units of the value of a simple or complex quantity or magnitude.

medium-term bit error rate

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

Bit error rate that can be encountered for relatively short time periods, e.g. some minutes, due to temporary malfunctions of, for example, transmission equipment.

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.

message sequencing

Rec. Q.9

The procedures for ensuring that received messages are processed in the correct order.

mesochronous

Rec. Q.9

Signals are mesochronous if their corresponding significant instants occur at the same average rate.

Note — The phase relationship between corresponding significant instants usually varies between specified limits.

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

Rec. X.400

In the context of Message Handling Systems, the unit of information transferred by the MTS. It consists of an envelope and a content.

message

See:
(signal) message.

message block

Rec. U.82

The portion of the MXU which contains the information to be transferred between the telex SFUs.

message deposit/message delivery (text deposit/delivery)

Rec. F.201, Sp. 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 (see Recommendation F.201, §§ 2.4.5 and 2.4.6).

message discrimination

See:
(signalling) message discrimination.

message distribution

See:

(signalling) message distribution.

message feedback

*Series X **

A method of checking the accuracy of transmission of data in which the received data are returned to the sending end for comparison with the original data, which are stored there for this purpose.

message handling address

Rec. X.400

An O/R address which is comprised of an Administration management domain name, a country name, and a set of user attributes.

message handling system (MHS)

Rec. X.400

The set of UAs plus the MTS.

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

Sup. No. 1 (II.2)

A caller, whether a subscriber or not, may dictate a message into recording equipment and require that it be passed to a particular telephone number by the following morning

message route

See:

(signalling) message route.

message routing

See:

(signalling) message routing.

message signal unit

Glos. (VI.7, VI.8)

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 suffix

Rec. E.131

The character indicating the end of the message.

message switching

Rec. Q.9

The transfer of stored messages so as to minimize queue and idle times of traffic carrying devices.

message switching exchange; switch (message)

Rec. 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 switching ; store and forward switching

Rec. 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 transfer agent (MTA)

Rec. X.400

The functional component that, together with other MTAs, constitutes the MTS. The MTAs provide message transfer service elements by: (1) interacting with originating UAs via the submission dialogue, (2) relaying messages to other MTAs based upon recipient designations, and (3) interacting with recipient UAs via the delivery dialogue.

message transfer agent entity (MTAE)

Rec. X.400

An entity, located in an MTA, that is responsible for controlling the MTL. It controls the operation of the protocol to other peer entities in the MTL.

message transfer layer (MTL)

Rec. X.400

A layer in the Application Layer that provides MTS service elements. These services are provided by means of the services of the layer below plus the functionality of the entities in the layer, namely, the MTAEs and the SDEs.

Message Transfer Part

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

The functional part of a common channel signalling system which transfers signal messages as required by all the users, and which performs the necessary subsidiary functions, for example error control and signalling security.

message transfer part receiving time T_{mr}

Rec. Q.706

T_{mr} is 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 in level 2, the transfer time from level 2 to level 3, the handling time in level 3 and the transfer time from level 3 to level 4 (see Figure 10/Q.706).

message transfer part sending time T_{ms}

Rec. Q.706

T_{ms} is 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 the handling time in level 2 (see Figure 8/Q.706).

message transfer protocol (P1)

Rec. X.400

The protocol which defines the relaying of messages between MTAs and other interactions necessary to provide MTL services.

message transfer service

Rec. X.400

The set of optional service elements provided by the Message Transfer System.

message transfer system (MTS)

Rec. X.400

The collection of MTAs, which provide the Message Transfer Service elements.

message transfer time at signalling transfer points T_{cs}

Rec. Q.706

T_{cs} 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 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*.

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*.

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.

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.

minimum acceptable interval

*Series X **

The duration of the shortest acceptable significant interval expressed in terms of the unit interval.

minimum interval

*Series X **

The duration of the shortest significant interval in a system using a code such that the theoretical durations of the significant intervals are not all multiples of a unit interval.

minor defect ; imperfection

Rec. G.106

A defect other than a *major defect*.

minor defective

Rec. G.106

An *item* which contains one or more *minor defects* but no *major defects*.

minor fault

Rec. G.106

A *fault* other than a *major fault*.

mishandling failure

Rec. G.106

A *failure* caused by incorrect handling or lack of care of the *item*.

mishandling fault

Rec. G.106

A *fault* caused by incorrect handling or lack of care of the *item*.

misrouting probability

Rec. G.106

The *probability* of a call attempt being misrouted following receipt by the exchange of a valid code.

mistake ; error (deprecated in this sense)

Rec. G.106

A human action that produces an unintended result.

misuse failure

Rec. G.106

A *failure* due to induced stresses during use which are beyond the stated capabilities of the *item*.

misuse fault

Rec. G.106

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 Figure 8/M.300 and 9/M.300.

mixed mode

Recs. T.72, T.73

A mixed-mode capability provides the means of transferring the information content of a document between sender and recipient, where the information content has been encoded using different techniques (e.g. in all forms of facsimile or character coding) and the document structure fully identified enabling the recipient to apply sophisticated editing methods.

mixed mode of operation

Rec. F.200, Sup. 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.

MML function

See:
class A 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 *methodology* for the specification of the *man-machine interface*. It is based upon *actions*, *objects*, *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 by one or more characters, so chosen that the character representation has a relationship to normal language usage such that the name of the entity serves as an aid to the memory of a human operator in remembering the appropriate coded representation used.

mnemonic abbreviation

Rec. Q.9

A representation of an entity typically consisting of one or more *characters* chosen to assist the human memory.

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 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 service switching centre (MSC) area

Recs. Q.9, Q.70

The part of the network covered by a mobile service switching centre. A MSC area may consist of several location areas.

mobile services switching centre (MSC)

Recs. Q.9, Q.70

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. A mobile station is registered at one MSC which functions as its home centre for charging and billing purposes and for administering its subscriber parameters such as category.

In order to obtain radio coverage of a given geographical area a number of base stations (radio transmitters/receivers) are normally required; i.e. each MSC would thus have to interface several base stations. In addition several MSCs may be required in order to cover a country. The definition of the MSC may be prefixed by the terms "land" or "maritime" if that is more suitable in a specific application.

mobile station charge

Recs. D.90, F.111

The charge relating to the use of facilities provided by the 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. Q.9, Q.70

The number allocated to a land mobile station for the purpose of routing calls to that station when it has roamed out of the area covered by the public land mobile network (PLMN) in which the station is permanently registered. See Recommendation E.213.

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 filter

Rec. G.651

A device designed to accept or reject a certain mode or modes.

mode mixer

See:

mode scrambler; mode mixer.

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.

modem

*Series X **

A contraction of “modulator-demodulator”.

The term may be used when the modulator and the demodulator are associated in the same signal-conversion equipment.

modification (of an item)

Rec. G.106

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*.

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.

modulation coherence

*Series X **

Modulation in which the succession of significant instants is simply related to the characteristics of the current transmitted to line.

Example:

Modulation obtained by reversing the phase of a carrier when the current passes through zero.

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

Rec. X.15

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.

modulation with a fixed reference

*Series X **

A type of modulation in which the choice of the significant condition for any signal element is based on a fixed reference.

monarchic 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.

monitor

Rec. Q.9

A functional unit that observes and records selected activities within a system for analysis.

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).

muldex

Rec. M.300

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; muldem

Rec. R.140

An assembly of a multiplexer and a demultiplexer operating in opposite directions of transmission in the same equipment.

multi-f/multi-f

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-address calling

*Series X **

A facility which permits a user to nominate more than one address for the sending of the same data.

Note 1 — The network may undertake this by one of two distinct forms:

- a) sequentially
- b) Simultaneously

and if both forms are provided may allow the user to opt for a preferred form.

Note 2 — The procedure for using this facility may

- i) be as defined for a direct call, or
- ii) use a special code or codes in the abbreviated address calling facility to designate all the required destinations, or
- iii) indicate the individual full or abbreviated address of each user to which data are to be transmitted.

Note 3 — This facility may also be used in association with the delayed delivery facility.

multi-block

Glos. (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 synchronization signal unit (MBS)

Glos. (VI.3)

A signal unit carrying a signal concerning the multi-block synchronization of the signalling system.

multi-channel voice-frequency telegraphy (MCVFT)

Rec. R.140

A telegraph transmission within a telephone type channel using frequency-division multiplexing.

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-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.

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 lines at the same address

*Series X **

The facility of permitting a user to receive calls to a single address on more than one access circuit.

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 aggregate bit rate

*Series X **

That bit rate in a time division multiplexer which is equal to the sum of the input channel data signalling rates available to the user plus the rate of the overhead bits required. That is:

$$\text{Aggregate bit rate} = \left(\sum_i^m n_i + H \right) R$$

where n_i is the number of bits per multiplex frame associated with the i^{th} input channel, m is the maximum number of input channels to the multiplexer (including non-working and/or equipped channels), H is the number of overhead bits per multiplex frame of the output channel and R is the repetition rate of the frame of the output channel.

Note. — The number of bits in the multiplex frame is assumed to be constant.

multiplex interface

Rec. X.15

A DTE/DCE interface which conveys the bit stream of a number of subscriber channels by means of time division multiplexing.

multiplex link

Rec. X.15

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 for effecting multiplexing.

multiplexing

Rec. R.140

A process for combining independent signals from several separate tributary channels for transmission in the same direction over a common 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 access

Rec. I.112

User access in which more than one terminal equipment is supported by a single network termination.

multipoint communication

Rec. I.130

This value applies when more than two access points 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.130

This value applies when more than two end points are provided by the connection, and thus many different information flows are possible.

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 terminal installation

Rec. F.200

A Teletex installation that includes more than one work station.

multiterminal service circuit

Rec. 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)

Glos. (VI.3)

A signal message which consists of more than one signal unit.

mutilation

Rec. R.140

A defect such that a signal element becomes changed from one significant condition to another.

mutually synchronized network

Recs. G.701, Q.9

A synchronized network in which each clock exerts a degree of control on all others.

N

(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)-address; (N)-service-access-point address

Rec. X.200

An identifier which tells where an (N)-service-access-point may be found.

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 Rec. 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 Rec. 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. Q.711

A set of functions invoked by a given layer for an instance of intersystems communication 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 or all of the functional capability of the given system within the layer in accordance with the functionality required for that instance of inter-system communication.

(N)-entity

Rec. X.200

An active element within an (N)-subsystem.

(N)-facility

Rec. X.200

A part of the (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 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-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.

nth order harmonic distortion

Recs. G.322, G.326

If U_1 is the r.m.s. voltage of the fundamental wave and U_n the r.m.s. voltage of the n^{th} harmonic, both measured at the output of the quadripole under consideration, the n^{th} order harmonic distortion is equal to

$$20 \log_{10} \left| \frac{U_1}{U_n} \right| \text{ (dB)}$$

name-defined parameter

Rec. Z.341

A *parameter* which is identified by its *parameter name*.

name part

Glos. (VI.11)

The *name part* of an *identifier* is a meaningful phrase in natural language which can be used in combination with a *qualifying part* of the *identifier* to identify a *type* or *instance* of an entity.

national circuit

Rec. F.68

A circuit 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.164, I.331

A code field, which combined with the subscribers' 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) characterising 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 in accordance with Recommendation E.160, 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

Recs. D.150, D.200 R, F.67

A national extension is that part of the connection which extends from the national side of the international exchange to the subscribers.

national indicator

Glos. (VI.7, VI.8)

Information within a signalling message which permits typically a distinction to be made between national and international messages.

national line

Rec. 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

Rec. M.900

The whole of the assembly of national group or supergroup sections connecting 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 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 (significant) number

Recs. E.160, Q.10

The number to be dialled following the 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 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:

<i>Subscriber</i>	<i>National (significant) number</i>
123 45 67 in Bruxelles	2 123 45 67
12 34 56 in Düsseldorf	211 12 34 56
21 34 56 in Nice	93 21 34 56
870 12 34 in Montreal	514 870 12 34

Note — Where several countries are included in one integrated numbering plan, only the national (significant) number is to be dialled after the trunk prefix on calls from one of these countries to another.

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 Recommendation E.160, § 5. 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 public land mobile network (PLMN) and the *subscriber number* within the PLMN.

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

Rec. U.140

A sequence of digits that a caller must normally select to connect to a called subscriber situated in the same country.

national systems

Rec. M.560

These may comprise one or more 4-wire amplified national circuits with 4-wire interconnection, and circuits with 2-wire connection to terminal exchanges and subscribers.

See Figure 1/M.560.

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 the 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

Glos. (VI.11)

The *natural number type* is a *range type* of the *integer type* with the values 0, 1, 2, ... up to infinity.

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 (Signalling System R2)

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.

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.

net margin

*Series X **

The margin represented by the degree of distortion indicated in the definition *margin of a telegraph apparatus*, when the rate of modulation applied to the apparatus is exactly equal to the standard theoretical rate.

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 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 architecture functional model

Rec. I.112

A representation of the functions of a network (in this case an ISDN) as seen at the user-network interface. These functions are normally characterized in terms of protocols, performance, etc.

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 terminus in common with it and for which the final circuit group is in the last choice route.

network control phase

*Series X **

That phase of a data call during which network control signals are exchanged between a DTE and the network for the purpose of call establishment, call disconnection or for control signalling during the data phase.

network coordination station

Rec. X.350

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 and operated by the satellite system operator (INMARSAT).

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 failure

Rec. X.15,

A circumstance occurring in a network which prevents a service from being offered because the network is not functioning correctly.

network-maintenance signals

Rec. Q.256

Management signals used for maintenance purposes.

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 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 parameter

*Series X **

A feature which is inherent in the design of a network.

network resources

See:

(network) resource.

network selection signals

*Series X **

Those selection signals which indicate call control information other than the address which is required by the network for establishing a call.

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 ; telecommunication network

Recs. I.112, Q.9

A set of nodes and links that provides connections between two or more defined points to accommodate telecommunication between them.

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 transfer delay

Rec. X.15

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

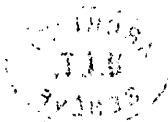
Rec. X.15

An inter-network administrative signalling mechanism in the call control procedure between switched public data networks.

network utility field

Rec. X.15

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.



newtype

Glos. (VI.1)

A *newtype* introduces sets of *literals* and *operators* which are distinct from any other *literals* and *operators* (even though they may have the same names so that the different identities have to be resolved by qualification). The properties of a *newtype* are defined by the use of the *literals* and *operators* in *axioms*.

next transmitted bit

Recs. V.35, V.36, V.37

The bit which will be transmitted as a result of scrambling the applied data bit.

No. 7 exchange

Glos. (VI.7, VI.8)

An exchange utilizing Signalling System No. 7.

No. 7 exchange — first

Glos. (VI.7, VI.8)

The exchange closest to the calling party in each No. 7 section of a connection where, unless it is the calling party's exchange, interworking with other signalling systems takes place.

No. 7 exchange — last

Glos. (VI.7, VI.8)

The exchange closest to the called party in each No. 7 connection where, unless it is the called party's exchange, interworking with other signalling systems takes place.

no sidetone line impedance (Z_{SO})

Rec. P.10

That circuit impedance which, when connected across the terminals of a telephone set, causes the sidetone to be reduced to zero.

no tone probability

Rec. G.106

The *probability* of a call attempt encountering no tone following receipt of a valid code by the exchange.

node

Glos. (VI.11)

A *node* is a named place on a *progress graph* which is joined to other *nodes* by *arcs*. The classes of *nodes* in SDL are *state nodes*, *input nodes*, *task nodes*, *output nodes*, *decision nodes*, *start nodes*, *stop nodes*, *procedure start nodes*, *procedure call nodes*, *procedure return nodes*, and *create request nodes*.

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".

noise cancelling microphone

See:

proximity microphone.

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 corrected reference equivalents (CREs) or loudness ratings (LRs) of the national systems

Rec. G.111

The sending and receiving CRE or LR of the national systems are calculated to, and from, the virtual analogue switching points of the international system; that is to say, points a and b of Figure 1/G.111. (See also the definition *corrected reference equivalent*.)

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 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 stuffing rate (deprecated)

See:

nominal justification rate.

nominal stuffing ratio (deprecated)

See:

nominal justification ratio.

nominal transmission loss

Recs. Q.507, Q.517

A connection through the exchange (see Figures 1/Q.507 and 1/Q.517) is established by connecting in both directions an input located at one interface to an output located at another interface.

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 definition in the *Yellow Book* Fascicle X.1) at the reference frequency. See also Supplement No. 9 to Fascicle VI.1

Note 1 — The nominal transmission loss, NL, may be implemented by an analogue loss pad. It may also be implemented by a digital loss pad. In the latter case, the digital loss pad may be on the incoming side of the digital switching network, or on the outgoing side of the digital switching network or both.

As a general principle the use of digital loss pads should be avoided because bit integrity is lost for digital services and additional transmission impairments are introduced for analogue services.

However, it is recognized that during the transition stage to a completely digital network, existing national transmission plans may require digital pads to be inserted for speech.

In addition, connections in a future ISDN used for voice can be expected to contain other devices which destroy bit integrity of the 64 kbit/s path (e.g. code converters, digital echo control devices, digital speech interpolation apparatus, or all-zero-suppressors). Provision must be made to render all such devices inoperative when necessary (see Recommendation Q.503, § 3.5).

Note 2 — The nominal transmission loss of the exchange may be different in the two directions.

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-associated mode (of signalling)

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

The mode where messages for a signalling relation involving two (non-adjacent) 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 path 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.

See Figure 4/Q.253.

non-associated signalling

Glos. (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-circularity of core (cladding surface)

Rec. G.651

The difference between the diameters of the two circles defined by the core (cladding surface) tolerance field divided by the core (cladding surface) diameter.

non-critical defect

Rec. G.106

A *defect* other than a *critical defect*.

non-critical failure

Rec. G.106

A *failure* other than a *critical failure*.

non-critical fault

Rec. G.106

A *fault*, other than a *critical fault*.

non-decimal numeral

Rec. Z.341

A *numeral* in a *numbering system* other than *decimal*.

non-delivery notification (NDN) / positive delivery notification (PDN)

Rec. F.201, Sup. 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 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 (see Recommendation F.201, §§ 3.1.3.4 and 4.1.6).

Note 1 – The NDN facility is not provided in the first method of interworking for the telex to Teletex direction (see Recommendation F.201, §§ 3.1.1, 3.1.2, 3.2.1 and 3.2.2).

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 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-designation method

Recs. Q.9, Q.70

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-operating state

Rec. G.106

The state when an *item* is not performing a *required function*.

non-operating time

Rec. G.106

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-relevant failure

Rec. G.106

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

Rec. G.106

An *item* which is not repaired after a *failure*.

Note — A *non-repaired item* may be repairable or not.

non-required time

Rec. G.106

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/G.106.

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.

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 uniform

Rec. I.130

This value applies in all other cases.

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.)

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.

nonsynchronized network

Rec. Q.9

A network in which the corresponding significant instants of signals need not be synchronized or mesochronous.

normal routing (of signalling)

Glos. (VI.7, VI.8)

The routing of a given signalling traffic flow in normal conditions (i.e. in the absence of failures).

normal (traffic) routing

Rec. 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.

not ready

*Series X **

A steady-state condition at the DTE/DCE interface which denotes that the DCE is not ready to accept a call request signal or that the DTE is not ready to accept an incoming call, respectively.

Note — The DTE may be controlled not ready or uncontrolled not ready.

note

Glos (VI.11)

An *annotation* in *SDL/PR* which is relevant only to the *SDL/PR* representation. A *note* is a text string enclosed by /* and */.

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.

null hypothesis H_0

Rec. G.106

The hypothesis to be rejected or not rejected (accepted) at the outcome of the *statistical test*.

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

Sup. No. 1 (II.2)

The possibility for the subscriber to repeat a previously dialled number by dialling a short code.

numbering

Rec. I.112

The assignment of unique identities to a user-network interface.

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*.

numerical signal (sent in the forward direction)

Rec. Q.120

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

O'

Glos. (VI.11)

The *SDL/PR* keyword introducing an octal denotation of a numerical *value*.

object

Rec. Z.341

An *information entity*, usually the *system* part towards which the *action* of a *function* is directed.

object language; target language

Rec. Q.9

A language into which statements are translated.

object program

See:

target program; object program.

observed data

Rec. G.106

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 value (in statistics)

Rec. G.106

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.

obstruction effect

See:

obstacle effect (obstruction effect).

OC curve (for a statistical plan)

See:

operating characteristic curve; OC curve (for a statistical test plan).

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.

octal numeral

Recs. Q.9, Z.341

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).

octet

Rec. G.701

A group of eight binary digits or eight signal elements representing binary digits operated upon as an entity.

octet

*Series X **

A group of 8 binary digits operated upon as an entity.

octet alignment

*Series X **

The process of alignment to an 8-bit sequence.

octet 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 octets.

octet timing signal

*Series X **

A signal that identifies the first bit in each octet in a contiguous sequence of serially transmitted octets.

off-site maintenance

Rec. G.106

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.

office document architecture (ODA)

Rec. T.73

Rules for applying structure to office documents.

OFFSPRING

Glos. (VI.11)

The *OFFSPRING* of a creating *process* is a *data item* which has the same *value* as the *SELF data item*

of the *process* most recently created by this creating *process*. If a *process* has not created any *processes* then its *OFFSPRING data item* is *undefined*.

oligarchic 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

Rec. Q.9

A synchronized network in which control is exercised by a few selected *clocks*, the remainder of the clocks being controlled by these.

oligarchic synchronized network

See:

oligarchic network.

omnibus service circuit

Rec. 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, Sup. 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 (see Recommendation F.201, Note 10 to Figure 2/F.201, Note 9 to Figure 5/F.201 and § 4.1.6).

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

Rec. G.106

Maintenance performed at the premises where the *item* is used.

one-sided test

Rec. G.106

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, Sup. 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-unit message

Glos. (VI.3)

A signal message which is transmitted entirely within one signal unit.

one way

Rec. E.600

A qualification applying to traffic or circuits which implies that the call set-up always occurs in one direction.

one-way

Rec. Q.9

A qualification applying to traffic which implies that the call set-ups always occur in one direction.

one way communication (OWC)

Rec. T.62

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 interaction

Rec. X.200

A form of operation of two-way-alternate interaction in which the turn can never be exchanged.

only route circuit group

Rec. E.600

A circuit group which is the one and only route for all the parcels of traffic it carries.

It is said to be fully provided for each of these parcels of traffic.

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 system

Rec. X.200

The representation within the Reference Model of those aspects of a real open system that are pertinent to OSI.

open systems interconnection (OSI)

Rec. I.112

A concept in which the relationships between a network and the services which it can support are shown by a hierarchy of protocol layers. Each layer contains one or more functions contained between an upper and a lower logical boundary. Each layer uses the services of the lower layers in conjunction with its own functions to create new services which are made available to the higher layers. The following designations are a brief summary of the layers of the model:

Layer 1 (Physical)	Includes transmission of signals and the activation and deactivation of physical connections.
Layer 2 (Link)	Includes synchronization and some control over the influence of errors within the physical layer.
Layer 3 (Network)	Includes routing and switching functions
Layer 4 (Transport)	Uses layers 1 to 3 to provide an end-to-end service with the required characteristics for the higher layer functions.
Layer 5 (Session)	Allows presentation entities to organize and synchronize their dialogue and to manage their data exchange.

Layer 6 (Presentation) Includes data formatting and code conversion.

Layer 7 (Application) Provides the means by which the user programs access the OSI environment and may contain part of these user programs.

open systems interconnection (OSI)

Rec. X.400

A term referring to the capability of interconnecting different systems.

operating characteristic curve ; OC curve (for a statistical test plan)

Rec. G.106

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

Rec. G.106

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

Rec. G.106

The *time interval* during which an *item* is an *operating state*.

operation

Rec. G.106

Combination of all technical and corresponding administrative actions intended so that an *item* can 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 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* for operation and maintenance purposes which 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*.

operational procedure

Rec. Z.341

A process illustrating the interrelationship of *user* and *system* in performing an operation, maintenance, installation or acceptance testing *job*.

operational ...

Rec. G.106

Value determined under given operational conditions.

operator

Glos. (VI.11)

An *operator* when applied to one or more *values*, *delivers a value* determined by the use of the *operator* in *axioms*. The symbols + – * / are arithmetic *operators*.

operator telephone set

See:

headset; operator telephone set.

operator typing

Glos. (VI.11)

Defines the *data types* of the *data items* to which the operator is applied and the *data type* of the resultant *value* (if any).

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.77).

option

Glos. (VI.11)

An *option* is a *concrete syntax* construct in a *process definition* allowing different *behaviours* to be chosen BEFORE the *process graph* is interpreted.

option expression

Glos. (VI.11)

An *expression* contained in an *option* which is evaluated to determine which *behaviour* is to be chosen.

option symbol

Glos. (VI.11)

The *symbol* on a *process diagram* or *procedure diagram* of *SDL/GR* representing an *option*.

optional user facility

Rec. X.15

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

Rec. X.400

A descriptive name for a UA that contains certain characteristics which help the MTS to locate the UA's point of attachment. An O/R address is a type of O/R name.

O/R name

Rec. X.400

The descriptive name for a User Agent.

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.

origin country (or Administration)

Rec. F.67

The origin country is the country in which the calling subscriber is located.

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

See:

(signalling) originating point.

originating point code

Glos. (VI.7, VI.8)

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 traffic

Rec. E.600

Traffic generated by sources located within the network considered, whatever its destination.

originating UA

Rec. X.400

A UA that submits to the MTS a message to be transferred.

originator

Rec. X.400

A user, a human being or computer process, from whom the MHS accepts a message.

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 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

Glos. (VI.11)

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*.

out-of-band signalling

Rec. V.7

The exchange of control signals between interconnected 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-slot signalling

Recs. I.112, Q.9

Signalling associated with a channel but transmitted in one or more separate digit time slots not within the channel time slot.

outage

See:

disabled state; outage.

outgoing channel

Glos. (VI.11)

An *outgoing channel* is a new *channel* formed when a *channel* is *partitioned*. An *outgoing channel* conveys from the new *blocks* formed by *channel partitioning*, all the *signals* which the *partitioned channel* conveys.

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.

outlet

Glos. (VI.11)

An *outlet* of a *macro* is the point where a line leaves the *macro*.

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 (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 in an *action* within a *transition* which generates a *signal* which in turn acts as an *input* elsewhere. (Recommendation Z.101, § 1.3.6.)

output

See:

output action.

output action

Glos. (VI.11)

An *output* is an *action* within a *transition* which generates a *signal* which in turn acts as an *input signal* elsewhere.

output field

See:

inaccessible field.

output node

Glos. (VI.11)

A *node* on a *process graph* where an *output action* takes place and has the same name as the *signal* it generates.

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

Rec. Z.333

Data determining output routing and scheduling.

output symbol

Glos. (VI.11)

The symbol in a *process diagram* of *SDL/GR* representing the SDL concept of an *output*.

overcharging probability

Rec. G.106

The *probability* that an effective call will be overcharged for any reason.

overflow (in telegraphy)

Rec. 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 traffic

Rec. E.600

That part of the traffic offered to a pool of resources which is not carried by it, but is offered to additional resources provided to handle such traffic.

overhead bits

*Series X **

All bits other than information bits.

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.

overlay

Rec. T.73

Positioning of layout objects in such a manner that they overlap each other partially or fully on the presentation medium.

overline service

Rec. 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 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 of 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.

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

Rec. G.106

The value obtained as the *p-fractile* of the distribution of a *random variable*.

p-fractile access delay

Rec. G.106

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

Rec. G.106

The *p-fractile* value of the *active repair time*.

p-fractile administrative delay

Rec. G.106

The *p-fractile* value of the *administrative delay*.

p-fractile logistic delay

Rec. G.106

The *p-fractile* value of the *logistic delay*.

p-fractile; p-quantile (of a probability distribution)

Rec. G.106

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

Rec. G.106

The *p-fractile* value of the *repair time*.

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.

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.

packet

*Series X **

A group of binary digits including data and call control signals which is switched as a composite whole. The data, call control signals and possibly error control information are arranged in a specified format.

packet assembly/disassembly (PAD)

Rec. X.15

A function which permits nonpacket mode terminals to exchange data in the packet mode.

packet disassembly

*Series X **

A user facility which enables packets destined for delivery to a non-packet mode terminal to be delivered in the appropriate form (for example, in character form at the applicable rate).

packet format

*Series X **

A set of rules governing the structure of data control information in a packet. The packet format defines the size and content of the various fields which make up a packet.

packet length selection

*Series X **

A user facility where a DTE may select a certain maximum user data field length out of a defined set.

packet-mode operation

*Series X **

The transmission of data by means of addressed packets whereby a transmission channel is occupied for the duration of transmission of the packet only. The channel is then available for use by packets being transferred between different data terminal equipments.

Note — In certain data communication networks the data may be formatted into a packet or divided and then formatted into a number of packets (either by the data terminal equipment or by equipment within the network) for transmission and multiplexing purposes.

packet-mode terminal

*Series X **

A data terminal equipment which can control and format packets and transmit and receive packets.

packet switched data transmission service

Rec. X.15

A service involving the transmission and, if necessary, the assembly and disassembly of data in the form of packets.

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 this Recommendation.

page

Rec. T.62

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

Recs. T.72, T.73

A layout object that is a rectangular area with dimensions equal to the associated interchanged image area.

page set

Rec. T.73

A composite layout object corresponding to a sequence of other page sets and/or pages.

page teleprinter

Rec. S.140

A teleprinter which prints characters in page formation.

page wait

Rec. X.15

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.

pair of complementary channels

Rec. E.600

Two channels, one in each direction, which provide a bidirectional communication.

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.

parallel automatic calling

Recs. V.7, V.25, V.25 bis

A procedure by which a DTE, by use of the 200 series interchange circuits, may instruct a 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.130

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.

parallel transmission

*Series X **

The simultaneous transmission of code elements constituting one or more character signals.

parameter

Rec. Q.9

A variable that is given a constant value for a specified application and that may denote the application.

parameter

Rec. T.73

A term sometimes used instead of attribute.

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

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 name* or the *parameter position* identifying a *parameter* in a *block of parameters*.

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*.

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*.

parcel of traffic

See:

traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic.

PARENT

Glos. (VI.11)

The *PARENT data item* of a *process* is the *SELF data item* of its parent *process*, that is the *process* which interpreted the *create request action* which started the *process*.

parity digit

*Series X **

An *n*-ary digit appended to an array of *n*-ary digits to make the sum modulo *n* of all the digits always equal to 0 or to any predetermined digit.

In the case of the radix 2, parity digit becomes parity bit.

parity function

Rec. X.15

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 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

Rec. G.106

A *fault* of an *item* other than a *complete fault*.

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.

partitioning

Glos. (VI.11)

Partitioning is the elaboration of behaviour of complex and/or large systems into sub-systems to provide a logical partitioning of the behaviour of the system and different abstract viewpoints of the same system.

passive operator

Glos. (VI.11)

An *operator* which requires only *values* as parameters and produces a *value* as a result. A *passive operator* cannot *change* the values associated with *variables*.

password

Rec. Z.341

A character string used for identification and authorization of a *user*.

to patch

Rec. Q.9

To make an improvised modification.

path; telecommunication path

Rec. Q.9

The continuous course taken by a transmission signal between 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.

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

Sup. 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

Sup. 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.

peak amplitude of an elementary echo

Rec. G.601

Maximum value of echo amplitude reached in the duration of an *elementary echo*.

peak busy hour; bouncing busy hour; post selected busy hour

Rec. E.600

The busy hour each day; it is usually not the same over a number of days.

peak limiting

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.

peaked traffic

Rec. E.600

A traffic that has a peakedness factor greater than one.

peakedness factor

Rec. E.600

The ratio of variance to mean of a traffic.

Note — The variance and the mean refer to the number of resources that would be occupied if this traffic was offered to an infinitely large pool of resources.

peer entities

Rec. Q.711

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

Rec. Q.711

A formal language used by peer entities to exchange user data.

pel path

Recs. T.72, T.73

The direction of progression of successive photographic elements along a line.

per word tariff system

Rec. D.40

In the per word tariff system, rates are established per single word, 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.

per word tariff system

Rec. D.302 R

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.

percentage overflow (% OFL)

Rec. E.411

% OFL indicates the relationship between the total bids offered to a route 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 route to another, or the bids which fail because all routes to a destination are busy.

$$\% \text{ OFL} = \frac{\text{Overflow bids (to another route or to circuit busy signal)}}{\text{Total bids for the route (or all routes)}} \times 100$$

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

periodicity pattern

Rec. Z.333

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.130

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.130

Permanent connections/connection elements are described by the following characteristics:

Permanent connections/connection elements installed in the ISDN will not pass through a switching network. They will use the transmission network of ISDN and by-pass the exchanges.

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 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 circuit telecommunication service

See:

permanent circuit service; permanent circuit telecommunication service.

permanent fault

See:

persistent fault; permanent fault; solid fault.

permanent virtual circuit

Rec. X.15

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.

permanently locked envelope

*Series X **

Used when envelopes are always separated by a number of bits corresponding to an integer number of envelopes.

persistent fault; permanent fault; solid fault

Rec. G.106

A *fault* of an *item* that persists until an action of *corrective maintenance* is performed.

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 procedure that forms the *methodology* for the specification of a *man-machine interface*.

phase-inversion modulation

*Series X **

A method of phase modulation in which the two significant conditions differ in phase by π radians.

phase modulation

*Series X **

Modulation in which the phase angle of a carrier is the characteristic varied.

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.

photographic coded text

Rec. T.72

The coded representation for text interchange of photographic elements. This coded representation is specified in Recommendation T.6.

photographic element

Recs. T.72, T.73

An individual picture element (pel, pixel) used in arrays to construct images. Each pel has a specific shape, size, colour, intensity and position.

physical interface

Recs. I.112, Q.9

The interface between two equipments.

physical interface specification (physical interface)

Recs. Q.9, I.112

A formal statement of the mechanical, electrical, electromagnetic and optical characteristics of the interconnections and interactions between two associated equipments, at their interface.

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

Sup. 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.

pictorial character

Recs. T.72, T.73

Predetermined pattern which is intended to be presented in adjacent character boxes to construct rulings, boxes, figures, logos, diagrams, or other pictures occupying multiple character boxes.

pictorial element (PE)

Rec. Q.9

One of a number of standardized graphical entities used within *state pictures* to represent switching system concepts. (See annexes to Recommendation Z.103.)

pictorial element (PE)

Glos. (VI.11)

One of a number of standardized graphical forms used with *state pictures* in *SDL/PE* to represent switching system concepts.

PId

Glos. (VI.11)

The predefined data type used to identify process instances.

pilot

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

Sinusoidal signal transmitted over analogue FDM links for regulation and supervision purposes.

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

Rec. G.701

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.

plesiochronous

Rec. Q.9

Signals are plesiochronous if 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 phase relationship between corresponding significant instants.

point

Rec. M.700

- 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-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.130

This value applies when there are only two access points.

point-to-point connection

Rec. I.130

This value applies when only two end points are provided by the connection.

point-to-point ISDN connection

Rec. I.112

An ISDN connection that is established between two specified ISDN interfaces.

point-to-point traffic

See:

traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic.

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 380-3.

At the output of the radio-relay system (point R), the conditions given in Recommendation G.213, § 2 are found in the baseband.

points of telephony input and output for the line link

See:

telephony input and output points for the line link.

pointwise availability

See:

instantaneous availability $A(t)$.

pointwise unavailability

See:

instantaneous unavailability $U(t)$.

poisson traffic

Rec. E.600

A traffic that has a Poisson distribution of arrivals.

portion of document content

See:

content portion.

portion of text

See:

content portion.

position

Recs. T.50, T.51

That part of a code table identified by its column and row coordinates.

position

Rec. T.61

An item in a code table identified by its column and row coordinates.

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*.

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

Recs. E.600, 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 selected busy hour

See:

peak busy hour; bouncing busy hour; post selected busy hour.

post-selection time

Rec. 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

Rec. U.140

A class of service signal transmitted after the sequence of digits characterizing the called terminal.

postal Administration

Rec. D.70

An Administration, or the part of a combined postal and telecommunication Administration, concerned with the provision of postal services.

power feeding (repeater) station

Rec. G.601

A *directly powered repeater station* which supplies electric power to other *repeater stations*.

power of the test

Rec. G.106

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.

power off condition

*Series X **

A condition in which power is not available within a unit of equipment.

Powerset

Glos. (VI.11)

The *predefined data type generator* generating *data types* with *values* which are mathematical ordered sets of *values*. Each *powerset value* is a set of *values* of the *data type* used to parameterize *powerset generator*.

pre-selection delay

Rec. 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-signal

Rec. U.140

A class of service signal transmitted at the beginning of the selection signals.

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 type

Glos. (VI.11)

For simplicity of description the term *predefined data type* is applied to both predefined *names* for *data types* and predefined *names* for *data type generators*. *Boolean*, *Character*, *Charstring*, *Duration*, *Integer*, *Natural*, *Pld*, *Real*, *Time* and *Timer* are *data type names* which are predefined. *Array*, *Powerset*, and *String* are *data type generator names* which are predefined.

predicted ...

Rec. G.106

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

Rec. G.106

- 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.

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.

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

Rec. 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

Rec. 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

Rec. 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 release probability; cut-off call probability

Rec. G.106

The *probability* that an established connection will be released for a reason other than intentionally by any of the parties involved in the call.

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).

presentation

Rec. T.61

The printing or display of a stored character or characters to allow for human comprehension of the stored information.

presentation

Recs. T.72, T.73

The printing or display of stored graphic elements to allow for human comprehension of the stored information.

presentation control functions

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 medium

Recs. T.72, T.73

The carrier of information in a form perceptible to a human, e.g. a sheet of paper or a display screen.

pressure gradient microphone

See:

proximity microphone.

preventive cyclic retransmission (error control) method

Glos. (VI.7, VI.8)

A noncompelled, positive acknowledgement, cyclic retransmission forward error correction system.

preventive maintenance

Recs. G.106, M.700

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

Rec. G.106

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/G.106.

primary block

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

Rec. G.106

A *failure* of an *item*, not caused either directly or indirectly by the *failure* or the *fault* of another *item*.

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 routes

Recs. F.60, F.68

The circuits normally used in a given relation.

primary routes

See:

routes.

primitive name

Rec. X.400

A name assigned by a naming authority. Primitive names are components of descriptive names.

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

Sup. 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.

priority facility

*Series X **

A facility which gives a user preference over the other users. Priority may be given for instance to handling of the call, packet transfers, and other services provided by the network.

priority service

Sup. 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

Rec. X.15

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 management domain (PRMD)

Rec. X.400

A management domain managed by a company or non-commercial organization.

private number ringing signal

Sup. No.1 (II.2)

Each member of a family is given different identification (ID) codes. 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*

probability

Rec. G.106

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.

For practical reasons, however, 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 is indefinitely increased.

probability density function

Rec. G.106

The derivative, if this exists, of the *distribution function*:

$$f(x) = \frac{dF(x)}{dX}$$

probability of acceptance

Rec. G.106

The *probability* that an *item* will be accepted by a given *statistical test plan*.

probability of loss

See:

call congestion; probability of loss; loss.

probability of rejection

Rec. G.106

The *probability* that an *item* will not be accepted by a given *statistical test plan*.

probability of successful service completion

Rec. G.106

The *probability* that a connection can be established, under satisfactory operating conditions, and retained for a given *time interval*.

procedure

Glos. (VI.11)

A section of a *process graph* which can be regarded in isolation. A *procedure* is defined in one place but may be referred to several times, even in different *processes*. The *signals* and *variables* affected by interpretation of a *procedure* are controlled by parameter passing.

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

Glos. (VI.11)

A *procedure call* is the means of invoking a *named procedure* for interpretation and passing parameters to the *procedure*.

procedure call

See:

call.

procedure call node

Glos. (VI.11)

A *procedure call node* is a *node* in a *process graph* or a *procedure graph* where a *procedure call* takes place.

procedure call symbol

Glos. (VI.11)

The *symbol* of *SDL/GR* representing a *procedure call*.

procedure definition

Glos. (VI.11)

A *procedure definition* defines a section of a *process graph*. The definition associates the *procedure graph* with a *procedure name*, a *formal parameter list*, an *additional-save-set* and optionally further *procedure definitions* and *data definitions*.

procedure description

Rec. Z.341

A method of representing an *operational procedure*.

procedure diagram

Glos. (VI.11)

A *procedure diagram* is the *SDL/GR* representation of a *procedure graph*.

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

Glos. (VI.11)

A *procedure graph* is a graph connected by directed *arcs* to describe the *behaviour* of a *procedure* and can form a section of a *process graph*.

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;
- 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 start node

Glos. (VI.11)

The *procedure start node* is a *node* and is a *procedure graph* where interpretation of the *procedure* is commenced by a call of the *procedure*.

procedure start symbol

Glos. (VI.11)

The symbol in a *procedure diagram* of *SDL/GR* representing a *procedure start node*.

proceed-to-select

*Series X **

An event in the call establishment phase of a data call which confirms the reception of a call request signal and advises the calling DTE to proceed with the transmission of the selection signals.

proceed-to-select signal

Rec. 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 (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.

proceed-to-send signal

See:

start-dialling signal.

process

Glos. (VI.11)

A *process* performs a function which requires various items of information to perform sub-functions. The sub-functions performed depend on the order in time that the information becomes available to the *process*. In the context of *SDL* a process is a class of entity, instances of which are either in a *state* awaiting an *input* or in a *transition*. The term *process* on its own is a synonym for *process instance*.

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*. (Recommendation Z.101, §§ 1.2.5, 1.3.9.)

process definition

Glos. (VI.11)

The behaviour of a *type* of the class *process* is described in a *process definition*, in terms of a closed directed graph of *inputs*, *saves*, *states*, *transitions*, *decisions*, *tasks* and *outputs*.

process diagram

Glos. (VI.11)

A *process diagram* is the *SDL/GR* representation of a *process graph*.

process graph

Glos. (VI.11)

A *process graph* is a graph connected by directed *arcs* to describe the behaviour of a *process*.

process instance

Glos. (VI.11)

A *process instance* is a dynamically created *instance* of a *process*.

process substructure

Glos. (VI.11)

The *process substructure* of a *process* is the *partitioning* of the *process* into *sub-processes* and the allocation of these *processes* into *sub-blocks*.

process substructure definition

Glos. (VI.11)

A *process substructure definition* is an optional part of a *process definition* which defines the *process substructure* of a *process*.

process symbol

Glos. (VI.11)

The *symbol* on a *block interaction diagram* or a *process tree diagram* of *SDL/GR* representing zero or more *process instances*. The *process symbol* contains the *process name*, which identifies the *process definition*, and a *formal parameters list*.

process tree diagram

Glos. (VI.11)

A *process tree diagram* of *SDL/GR* represents the *partitioning* of a *process* in a *block* into *sub-processes*. The allocation of the *sub-processes* to *sub-blocks* is shown by *allocation symbols* on the *process tree diagram*. The diagram is in the form of an inverted tree.

processing

Rec. T.73

The carrying out of operations on a document. This includes editing, formatting, rendition, filing, retrieval.

processing time

See:

switching delay; processing time; handling time.

processor

Rec. Q.9

A device capable of performing systematic execution of operations upon data.

processor outage

Glos. (VI.7, VI.8)

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. It may also be due to a manually initiated blocking of an individual signalling link.

producer's risk (point)

Rec. G.106

A point on the *operating characteristic curve* corresponding to some predetermined and usually low *probability of rejection*.

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-sensitive fault

Rec. G.106

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.

prompting

Rec. Z.341

A method used by the *system* to request *input* from the *user* in a *dialogue procedure*.

prompting output

Rec. Z.341

An *output* from the *system* providing guidance on the next *input* requirement.

propagated error

Rec. G.106

An *error* in the response to erroneous data input to a non-faulty *item*.

propagation performance

Rec. G.106

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.

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

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.

protection switching

Rec. M.495

That category of restoration in which one transmission path is substituted for another to permit maintenance operations either for the protection against component failure or to remedy temporary conditions such as fading. This is intended to reflect a configuration in which m paths protect n paths on the same route.

protocol

Rec. I.112

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 formal statement of the procedures that are adopted to accommodate communication between two or more functions within the same layer of a hierarchy of functions.

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 reference model

Rec. I.112

A conceptual arrangement of the functions comprising protocols. The OSI model is an example of a protocol reference model.

provider-initiated-service

Rec. X.210

A service which is generated by the service-provider.

proximity microphone

Sup. No. 9 (V)

A transducer converting sound energy into electrical energy, responding to the difference in sound pressure between a front port and a rear port. Also termed "noise cancelling microphone", "pressure gradient microphone".

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 picowatt (pW), and this equation can then be given as follows:

$$\text{psophometric power} = \frac{(\text{psophometric e.m.f. in mV})^2}{0.0024} \text{ (pW)}.$$

public data network

Rec. X.15

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

Sup. No. 1 (II.4)

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 data transmission service

Rec. X.15

A data transmission service established and operated by an Administration 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.

public facsimile bureau

Rec. F.160

An Administration's public bureau responsible for accepting, transmitting, receiving and delivering facsimile documents.

public facsimile service

Sup. 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 land mobile network (PLMN)

Rec. Q.9

A collection of mobile service switching centre areas within a common numbering plan (e.g. service access codes) and a common routing plan (e.g. definition of crossover point).

Functionally the PLMNs may be regarded as independent communications entities even though different PLMNs may be interconnected through the PSTN and PDNs for forwarding of calls or network information. A similar type of interconnection may exist for the interaction between the MSCs of one PLMN.

public land mobile network (PLMN)

Rec. Q.70

A public land mobile network may be defined 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). The MSCs are the functional interfaces between the fixed network and a PLMN.

Functionally the PLMNs may be regarded as independent communications entities even though different PLMNs may be interconnected through the PSTN and PDNs for forwarding of calls or network information. A similar type of interconnection may exist for the interaction between the MSCs of one PLMN.

The location register system of a PLMN may be centralized, distributed or segmented. So long as we are concerned with functions of a PLMN, such as routing and interworking, the configuration and operation of the location register system have no influence on external networks.

The use of the concept PLMN is illustrated in Figure 1/Q.70 where various PLMNs are shown with their interfaces to the fixed networks. It should be noted that a PLMN may have several interfaces with the fixed network (e.g. one for each MSC). Interworking between two PLMNs may be performed via an international gateway.

Figure 1/Q.70 also shows the information paths between a PSTN and a PLMN and between two different PLMNs. The solid lines indicate a possible physical path between the PLMNs through the PSTN. The dotted line indicates that, for some interactions, an end-to-end information path (established through the physical path) may exist between the two PLMNs.

public recorded information service

Sup. 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 telefax station

Sup. 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

Sup. 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.

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 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 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

Rec. E.600

A Poisson traffic which has a negative exponential distribution of holding time.

put-back

Rec. F.1

Stopping a transmission on a channel, recommencing at a particular telegram previously transmitted and continuing from there.

Q

qualifiers

See:

qualifying part.

qualifying part

Glos. (VI.11)

The *qualifying part* of an *identifier* is the information which has to be added to the *name part* of the *identifier* to form a unique *name*. The *qualifying part* of an *identifier* may be derived from the context of the use of the *name part*.

quality of service

Rec. E.600

A measure of service provided to the subscriber. The characteristics of this measure must be declared when specifying a quality of service, and may include such characteristics as transmission quality, faults, congestion, delays, etc.

quality of service

Rec. G.106

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*, *serveability performance*, *service integrity* and other factors specific to each service. See Figure 1/G.106.

quality of service

Rec. I.130

This attribute is described by a group of specific sub-attributes, for example:

Service reliability, service availability.

The values are under study.

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.

quasi-associated mode (of signalling)

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

A non-associated 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

Glos. (VI.3)

A form of non-associated signalling in which the route the signals may take through the network is prescribed.

queueing delay

Glos. (VI.3)

The delay incurred by a signal message as a result of the sequential transmission of signal units on the signalling channel.

queuing time

See:

waiting time; queueing time.

R

R25 equivalent

Rec. P.10

Loudness loss determined as a *reference equivalent* in accordance with Recommendation P.72, except that the listening level is constant, corresponding to 25 dB in NOSFER.

radio control path

Recs. Q.9, Q.70

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 mobile services switching centre (MSC), in which area the mobile station currently is located, during the time that no radio speech path between that base station and that mobile station is assigned.



radio paging service

Sup. 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 speech path

Recs. Q.9, Q.70

The radiocommunication facility between a mobile station and a base station intended to carry a call and uniquely assigned to the mobile station during the 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.

radiotelexogram

Recs. E.200, F.110

A 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

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

Errors distributed over the digital signal so that they can be considered statistically independent from each other.

random process

Rec. G.106

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

Rec. G.106

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".

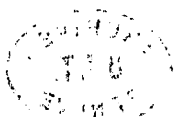
ratio of compression

Rec. G.162

The ratio compression of a compressor is defined by the formula:

$$\alpha = \frac{n_c - n_{c0}}{n_s - n_{s0}}$$

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:

$$\alpha = \frac{L_{1 \text{ CIN}} - L_{2 \text{ CIN}}}{L_{1 \text{ COUT}} - L_{2 \text{ COUT}}}$$

where:

$L_{1 \text{ CIN}}$ and $L_{2 \text{ CIN}}$ are any two different compressor input levels within the compressor operating range.

$L_{1 \text{ COUT}}$ and $L_{2 \text{ COUT}}$ are the compressor output levels corresponding to input levels $L_{1 \text{ CIN}}$ and $L_{2 \text{ CIN}}$ 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:

$$\beta = \frac{L_{1 \text{ EOUT}} - L_{2 \text{ EOUT}}}{L_{1 \text{ EIN}} - L_{2 \text{ EIN}}}$$

where

$L_{1 \text{ EIN}}$ and $L_{2 \text{ EIN}}$ are any two different expander input levels within the expander operating range.

$L_{1 \text{ EOUT}}$ and $L_{2 \text{ EOUT}}$ are the expander output levels corresponding to input levels $L_{1 \text{ EIN}}$ and $L_{2 \text{ EIN}}$ respectively.

re-routing

Rec. 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.

re-run

Rec. F.1

The repetition, between two directly connected centres or offices, of one or more telegrams that have previously been sent.

ready

*Series X **

A steady-state condition at the DTE/DCE interface which denotes that the DCE is ready to accept a call request signal or that the DTE is ready to accept an incoming call, respectively.

ready for data

*Series X **

A call control signal transmitted by the DCE to the DTE to indicate that the data connection is available for data transfer between both DTEs.

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.

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

Glos. (VI.11)

The *real type* is defined by the set of ALL values between $-(\text{infinity})$ and $+(\text{infinity})$ and the normal mathematical operations, i.e. +, -, multiply, raise to power, etc.

real open system

Rec. X.200

A real system which complies with the requirements of Recommendation X.200 in its communication with other real systems.

real system

Rec. 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 time (adjective)

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 conversion facility (real-time interworking)

Rec. F.201, Sup. 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 (see Recommendation F.201, § 3.2).

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 verifying 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

Glos. (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.

reattempt

See:

repeated call attempt; reattempt.

receive channel

Rec. R.140

The designation at a terminal or other equipment, of a channel used for receiving.

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.

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 perforator

See:

reperforator; receiving perforator.

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 — An SS-user can be both a sending and a receiving SS-user simultaneously.

receiving transport entity

Rec. X.224

A transport entity that receives a given TPDU.

reception congestion

*Series X **

A network congestion condition occurring at a switching centre.

recipient

Rec. X.400

A user, a human being or computer process, who receives a message from the MHS.

recipient UA

Rec. X.400

A UA to which a message is delivered or that is specified for delivery.

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.

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.

recording

Rec. Z.333

Performance of the operations implied by the measurement entities in order to collect the required data.

recording day

Rec. Z.333

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

Rec. Z.333

A period of recording during a recording day.

recovery

See:

restoration; recovery.

redundancy

Rec. G.106

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 code

*Series X **

A code using more signal elements than necessary to represent the intrinsic information.

For example:

- A 5-unit code using all the characters of International Telegraph Alphabet No. 2 is not redundant.
- A 5-unit code using only the figures in International Telegraph Alphabet No. 2 is redundant.
- A 7-unit code using only signals made of 4 “space” and 3 “mark ” elements is 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.

reenterable program

See:

reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine.

reenterable routine

See:

reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine.

reenterable subroutine

See:

reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine.

reentrant program; reentrant routine; reentrant subroutine; reenterable program; 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 routine

See:

reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine.

reentrant subroutine

See:

reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine.

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 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 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 data

Rec. G.106

"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.

reference point

Rec. I.112

A conceptual point at the conjunction of two non-overlapping functional groups.

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 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 test method

Rec. G.651

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

(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.

reframing time

Series X *

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.

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.

regenerative repeater

Rec. G.701

A repeater that regenerates digital signals.

Note 1 — A regenerative repeater may operate in one or both directions of transmission, and the term may be qualified by “unidirectional” or “bidirectional” as appropriate.

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.

regenerator

Rec. G.701

A device that performs regeneration.

regenerator section (deprecated)

See:

elementary regenerator section.

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 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.

registration of incoming calls service

Sup. 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)

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 (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.

rejection output

Rec. Z.341

An *output* message indicating that an *input* to the *system* is invalid and will not be acted upon, and corrections cannot be applied.

relation (international public telegram service)

Recs. D.40, D.302 R

A relation between two terminal countries exists when telegrams are exchanged between them (and, normally, accounts are settled).

relation

See:

(telephone) relation;
(telex) relation.

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 equivalent

Rec. P.10

The loss, expressed in decibels, which has to be introduced into a *working standard* in order to obtain in a given direction the same *loudness* as the *telephone call* being considered, the *acoustic speech power* emitted by the talker being the same in both cases.

Note 1 — The relative equivalent is positive or negative according to whether it has been necessary for a loss to be added or removed from that standard.

Note 2 — The *reference equivalent* is approximately equal to the sum of the relative equivalent measured with respect to a working standard and of the reference equivalent of this working standard.

Note 3 — The relative equivalent is strictly defined by the measuring method described in Recommendation P.72.

relative frequency

Rec. G.106

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 given 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 numerically equal to the *composite gain* (definition in Yellow Book, Fascicle X.1) between the transmission reference point and the point concerned, for a nominal frequency of 1000 Hz.

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.

relaying

Rec. X.400

The interaction by which one Message Transfer Agent transfers to another the content of a message plus the relaying envelope.

relaying envelope

Rec. X.400

The envelope which contains the information related to the operation of the MTS plus the service elements requested by the originating UA.

release

Rec. E.600

The event which is the end of a busy state.

release

Rec. Q.9

The sequence of events which brings about the end of a busy state.

release failure probability

Rec. G.106

The *probability* that the required release of a connection will not take place.

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

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 (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 (Signalling System R2)

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.

relevant failure

Rec. G.106

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 (performance)

Rec. G.106

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*.

reliability block diagram

Rec. G.106

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

Rec. G.106

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

Rec. G.106

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

Rec. G.106

A mathematical model used for *prediction* or *estimation* of *reliability measures* of an *item* or for similar purposes.

reliability R

Rec. G.106

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*.

relocatable address

Rec. Q.9

An address that is adjusted when the computer program containing it is relocated.

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.

remote call forwarding service

Sup. 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 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

Rec. G.106

Maintenance of an *item* performed without physical access of the personnel to the *item*.

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.)

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

Recs. D.150, F.67

The *remuneration for exclusive use* is the remuneration paid to the Administration that 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* used until now applied 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 that receives the remuneration and that 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

Recs. D.150, F.67

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 $L_1, L_2, \dots, L_n$ 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; or
- b) by a fixed amount covering a certain period of time and based on the estimated volume of traffic and its time characteristics.

rendition

Recs. T.72, T.73

The operation consisting of presenting the document content on a presentation medium.

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

Rec. G.106

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

Rec. G.106

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/G.106.

repaired item

Rec. G.106

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.

repeated call attempt; reattempt

Rec. E.600

Any of the subsequent call attempts related to a first call attempt.

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

Rec. 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.

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.

reproducible failure

See:

systematic failure; reproducible failure; deterministic failure.

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 data transfer

*Series X **

A call control signal sent by the DTE to the DCE to request the establishment of the data connection in leased circuit service.

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 repeat system

*Series X **

A system employing an error-detecting code and so arranged that a signal detected as being in error automatically initiates a request for retransmission of the signal detected as being in error.

request transmission time

See:

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

requesting SS-user

See:

requestor; requesting SS-user.

requestor; requesting SS-user

Rec. X.215

An SS-user that initiates a particular action.

required function

Rec. G.106

A function or a combination of functions of an *item* which is considered necessary for the provisioning of a given *service*.

required time

Rec. G.106

The *time interval* during which the user requires the *item* to be in a condition to perform a *required function*.

See Figure 3/G.106.

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.

rerouting

Rec. M.495

The restoration of a transmission path on another path when a total or partial physical route failure has occurred or when the normal route protection channel is not available due to a previous or simultaneous failure, or when there is no such protection channel provided. Such rerouting is normally effected by manual switching using plugs and cords but it could be accomplished by automatic switching, if appropriate.

reselection

Rec. X.15

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.

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.130

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 I-1/I.130).

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.

reserved switching path PE

Glos. (VI.11)

A *pictorial element* representing a reserved connection between terminal equipment and/or signalling devices.

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 of *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 might be combined so that the (N)-layer performs blocking and concatenation.

reset

Glos. (VI.11)

The *operator* defined for the *timer data type* which allows timers to be cleared.

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-circuit signal

Rec. Q.254

A signal that is sent to release a circuit when, due to memory mutilation 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.

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_{RES} is the residual echo level
 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 rate

*Series X **

The ratio of the number of bits, unit elements, characters or blocks incorrectly received but undetected or uncorrected by the error-control equipment, to the total number of bits, unit elements, characters or blocks sent.

residual voltage

See:

discharge voltage.

resource

Rec. E.600

Any physically or conceptually identifiable entity, the possession or use of which can be unambiguously determined.

(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 devices for sending recorded announcements, traffic service positions, network integrated data banks, etc.

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.

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

See:

command 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 be any one of the following types: *acceptance output*, *rejection output* and *request output*.

restitution

Rec. R.140

The formation of a succession in time of significant conditions resulting from a received signal.

restitution

*Series X **

Series of significant conditions determined by the decisions taken according to the products of the telegraph demodulation.

restitution delay

Rec. R.140

Transfer time of a significant instant between a transmitter and the corresponding receiver.

restoration control point (RCP)

Rec. M.725

The restoration control point (RCP) is an element within the general maintenance organization for the international 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 Administrations concerned.

restoration ; recovery

Rec. G.106

That event when the *item* regains the ability to perform a *required function* after a *fault*.

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*.

restriction in the outgoing direction service

Sup. 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.

results accumulation period

Rec. Z.333

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

Rec. Z.333

Data defining the media to which results output is to be directed.

results output schedule

Rec. Z.333

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.

retainability of an established connection

Rec. G.106

The *probability* that a switched connection, once established, will operate within specified transmission tolerances without *interruption* for a given *time interval*.

retained signal

Glos. (VI.11)

When a *signal* arrives at a *process*, it is considered to be *received* and *retained* for that process (it is outside the *process* hence it is not yet *consumed* by it).

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

Rec. G.701

Adjustment of the intervals between the significant instants of a digital signal, by reference to a timing signal.

retiming

Rec. Q.9

Adjustment of the intervals between corresponding significant instants of a digital signal, by reference to a timing signal.

retransmission buffer

Glos. (VI.7, VI.8)

Storage in the signalling link control for signal units transmitted but not yet positively acknowledged.

retrieval

Glos. (VI.7, VI.8)

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.83

The recovery of previously filed information.

return

Glos. (VI.11)

The *return* of a *procedure* is the destruction of the *variables* and *synonyms* created at the *procedure start* followed by the completion of the interpretation of the *procedure start*.

return node

Glos. (VI.11)

A *return node* is the *node* in a *procedure graph* where the *return* from the *procedure* takes place.

return switching signal

Rec. U.140

A switching signal transmitted in the direction from the called party to the caller.

return symbol

Glos. (VI.11)

The symbol in a *procedure diagram* representing a *return* from the *procedure*.

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

$$L_{\text{RET}} = L_{\text{Rin}} - (A_{\text{ECHO}} + A_{\text{CANC}} + A_{\text{NLP}}).$$

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 $L_{\text{RES}} = L_{\text{RET}}$.

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

Glos. (VI.11)

A *variable* owned by a *process* may have a *reveal attribute*, in which case another *process* in the same *block* can *view* the *value* associated with the *variable*.

ring-forward signal (Signalling System R1)

Rec. Q.310

This line signal is initiated by an operator (and sent in the forward direction) to recall an operator at a point further ahead in the connection.

ringback tone

See:

ringing tone; ringback tone.

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.

route

Rec. E.411

A collection of circuits uniquely identifiable for engineering, routing or traffic purposes.

route

Rec. E.600

A set of circuits or interconnected circuits from one reference point to another such that the routing of any call over this set is wholly controlled from the first-named reference point.

Note – The set need not define a single circuit-group, though it frequently does.

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 set congestion control

Glos. (VI.7, VI.8)

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.

routing

Rec. E.600

The particular route or sequence of routes which is used to establish a path for a call.

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

Glos. (VI.7, VI.8)

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 mutilation is detected.

Note — See CCIR Recommendation 342-2.

S

safety of life telex calls

Rec. F.60

Those telex calls requested in accordance with Article 25 of the *International Telecommunication Convention*, Nairobi, 1982.

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.)

save

Glos. (VI.11)

A *save* is the postponement of *recognition of a signal* when a *process* is in a particular *state* in which *input* of that *signal* is not allowed.

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. (Recommendation Z.101, § 1.3.4.)

save-signal-set

Glos. (VI.11)

The *save-signal-set* of a *state* of a *process* is the set of *saved signal names* for that *state*.

save symbol

Glos. (VI.11)

A symbol in a *process diagram* of *SDL/GR* representing the SDL concept of a save.

scheduled maintenance

Rec. G.106

The *preventive maintenance* carried out in accordance with an established time schedule.

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 test

Rec. G.106

A *test*, or combination of *tests*, intended to remove or detect unsatisfactory *items* or those likely to exhibit early *failures*.

scrolling ; windowing

Rec. Z.341

A mechanism for retrieving data not currently displayed from the *display memory* into the *display area*.

SDL/GR

Glos. (VI.11)

The graphical representation of SDL.

SDL/PE

Glos. (VI.11)

The pictorial element form of SDL, which is a state oriented extension of *SDL/GR*.

SDL/PR

Glos. (VI.11)

The textual phrase representation of SDL.

second data multiplexer

*Series X **

The equipment that accepts a number of streams of binary digits each signalled from first data multiplexers or signals at equal rate and combines these on a time division basis into a single stream of binary digits signalled at the digit rate of a PCM primary block.

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.

secondary failure

Rec. G.106

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.

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.

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.

security arrangements

Glos. (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.

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. 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 Figures 3a/G.701 and 3b/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.

seizing-acknowledgement signal (Signalling System R2)

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 used only in the digital version of System R2 line signalling.

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, which 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 (Signalling System R2)

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.

seizing signal

See:

connect signal.

seizure

Rec. E.411

A seizure is a bid for a circuit in a route which succeeds in obtaining a circuit in that route.

seizure

Rec. E.600

A successful bid.

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 in a route is seized. When related to the expected values of average call holding times and effective call/seizure rate for the route, 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.

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 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 is 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 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

Rec. U.140

A sequence of forward signals giving to an exchange information necessary to the setting up of a call.

selection signals

Series X *

The sequence of characters which indicates all the information to establish a call. The selection signals consist of two elements: the facility request and the address. The facility request always precedes the address.

In some cases one of the two elements may be omitted. There may be several facility requests and several addresses in the selection signals.

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

Rec. 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.

selective accounting service

Sup. 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.

SELF

Glos. (VI.11)

The *SELF data item* of a *process* is the unique *process instance* value which distinguishes it from any other *process instance*.

semantics

Rec. Z.341

The rules and conventions governing the interpretation and assignment of meaning to constructions in a language.

semateme (not used in English)

Rec. R.140

Contiguous succession in time of significant conditions.

semi-automatic demand operating

See:

demand operating.

semi-automatic observation

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 are 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-permanent (connection)

Rec. I.130

Semi-permanent connections/connection elements pass through a switching network.

Semi-permanent connection/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.

semi-permanent connection

Rec. Q.9

A connection established part-time 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.

send reference station

Rec. N.1

The transmit sub-control station of an international multiple destination sound-programme circuit section (see its definition), circuit (see its definition) or link (see its definition). (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 (see its definition), circuit (see its definition) or link (see its definition). (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

Glos. (VI.11)

The *SENDER* data item of a *process* is equal to the origin process data item of the most recently consumed *signal*.

sending SPM

Rec. X.225

An SPM that sends a given SPDU.

sending SS-user

Rec. X.215

An SS-user that acts as a source of data during the data transfer phase of a session connection.

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.

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.

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.

sequential

Rec. I.130

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.

serial automatic calling

Recs. V.7, V.25, V.25 bis

A procedure by which a DTE, by use of the 100 series interchange circuits, may instruct a 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 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.

serial transmission

*Series X **

Transmission at successive intervals of signal elements constituting the same telegraph or data signal.

For example:

- transmission of signal elements by a standard teleprinter, in accordance with International Telegraph Alphabet No. 2;
- telegraph transmission by a time-divided channel.

Note — The sequential elements may be transmitted with or without interruption, provided that they are not transmitted simultaneously.

serializer

See:

parallel to serial converter;
parallel to serial converter; serializer .

serveability performance

Rec. G.106

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*. See Figure 1/G.106.

service

Rec. G.106

A set of functions offered to a user by an organization.

service access probability

See:

service accessibility; service access probability.

service accessibility performance

Rec. G.106

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. See Figure 1/G.106.

service accessibility; service access probability

Rec. G.106

The *probability* that a *service* can be obtained within specified tolerances and other given operating conditions when requested by the user.

service advices

Rec. F.1

Relate to details of service or to the working of circuits and telegraph offices and to transmission of traffic. They shall be exchanged between telegraph offices. They may also be initiated by the sender or addressee of any telegram to give instructions or to obtain information about that telegram.

service area

Recs. Q.9, Q.70

The service area is defined as an area in which a mobile station is obtainable by a fixed telephone subscriber without the subscriber's knowledge of the actual location of the mobile station within the area. A service area may consist of several public land mobile networks (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.70 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 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.140

Service availability is the ratio of the aggregate time during which satisfactory or tolerable service is or could be provided, to the total observation period.

service bits

*Series X **

Those overhead bits which are not check bits.

Example: request for repetition, numbering sequence, etc.

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 data unit integrity

Rec. I.130

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 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 identification

Rec. E.131

Information designating a supplementary service.

service indicator

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

Information within a signalling message identifying the user to which the message belongs.

service information (octet)

Glos. (VI.7, VI.8)

Eight bits, contained in a message signal unit, comprising the service indicator and the sub-service field.

service integrity

Rec. G.106

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

Rec. T.62

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

Rec. G.106

The ability of a *service* to be successfully and easily operated by a user. See Figure 1/G.106.

service outage duration

Rec. X.140

Service outage duration is the duration of any continuous period of time for which satisfactory or tolerable service is not available. It is recognized that the determination of an outage condition requires a finite observation period.

service-primitive ; primitive

Rec. X.210

An abstract, implementation independent interaction between a service-user and the service-provider.

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. G.106

The *probability* that a *service*, once obtained, will continue to be provided under given conditions for a given *time duration*.

service retainability performance

Rec. G.106

The ability of a *service*, once obtained, to continue to be provided under given conditions 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. See Figure 1/G.106.

service signal

Rec. 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

Rec. G.106

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 telegrams

Rec. F.1

Telegrams that relate to public international telecommunication and are exchanged between:

- Administrations;
- Recognized private operating agencies;
- Administrations and recognized private operating agencies;
- Administrations and recognized private operating agencies on the one hand and the Secretary-General of the ITU on the other hand.

service telex calls

F.60

Those telex calls that relate to the working of the international telecommunication services.

service time

Rec. E.600

The total accumulated time that a resource attends to a given demand.

Note — For hardware resources, service time is generally uninterrupted and coincides with the holding time.

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. G.106

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. G.106

Probability of a *mistake* made by a user in his attempt to utilize a *service*.

service, telecommunication service

Rec. I.112

That which is offered by an Administration or RPOA 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.

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

See:

dialogue procedure.

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

Recs. Z.333, 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

Glos. (VI.11)

The *operator* defined for the *Timer data type* which allows timers to be set.

SETED

Rec. P.10

A working standard using high-quality moving coil microphones and receivers with an orthotelephonic response.

setting-up time

Rec. U.1

The 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 kHz audio

Rec. I.130

Digital representation of audio information with a bandwidth of 7 kHz, the encoding rule being specified.

SFERT speech level meter

Sup. No. 8 (V)

A *speech level meter* whose essential characteristics are laid down in the SFERT (master European transmission reference system; French: système fondamental européen de référence pour la transmission téléphonique) specifications.

shannon

*Series X **

The unit of selective information, i.e. the amount of information derived from knowledge of the occurrence of one of two equiprobable, exclusive and exhaustive events.

shared value

Glos. (VI.11)

A *shared value* is the *value* associated with a *variable* which has the *reveal* attribute in one *process* and is viewed by another.

shift register

*Series X **

A register composed of binary storage cells in which the state of each cell is transferred to the adjacent cell in a predetermined direction by the application of a shift pulse applied to all stages of the register.

ship earth station

Rec. X.350

A mobile earth station in the Maritime-Mobile-Satellite Service located on board ship (Article 1, § 4.16, of the Radio Regulations, ITU, Geneva 1982). See Figure 1/X.350.

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

See:

maritime terminal.

ship station identity

Recs. E.210, F.120, Q.11 ter

The ship's identification $X_1, X_2 \dots X_k$ transmitted on the radio path.

ship station number

Recs. E.210, F.120, Q.11 ter

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 — In Recommendations E.210, F.120 and Q.11 *ter*, the term ship station is also intended to include, for simplicity, ship earth station.

shore station

See:

maritime centre.

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 loudness rating (STLR)

Rec. P.10

The loudness of a telephone sidetone path compared with the loudness of the intermediate reference system (IRS) overall.

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 path loss

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 ERP) and expressed as a loss compared with the speech at 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.

sidetone power rating (STPR)

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} by power addition.

signal

Recs. G.701, I.112

A physical phenomenon one or more of whose characteristics may vary to represent information.

SIGNAL

Glos. (VI.11)

The *formal parameter* attribute for a *signal* parameter of a *procedure*.

signal (general sense)

Rec. Q.9

Aggregate of waves propagated 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 preconceived 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 (in SDL)

Rec. Q.9

A signal is a flow of data conveying information to a *process*. (Recommendation Z.101, § 1.3.1.)

signal

See:

signal instance.

signal-conversion equipment

*Series X **

That part of the terminal installation belonging to the data channel, comprising at least one modulator or one demodulator and providing:

- modulation according to the signals to be transmitted;
- and/or demodulation of the signals received.

Note — The signal-conversion equipment is used for transmission of data, including information, service signals, repetition, etc.; it may, for example, comprise clocks and signal regenerators but not error-control equipment.

signal definition

Glos. (VI.11)

A *signal definition* defines a *name* as being a *signal name* and associates a list of zero or more *data types* with the *signal name*.

signal distance (deprecated)

See:

Hamming distance.

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 element

*Series X **

Each of the parts constituting a telegraph or data signal and distinguished from the others by its nature, magnitude, duration and relative position (or by one or some of these features only).

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 instance

Glos. (VI.11)

A *Signal instance* is an *instance* of a *signal* communicating information to a *process instance* from either the *output action* of another *process instance* or the *environment*. Alternatively, a *signal instance* is used to communicate information from the *output action* of a *process* to the *environment*.

signal list

Glos. (VI.11)

The list of *names* of all the *signals* which can be conveyed by a *channel* or internally in a *block* from one *process* to another.

signal list symbol

Glos. (VI.11)

The symbol on a block *interaction diagram* of *SDL/GR* representing a *signal list* associated with a *channel* or *signal route symbol*.

(signal) message

Glos. (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.

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 symbol

Glos. (VI.11)

The *symbol* on an *interaction diagram* of *SDL/GR* indicating the flow of *signals* between a *process* and either another *process* in the same *block* or the *channels* connected to the *block*.

signal spill-over (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.9

A signalling point with the function of transferring signalling messages from one signalling link to another.

signal transfer point

Glos. (VI.3)

A signal relay centre handling and transferring signals from one signalling link to another in a non-associated mode of operation.

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 unit

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

A group of bits forming a separately transferable entity used to convey information on a signalling link.

signal unit (SU)

Glos. (VI.3)

The smallest defined group of bits on the signalling channel (28 bits), used for the transfer of signal information.

signal unit alignment

Glos. (VI.7, VI.8)

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)

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.

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

See:

access protocol; signalling access protocol, information access coding/protocol.

signalling channel

Glos. (VI.3)

A data channel in combination with the associated signalling terminal equipment at each end.

signalling channel (Signalling System No. 6)

Rec. Q.9

A data channel in combination with the associated signalling terminal equipment at each end.

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 data link

Glos. (VI.3)

A combination of two data channels operating together in a single signalling system.

(signalling) destination point

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

A signalling point to which a message is destined.

signalling information

Rec. Q.9

The information content of a signal or a signalling message.

signalling information (field)

Glos. (VI.7, VI.8)

The bits of a message signal unit which carry 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

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

A transmission means which consists of a signalling data link and its transfer control functions, used for reliable transfer of signalling messages.

signalling link

Glos. (VI.3)

A combination of two signalling channels operating together in a single signalling system.

signalling link blocking

Glos. (VI.7, VI.8)

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

Glos. (VI.7, VI.8)

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 error monitoring

Glos. (VI.7, VI.8)

This comprises two functions: initial alignment error rate monitoring and signal unit error rate monitoring.

signalling link failure

Glos. (VI.7, VI.8)

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

Glos. (VI.7, VI.8)

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)

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)

An event consisting in the completion of 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)

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

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

A set of signalling link(s) directly connecting two signalling points.

signalling link unblocking

Glos. (VI.7, VI.8)

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 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

Glos. (VI.7, VI.8)

An assembly of signalling information pertaining to a call, management transaction, etc. that is transferred as an entity.

(signalling) message discrimination

Glos. (VI.7, VI.8)

The process which decides, for each incoming message, whether the signalling point is destination point or if it should act as signalling transfer point for that message and accordingly, whether the message should be handled to (signalling) message distribution or to (signalling) message routing functions.

(signalling) message distribution

Glos. (VI.7, VI.8)

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.

signalling message handling functions

Glos. (VI.7, VI.8)

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

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 routing

Glos. (VI.7, VI.8)

The process for selecting, for each signalling message to be sent, the signalling link to be used.

signalling network

Rec. Q.9

A network used for signalling and consisting of signalling points and connecting common channel signalling links.

signalling network

Glos. (VI.7, VI.8)

A network used for signalling by one or more users and consisting of signalling points and connecting signalling links.

signalling network functions

Glos. (VI.7, VI.8)

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)

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) originating point

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

A signalling point in which a message is generated.

signalling point

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

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 code

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

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 receiver PE

Glos. (VI.11)

A pictorial element representing a signalling receiver.

signalling relation

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

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)

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

Glos. (VI.7, VI.8)

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

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

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 sender PE

Glos. (VI.11)

A *pictorial element* representing a signalling sender.

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 system

Glos. (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 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 flow control

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

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.

signalling traffic management functions

Glos. (VI.7, VI.8)

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 message flow.

signalling transfer point

Glos. (VI.7, VI.8)

A signalling point with the function of transferring signalling messages from one signalling link to another and considered exclusively from the viewpoint of the transfer.

significance level (of a statistical test) α

Rec. G.106

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 condition of a modulation

*Series X **

Condition assumed by the appropriate device corresponding to the quantized value (or values) of the characteristic (or characteristics) chosen to form the telegraph modulation.

Example: In a two-condition modulation (or binary modulation) there are two significant conditions, generally designated A and Z (or 0 and 1).

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, significant instant of a digital signal

Rec. G.701

The instant at which a signal element commences in a discretely-timed signal.

significant instants

*Series X **

The instants at which the successive significant conditions recognized by the appropriate device of the modulation or restitution begin.

Each of the instants is determined as soon as the appropriate device takes up the significant condition usable for a recording or a processing.

significant interval

*Rec. R.140, Series X**

Time interval between two consecutive significant instants.

simple connection

Rec. I.130

A connection consisting of only one connection element.

simple multipoint circuit

Rec. V.7

A multipoint circuit that does not contain more than two 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

simplex ; half duplex (deprecated)

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

G.601

A unidirectional pulse defined by the expression:

$$y = K \sin^2 (\pi t/2T); 0 \leq t \leq 2T$$

$$y = 0; t < 0 \text{ and } t > 2T$$

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.

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

Recs. G.701, Q.9

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 error

*Series X **

An erroneous bit, preceded and followed by at least one correct bit.

single-stage selection (special prefix, or national destination code method)

Recs. E.164, I.331

An interworking method where the information provided includes a code indicating that conventions for the codes it precedes are other than those defined for the ISDN numbering scheme.

slip (deprecated)

See:

controlled slip.

smooth traffic

Rec. E.600

A traffic that has a peakedness factor less than one.

software

Rec. Q.9

Computer programs, procedures, rules and any associated documentation concerned with the operation of a system.

solid fault

See:

persistent fault; permanent fault; solid fault.

sort

Recs. Z.333, Z.341

An *action* to rearrange the order of a *data set* according to specified (or default) criteria; the contents of the original set are not affected by this *action*, only its order.

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. 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 Figure 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.)

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 (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.

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.

SPDU identifier (SI)

Rec. X.225

Heading information that identifies the SPDU concerned.

speaking sets

See:

headset; operator telephone set.

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 ringing tone

Rec. E.182

A tone used to indicate to the calling subscriber that his call has been connected to a telephone number that is busy but for which the call waiting service applies.

specific

Recs. T.72, T.73

Term qualifying a layout or logical structure, a layout or logical object, or an attribute, pertaining to a particular document.

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 (in SDL)

Rec. Q.9, Glos. (VI.11)

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.

specification and description language (SDL)

Rec. Q.9, Glos. (VI.11)

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.

speech

Rec. I.130

Digital representation of speech coded according to a specified encoding rule (e.g. A-law, μ -Law).

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 plus duplex (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 (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 penalty

Rec. P.10

The reduction in a subscriber's talking level [usually expressed as a function of a speech sidetone rating, e.g. STRE (reference equivalent of sidetone), STMR (sidetone masking rating), STLR (sidetone loudness rating)] 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

Rec. 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:

- precedes 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 service user; SS-user.

ST (end-of-pulsing) signal (Signalling System R1)

Rec. Q.310

This register signal is sent (in the forward direction) to indicate that there are no more address signals to follow. The signal is always sent in semi-automatic as well as automatic working.

stand alone concentrator

See:

line concentrator; stand alone concentrator.

standard deviation δ

Rec. G.106

The positive square root of the *variance*.

standard receive side

Rec. G.714

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 frequency-attenuation distortion and no envelope-delay distortion), and which may be simulated by a digital processor.

standard send side

Rec. G.714

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 frequency-attenuation 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.

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. G.106

That *redundancy* wherein one means for performing a *required function* is intended to operate, while the alternative means are inoperative until needed.

standby state

Rec. G.106

A non-operating *up state* during the *required time*.

standby time

Rec. G.106

The *time interval* during which an *item* is in a *stand-by state*.

start action

Glos. (VI.11)

The *start action* of a *process* is interpreted before any other *action*. The *start action* initializes the *formal parameters* of the process.

start date

Rec. Z.333

Start day for the measurement execution.

start-dialling signal (Signalling System R1)

Rec. Q.310

This line signal is sent (in the backward direction) 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 element

Rec. R.140

A start signal limited to one signal element generally having the duration of a unit interval.

start node

Glos. (VI.11)

The *start node* in a *process graph* is the only node which does not follow another node. There is only one *start node* in a *process graph* and interpretation of a *process* starts at this node. The *start node* is where an *input action* takes place.

start-of-block signal

*Series X **

Signal which identifies the start of a block.

start-of-pulsing signal (sent in the forward direction)

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 call:

- a) KP1, terminal; and
- b) KP2, transit.

start-of-pulsing signal

See:

KP signal.

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 apparatus

Recs. S.3, S.31

Any telegraph apparatus which operates according to the *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 symbol

Glos. (VI.11)

The *symbol* in a *process diagram* of *SDL/GR* representing a *start node*.

start time

Rec. Z.333

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. Z.333

The start/stop day of a test/measurement on a routine basis.

start/stop time

Rec. Z.333

The start/stop time of a test/measurement on a routine basis.

state (in SDL)

Rec. Q.9, Glos. (VI.11)

A *state* is a condition in which the action of a *process* is *suspended* awaiting an *input signal*.

state node

Glos. (VI.11)

A *node* in a *process graph* or a *procedure graph* where the *process* enters a *state*.

state picture

Glos. (VI.11)

A *state picture* is a *state symbol* incorporating *pictorial elements* used to extend *SDL/GR* to *SDL/PE*.

state symbol

Glos. (VI.11)

A *symbol* in a *process diagram* of *SDL/GR* representing the SDL concept of one or more states.

state-transition diagram

Rec. G.106

A diagram showing the set of possible states of an *item* and the possible one step transitions between these states.

staticizer (deprecated)

See:

serial to parallel converter;
serial to parallel converter; deserializer .

statistic

Rec. G.106

A function of the *observed values* derived from a sample.

statistical test

Rec. G.106

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

Rec. G.106

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 $1 - \alpha$.

status channel

*Series X **

A channel indicating whether a group of bits is for data or control use.

status field

Glos. (VI.7, VI.8)

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 an 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

See:

system status window.

steady state availability

See:

(asymptotic) availability, A_s.

step stress test

Rec. G.106

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.

stop

Glos. (VI.11)

An *action* which terminates a *process instance*.

stop date

Rec. Z.333

Stop day for the measurement execution.

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 node

Glos. (VI.11)

A node in a process graph where the stop takes place.

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 symbol

Glos. (VI.11)

The symbol on a process diagram of SDL/GR representing a stop.

stop time

Rec. Z.333

Time for terminating a recording period in a recording day.

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 register

*Series X **

A device into which data can be inserted, in which they can be retained and from which they can be obtained when desired.

storage within the network

Rec. F.200

A network-provided facility that will accept and store messages and relay them to the addressee(s).

store and forward conversion facility (CF using store and forward principles)

Sup. No. 1 (II.4)

CFs that "store" the received telex (or Teletex) messages before "forwarding" them to the called Teletex (or telex) terminal (see Recommendation F.201, § 3.1 and § 4; see also the definition *real-time conversion facility*).

store and forward switching

See:

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 program control (SPC) system

Rec. Z.341

A *system* (this includes switching *systems*) that provides telecommunication services to the subscriber.

stored program control (SPC)

Rec. U.140

The control of an exchange by means of a set of instructions which are stored and can be modified.

stress analysis

Rec. G.106

A quantitative or qualitative determination of the physical, chemical or other stresses an *item* is subjected to under given use conditions.

stress model

Rec. G.106

A mathematical model which describes how a *reliability performance measure* of an *item* varies as a function of the applied stresses.

String

Glos. (VI.11)

The *predefined data type generator* generating *data types* with *values* which are lists of items of the *data type* used to parameterize the *string generator*.

Struct

Glos. (VI.11)

A *data type definition* with *Struct* implicitly introduces *data types* for field names and implicit *axioms* which define the use of field names with *extract!* and *insert!* for partial values of structures.

structure

Rec. I.130

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).

stuffable digit time slot (deprecated)

See:

justifiable digit time slot.

stuffing (deprecated)

See:

justification.

stuffing character

*Series X **

A character used on isochronous transmission links to take account of differences in clock frequencies.

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.

sub-address (network address extension)

Recs. E.164, I.331

Part of an address, for example which identifies to the subscriber's terminal equipment a point in the subscriber's installation (group of terminals, terminal or specific function of terminal equipment). The sub-address is agreed by the calling and called party and transferred by the network. However, sub-address information is not processed by the public network.

sub-addressing

Rec. I.112

An expansion of addressing to identify individual users, processes or group of users within a larger group of users or processes that are identified by a single network number.

sub-block

Glos. (VI.11)

A *sub-block* is a *block* contained within another *block*. *Sub-blocks* are formed when a *block* is *partitioned*.

sub-block definition

Glos. (VI.11)

A *sub-block definition* defines a *block* and forms part of a *block substructure definition*.

sub-block symbol

Glos. (VI.11)

The symbol in a *block interaction diagram* or *block tree diagram* of *SDL/GR* which represents a *sub-block* and is identical to a *block symbol*.

sub-centre

Rec. 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.

sub-channel

Glos. (VI.11)

A *sub-channel* is a *channel* formed when a block is *partitioned*.

sub-control station

Rec. M.90

A sub-control station is a point within the general maintenance organization which fulfils 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.

sub-process

Glos. (VI.11)

A *sub-process* is a *process* formed when a *process* is *partitioned*.

sub-system number

Q.711

A number to identify a SCCP user in the SCCP, like the ISDN user part.

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 greater than 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.

sublayer

Rec. X.200

A sub-division within 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 1/G.371).

submission

Rec. X.400

The interaction by which an originating User Agent transfers to a Message Transfer Agent the contents of a message plus the submission envelope.

submission and delivery entity (SDE)

Rec. X.400

An entity that is located in the MTL, co-resident with a UA and not with an MTA, and responsible for controlling the submission and delivery interactions with an MTAE.

submission and delivery protocol (P3)

Rec. X.400

The protocol which governs communication between an SDE and an MTAE.

submission envelope

Rec. X.400

The envelope which contains the information the MTS requires to provide the requested service elements.

subnetwork

Rec. X.200

A set of one or more intermediate 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-connection

Rec. X.200

A communication path through a subnetwork which is used by entities in the network layer in providing a network-connection.

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-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 call charge meter service

Sup. No. 1 (II.2)

Meters at the subscriber's premises showing call charge units debited.

subscriber calling rate

Rec. E.600

The call intensity of a subscriber line.

Note 1 — It should not be used to mean traffic rate.

Note 2 — It should be made clear whether the rate refers to the originating calling rate, or to the terminating calling rate or to the sum of both.

subscriber channel in a multiplexed DTE/DCE interface

Rec. X.15

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 line busy (Signalling System R2)

Rec. Q.400

A signal indicating that the line or lines connecting the called subscriber to the exchange are busy.

subscriber line free, charge (Signalling System R2)

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 (Signalling System R2)

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 out of order (Signalling System R2)

Rec. Q.400

A signal indicating that the subscriber's line is out-of-service or faulty.

subscriber line PE

Glos. (VI.11)

A pictorial element representing a subscriber line.

subscriber loop

See:

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

Rec. 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 traffic rate

Rec. E.600

The traffic intensity of a subscriber line.

Note — It should be made clear whether the rate refers to the originating traffic rate, or to the terminating traffic rate, or to the sum of both.

subscriber's alpha-numerical display

Sup. 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 exchange to the subscriber's station.

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*.

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.

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 (SAM)

Glos. (VI.3)

An address message, which may be either a one-unit or a multi-unit message, sent following the initial address message.

subsequent signal unit (SSU)

Glos. (VI.3)

A signal unit of a multi-unit message other than the initial signal unit.

subtelephone telegraphy

Rec. R.140

Telegraphy using a frequency band below that part of the audio range usually employed in telephone transmission.

successful call

Rec. E.600

A call that has reached the wanted number and allows the conversation to proceed.

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 semi-automatic 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

Rec. G.106

A *failure* that could not be anticipated by prior examination or monitoring.

super-telephone telegraphy

Rec. R.140

Telegraphy using a frequency band above that part of the audio range usually employed in telephone transmission.

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 (modem, 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.

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.

supervision

Rec. G.106

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.

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 services provided

Rec. I.130

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.

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.

switch (circuit)

See:

circuit switching exchange; switch.

switch (message)

See:

message switching exchange; switch (message).

switchboard PE

Glos. (VI.11)

A pictorial element representing a switchboard piece of terminal equipment.

switched (connection)

Rec. I.130

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 ISDN connection element

See:

switched connection element; switched ISDN connection element.

switched transit country

Recs. D.150, D.200 R, F.67

A switched-transit country is a transit country through which traffic is routed by switching in an international transit exchange.

switched virtual connection

Rec. X.15

See virtual call.

switched virtual connection

See:

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 module PE

Glos. (VI.11)

A *pictorial element* representing a switching module associated with a connected or reserved switching path.

switching network

Rec. Q.9

The switching stages of a telecommunication exchange taken collectively.

switching node

Rec. Q.9

An interstitial point in a network where interconnection of required inlets and outlets may be undertaken.

switching node

See:

node; switching node.

switching signal

Rec. U.140

A signal transmitted between two exchanges or between one exchange and a terminal for establishing and clearing a call.

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

Recs. Q.9, Z.341

A conventional representation of a concept or a representation of a concept upon which agreement has been reached.

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*. (Recommendation Z.102, § 2.2.)

symbol rate (deprecated)

See:

line digit rate.

symbolic name

Rec. Z.341

A character string used for the representation of an entity.

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 digital 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 channel

*Series X **

A network parameter used to indicate that the send and receive directions of transmission have the same data signalling rate.

symmetry

Rec. I.130

This attribute describes the relationship of information flow between two (or more) access points or reference points involved in a communication.

It characterizes the structure associated with a telecommunication service or a connection.

synchronization

Recs. G.701, Q.9

The process of adjusting the corresponding significant instants of signals to make them synchronous.

synchronization bit

*Rec. R.140, Series X**

A binary digit which is used for frame synchronization.

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)

Glos. (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.

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 data network

*Series X **

A data network which uses a method of synchronization between data circuit-terminating equipment (DCE) and the data switching exchange (DSE) and between DSEs, the data signalling rates being controlled by timing equipment within the network.

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 favourable value with respect to the time-base characteristics of the receiver.

synchronous network (deprecated)

See:

synchronized network.

synchronous system

Rec. R.140

A system of alphabetic telegraphy using synchronous transmission.

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.

synonym definition

Glos. (VI.11)

A definition of a name for a data value.

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

Glos. (VI.11)

Syntax diagrams are diagrams used to define the *SDL/PR* concrete syntax.

syntype

Glos. (VI.11)

A *syntype* introduces a set of *values* which corresponds to a subset of the *values* of the parent *newtype*. *Access!*, *declare!* and *assign!* are the only operators for *syntypes* since *values* prior to assignment and after extraction from *syntype variables* are always *values* of the parent *newtype*.

system

Rec. Z.341

Computer-based equipment used in telecommunications to provide service to the subscriber or to support administration personnel in their *jobs*.

system

Glos. (VI.11)

A *system* is a set of *blocks* connected to each other and the *environment* by *channels*. The term *system* on its own is a synonym for *system instance*.

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.9

The group of public land mobile networks (or service areas) accessible by fully compatible mobile stations.

system area

Rec. Q.70

The system area is defined as the group of public land mobile networks (PLMNs) (or service areas) accessible by fully compatible mobile stations.

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.70.

system availability information point

Rec. M.721

The system availability information point is an element within the general maintenance organization for the international automatic and semi-automatic 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 boundary

Glos. (VI.11)

The *system boundary* is the boundary between the *blocks* defined in terms of SDL and the *environment*.

system control signal unit (SCU)

Glos. (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

Rec. U.140

Station which is responsible for maintenance and clearance of faults on a transmission system.

system definition

Glos. (VI.11)

A *system definition* defines the properties of a *system*. The properties of a *system* are the *blocks*, *channels*, *signals* associated with the *channels*, *data types* and *synonyms* of the *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 No. 6 exchange

Glos. (VI.3)

An exchange utilizing Signalling System No. 6.

System No. 6 exchange, first

Glos. (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

Glos. (VI.3)

A transit exchange where interworking to and from Signalling System No. 6 takes place.

System No. 6 exchange, last

Glos. (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 status window

Rec. Z.341

A *window* indicating whether the sub-systems are working normally or are affected by some fault.

systematic failure; reproducible failure; deterministic failure

Rec. G.106

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

Rec. G.106

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

table

Rec. Z.341

An ordered presentation of interrelated information.

tag

See:

key; tag; label.

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.

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 (deprecated)

See:

transit exchange.

tandem connection

Rec. I.130

Two or more connection elements in series form a connection.

tandem exchange (deprecated)

See:

transit exchange.

tandem office (deprecated)

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 example, 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 program ; object program

Rec. Q.9

A program in a target language that has been translated from a source language.

task

Glos. (VI.11)

A *task* is an action within a *transition* containing either a sequence of *assignment statements*, *set statements* or *reset statements* or informal text. The interpretation of a *task* depends and may act on information held by the system.

task (in SDL)

Rec. Q.6

A task is any action within a *transition* which is neither a *decision* nor an *output*. (Recommendation Z.101, § 1.3.8.)

task node

Glos. (VI.11)

A *node* in a *process graph* or a *procedure graph* where a *task* takes place.

task symbol

Glos. (VI.11)

A symbol in a *process diagram* of *SDL/GR* representing the SDL concept of a task.

technical delay

Rec. G.106

The *accumulated time* necessary to perform auxiliary technical actions associated with the *maintenance action* itself.

See Figure 3/G.106.

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, I.112

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 Administration

Rec. D.70

An Administration, or the part of a combined postal and telecommunication Administration, concerned with the provision of telecommunication services.

telecommunication circuit

See:

circuit;

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 security

*Series X **

The protection of telecommunication signals so that their information content can be extracted only by those authorized and equipped to do so.

telecommunication service (deprecated)

See:

teleservice.

telecommunication service

See:

service, telecommunication service.

telecommunication service attribute

See:

service attribute; telecommunication service attribute.

telecommunications traffic; teletraffic

Rec. E.600

A flow of attempts, calls and messages.

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

Rec. F.180, Sup. No. 1 (II.4)

The public facsimile service between subscriber stations on the public switched telephone network (or circuits intended for DATEL) shall be known as the Telefax service (see Recommendation F.180, § 5).

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 demodulator

*Series X **

Unit (or group of units) converting a telegraphic modulation product into a signal suitable for processing.

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

Rec. R.140

1. A modulation, restitution or signal suffers from telegraph distortion when the significant intervals have not all exactly their theoretical durations.

2. A modulation, restitution or signal is affected by telegraph distortion when significant instants do not coincide with the corresponding theoretical instants.

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

Rec. U.140

A telegraph circuit connecting a sub-centre with its parent switching centre.

telegraph modulation

*Series X **

Variation in time of one or more quantized characteristics of an electromagnetic wave, alternating current or direct current according to the telegraph or data signals to be transmitted.

telegraph modulator

Rec. S.140

A modulator controlled by a telegraph signal.

telegraph modulator

*Series X **

Unit (or group of units) converting a basic signal into a modulation product.

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

Rec. 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.

telegraph trunk circuit

Rec. U.140

A permanent telegraph circuit between two telegraph exchanges permitting intercommunication.

telematic services

Sup. 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 and Videotex service.

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.

Note — The above definitions relate solely to the use of the terms in operational procedures, no matter how the circuits are actually made up.

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) relation

Recs. D.150, D.200 R

A (telephone) relation between two terminal countries exists when there is between them an exchange of telephone traffic (and, normally, a settlement of accounts).

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

Glos. (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

Glos. (VI.7, VI.8)

The User Part specified for telephone services.

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) control unit

Rec. S.140

Unit associated with a teleprinter and containing the necessary auxiliary equipment for operating this instrument on a switched network.

teleprinter ; teletypewriter

Rec. S.140

A start-stop apparatus comprising an alphanumeric keyboard transmitter with a printing character receiver.

teleprinting over radio circuits (TOR)

See:

Van Duuren radiotelegraph system; teleprinting over radio circuits.

teleservice

Rec. I.112

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 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 one terminal to another 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 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 basic element of office correspondence in the Teletex 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

Sup. No. 1 (II.4)

An international telematic service offered by Administrations enabling subscribers to exchange correspondence via telecommunication networks.

Teletex terminal

Recs. F.200, T.62

A device that is capable of transmitting and receiving Teletex documents in accordance with the basic requirements of Recommendation T.60.

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.)

Telex call

See:

(telex) call.

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 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) 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).

(telex) relation

Rec. F.67

A (telex) relation between two terminal countries exists when there is between them an exchange of telex traffic (and, normally, a settlement of accounts).

terminal

Rec. I.112

An equipment, located in close proximity to the user which presents to the user the information received from the network in a form compatible with the user's requirements and performs also the complementary function from the user to the network.

terminal

Rec. Z.341

Abbreviation for *man-machine terminal*.

terminal

See:

(telegraph) terminal

terminal connection method (in telex)

Rec. U.140

The characteristics of the interface between a telex subscriber's line and a subscriber-serving exchange.

terminal country (or Administration)

Recs. D.40, D.302 R

A terminal country is both a country of origin and a country of destination of a telegram.

terminal country (or Administration)

Recs. D.150, D.200 R, F.67

A terminal country is both a country of origin and a country of destination 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 PE

Glos. (VI.11)

One of a possible six *pictorial elements* representing the following types of terminal equipment: telephone on-hook, telephone off-hook, trunk, subscriber line, switchboard, or other.

terminal installation for data transmission

*Series X **

Installation comprising: the data terminal equipment (DTE), the data circuit-terminating equipment (DCE), and any intermediate equipment.

See Figure 2/X. *Note* — In some instances, the data terminal equipment may be connected directly to a data-processing machine or may be a part of it.

terminal international centre

Rec. 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

Rec. 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 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) (TMP-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

Rec. 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

Rec. 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

Rec. 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

Rec. 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

Rec. X.15

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 share

Rec. D.40

The terminal share is that part of the accounting rate which is due to a terminal Administration and which is used for the establishment of international accounts. In the binary tariff system, the terminal share has two components.

terminal share

Rec. D.302 R

The terminal share is that part of the accounting rate which is due to a terminal country.

terminal symbol

Rec. Z.341

A *symbol* containing a character or string of characters which actually appear in the *input* or *output*.

terminating traffic

Rec. E.600

Traffic destined for sinks located within the network considered, whatever its origin.

terminology harmonization

Rec. Z.341

Standardization of the terminology to be used in the generation of *MML function semantics*.

test

Rec. G.106

An experiment made in order to measure or classify a *characteristic*.

test

Rec. M.700

A direct practical trial in whatever manner it may be made.

test call indicator (Signalling System R2)

Rec. Q.400

A signal occupying the position of the language digit when the call is originating from test equipment.

test data

Rec. G.106

Observed data obtained during tests.

test levels at analogue interfaces

Rec. Q.507

At the reference frequency, test levels are defined in terms of the apparent power relative to 1 mW. At frequencies different from the reference frequency, test levels are defined as having the same voltage as the test level at the 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

Rec. I.112

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. Such a loop may be activated either by the user or by the network, and may take the form of an electrical connection (physical loop) or the repetition of a sequence of digits (logical loop).

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.

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 (switching and interregister signalling)

Rec. M.719

The testing point (switching and interregister signalling) is an element within the general maintenance organization for the international automatic and semi-automatic 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 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)

Rec. M.717

The testing point (transmission) is an element within the general maintenance organization for the international automatic and semi-automatic 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 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 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 System No. 6 are controlled and coordinated by the administrative control (see Recommendation M.762).

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.

test/measurement day

Rec. Z.333

Day in which the test/measurement is performed according to the associated schedule.

text

Recs. T.60, T.72, T.73

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*, *name-defined parameters* and/or *tables* which gives *output* information wherever it is needed or requested.

text deposit/delivery

See:

message deposit/message delivery (text deposit/delivery).

text extension symbol

Glos. (VI.11)

The text associated with this symbol is regarded as belonging to the symbol in *SDL/GR* to which the *text extension symbol* is attached.

text image format (TIF)

Recs. T.72, T.73

An interchange format that provides for the representation of the document profile, layout objects and content portions of a document.

text processable format (TPF)

Recs. T.72, T.73

An interchange format that provides for the representation of the document profile, logical objects, content portions and, optionally, layout objects of a document.

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

Recs. T.72, T.73

A data structure representing a content portion.

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 party services

Sup. 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 kHz audio

Rec. I.130

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).

threshold amplifier

Sup. No. 9 (V)

An electronic system which will decrease the gain of a sending system (10 to 15 dB) when the user is not talking and the signal peaks are below a certain threshold. It is typically used to increase the signal-to-noise ratio of sending systems. Also termed “switch-gain” amplifier.

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 between the incoming and outgoing circuits.

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-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-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-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-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.

Time

Glos. (VI.11)

The *predefined data type* representing absolute time.

time acceleration factor

Rec. G.106

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 between failures

Rec. G.106

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. G.106

The *time duration* between the end of one *interruption* and the beginning of the next.

time congestion

Rec. E.600

The probability that a system is congested at an arbitrary instant of time.

time consistent busy hour; mean busy hour

Rec. E.600

The 1-hour period starting at the same time each day for which the average traffic volume or call-attempt count of the exchange or 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 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

Rec. G.106

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 interval error (TIE)

Rec. G.811

The definition is based on the variation ΔT , of the time delay of a given timing signal with respect to an ideal timing signal. The TIE over a period of S seconds is defined to be the magnitude of the difference between the time delay values measured at the end and at the beginning of this period, i.e. $TIE(S) = |\Delta T(t + S) - \Delta T(t)|$, see Figure 1/G.811.

time-out

Rec. X.15

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 quantized control

Rec. Q.9

Synchronization control in which the error signal is derived or utilized only at a number of discrete instants which may or may not be equally spaced 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. 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 supervision of a process PE

Glos. (VI.11)

A *pictorial element* representing the running of a supervisory timer.

time to failure

Rec. G.106

Total *time duration* of the *operating time* of an *item*, from the *instant* it goes from a *down state* to an *up state*, after a corrective *maintenance action*, until next *failure*.

time to first failure

Rec. G.106

Total *time duration* of the *operating time* of an *item* from the *instant* 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

Rec. G.106

The *time interval* during which an *item* is in a *down state* due to a *failure*.

Timer

Glos. (VI.11)

The *predefined data type* used for timers and which defines the operators *SET* and *RESET* for timers.

timing extraction

See:

timing recovery; timing extraction.

timing information

Rec. G.701

Information contained in a signal relating to the timing of another signal.

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. X.200

A permanent identifier for an entity.

title-domain

Rec. X.200

A subset of the title space of the OSI environment.

Note — Title-domains of primary importance are the layers. In this specific case, the title-domain-name identifies the (N)-layer.

title-domain-name

Rec. X.200

An identifier which uniquely identifies a title-domain with the OSI environment.

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.

tone

Rec. E.182

A tone is 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.

topology

Rec. I.130

This attribute describes in addition to the connection configuration the arrangements of connection elements to form the ISDN connection.

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.

track

*Series X **

In recording apparatus: that part of a moving recording medium which is influenced by or influences a writing or reading device, e.g.:

- the ring-shaped portion of the surface of a magnetic drum associated with one head;
- the line of positions on a tape which could be perforated by a given punch or read by a given reader.

traffic carried (intensity)

Rec. E.600

The traffic carried by a pool of resources over a given interval of time is equal to the average number of simultaneously busy resources. Traffic carried calculated in this way is expressed in Erlangs.

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

Occurs in an exchange when the traffic flow of one incoming unit is unevenly distributed among all the outgoing units.

traffic flow control

See:

(signalling) traffic flow control.

traffic item

See:

traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic.

traffic load imbalance

Rec. E.600

Occurs in an exchange when the traffic load is unevenly distributed among similar units.

traffic matrix

Rec. E.600

A matrix of which the element at the intersection of row *i* and column *j* gives the traffic which originates at point *i* and is destined for point *j*. The points *i* and *j* may typically be switching centers in a network or the incoming and outgoing circuit groups of a switching center.

Note — Additional traffic generated by the normal operation of the system in setting up and controlling the establishment of the calls needs to be taken into account in any design process using this matrix.

traffic offered

Rec. E.600

The traffic that would be served by a pool of resources (assumed to be fully operative) sufficiently large to serve that traffic without limitation by the finite size of that pool.

Its usage is as a calculating quantity similar to a traffic intensity.

traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic

Rec. E.600

The traffic originating at a particular source and intended for 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 a route or routes, for a given traffic stream; this term is applicable to the selection of routes by switching systems or operators, or to the planning of routes.

traffic routing (in circuit switching)

Rec. 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 stream

See:

traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic.

traffic unit

Rec. F.67

For the purpose of the establishment of accounting rates, the traffic unit of one minute shall be used.

The traffic unit for use in the traffic unit pricing procedure for the measurement of total traffic exchanged is determined by the method of measuring call duration agreed between Administrations for the establishment of their international accounts as provided for in Recommendation F.61.

traffic-unit price procedure

Recs. D.150, F.67

The traffic-unit price procedure is the procedure whereby remuneration of an Administration is based on traffic units.

traffic volume

Rec. E.600

The traffic carried by a pool of resources over a given interval, multiplied by the duration of the interval. The traffic volume is therefore equal to the sum of the durations of the occupations of the resources. It may be expressed in (for example) Erlang-hours.

trafficability performance

Rec. G.106

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 not faulty sub-items.

transaction (in signalling applications)

Rec. Q.9

An interchange of enquiry and response messages between signalling points that transfers information.

transfer-allowed-acknowledgement signal

Rec. Q.256

A signal sent in response to the reception of a transfer-allowed signal.

transfer-allowed (procedure)

Glos. (VI.7, VI.8)

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 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

Glos. (VI.3)

A voice-frequency channel or a digital channel.

transfer controlled

Glos. (VI.7, VI.8)

A procedure included in signalling route management which informs a signalling point of the congestion status of a signalling route.

transfer link

Glos. (VI.3)

A combination of two transfer channels operating together in a single signalling system.

transfer-prohibited (procedure)

Glos. (VI.7, VI.8)

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

Glos. (VI.7, VI.8)

A procedure included in signalling route management which informs a signalling point of the restriction of a signalling route.

transfer syntax

Rec. X.200

That concrete syntax used in the transfer of data between open systems.

transfer time

*Series X **

The time that elapses between the initial offering of a unit of the user's data to a network by a transmitting data terminal equipment and the complete delivery of that unit to a receiving data terminal equipment.

Note 1 — A unit of data may be a bit, byte, packet, message, etc.

Note 2 — A specific example of transfer time applied to packet mode operation may be defined as follows: packet transfer time is the time that elapses between the initial offering of a packet to the network by a transmitting data terminal equipment and the complete delivery of that packet to a receiving data terminal equipment.

transferred account (TA) service

See:

international transferred account (TA) service.

transient fault

See:

intermittent fault; volatile fault; transient fault.

transit country (or Administration)

Recs. D.40, D.150, D.200 R, F.67

A transit country is a country through which traffic is routed between two terminal countries.

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

Rec. U.140

A telegraph exchange which enables connections between other telegraph exchanges to be established.

transit network identification

Rec. X.15

A network utility that names each transit network controlling a portion of the established or partially established virtual circuit.

transit share

Rec. D.40

The transit share is that 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, and is the share used for the establishment of international accounts.

In both the per word and binary tariff systems, the transit Administration is remunerated on the basis of the per word rate only.

transit share

Rec. D.302 R

The transit share is that part of the accounting rate which is due to a country through which traffic is routed between two terminal countries.

transit traffic

Rec. E.600

Traffic passing through the network considered, generated by sources outside it and destined for sinks outside it.

transition

Rec. R.140

A transient phenomenon separating two successive signal elements having different significant conditions.

transition

Glos. (VI.11)

A *transition* is an *action* sequence which occurs when a *process instance* changes from one *state* to another in response to an *input*.

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 response to an *input*. (Recommendation Z.101, § 1.3.5.)

transition string

Glos. (VI.11)

A *transition string* is a sequence of zero or more *actions* between an *input node* and the following *state node*, *stop node* or *procedure return node*.

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.

translator

Rec. Q.9

In automatic telephony: a device used for the *translation* of trains of impulses.

transmission

Recs. G.701, I.112

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

Glos. (VI.7, VI.8)

Storage in the signalling link control for signal units not yet transmitted.

transmission channel

See:
channel.

transmission code violation

*Series X **

Digits which are not in the transmission code and which, when used in small quantities, can give some more information without significantly affecting the spectrum of signal.

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 link

See:

link; transmission link.

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 of a verbal message service

Sup. No. 1 (II.2)

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 performance

Rec. G.106

The level of reproduction of a signal offered to a telecommunications system, under given conditions, when this system is in an *up state*.

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. At those points in a telephone circuit the nominal mean power level (-15 dBm) defined in Recommendation G.223, § 1 shall be applied when checking whether the transmission system conforms to the noise objectives defined in Recommendation G.222.

Note — For certain systems, e.g. submarine cable systems (Recommendation G.371), other values apply.

Such a point exists at the sending end of each channel of a 4-wire switched circuit preceding the virtual switching point; on an international circuit it is defined as having a signal level of $+3.5$ dB above that of the virtual switching point.

In frequency division multiplex equipment, a hypothetical point of flat zero relative level (i.e. where all channels have the same relative level) is defined as a point where the multiplex signal, as far as the effect of intermodulation is concerned, can be represented by a uniform spectrum random noise signal with a mean power level as defined in Recommendation G.223. The nominal mean power level in each telephone channel is -15 dBm as defined in Recommendation G.223.

transmit channel

Rec. R.140

The designation at a terminal or other equipment, of a channel used for transmitting.

transmit flow control

*Series X **

A transmission procedure which controls the rate at which data may be transmitted from one terminal point so that it is equal to the rate at which it can be received by the remote terminal point.

Note 1 — This procedure may apply between a DTE and the adjacent data switching exchange or between two DTEs. In the latter case the transmission rate may be controlled due to network or remote DTE requirements.

Note 2 — This procedure would operate independently in the two directions of data transfer thus permitting different data transfer rates in both directions of transmission.

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.

transmitter distortion

Rec. R.140

The telegraph distortion of a transmitter measured at the output under specified standard conditions.

transmitter distortion

Rec. V.57

A signal transmitted by an apparatus (or a signal at the output of a local line with its termination) is affected by telegraph distortion when the significant intervals of this signal have not exactly their theoretical durations.

Note — The definitions of degree of individual distortion, of degree of isochronous distortion, of degree of start-stop distortion, of degree of gross start-stop distortion, of degree of synchronous start-stop distortion, of degree of distortion in service, of conventional degree of distortion, of fortuitous distortion, of bias distortion, of cyclic distortion, are applicable to transmitter distortion.

transmultiplexer

Recs. G.701, M.300

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 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. 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.

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.

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

Rec. X.15

The phase of a call during which any bit sequence can be transmitted between DTEs.

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.

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 ...

Rec. G.106

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.

trunk circuit

Rec. E.600

A pair of complementary channels with associated equipments terminating in two switching centres.

It is said to be a national (international) circuit if it connects exchanges in the same (different) countries.

Note — Where there is no ambiguity the prefix “trunk” may be omitted.

trunk code

Recs. E.160, Q.10

A digit or combination of digits (not including the 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, the trunk code for which is 1;

In Canada and the USA:

the geographical area defined above corresponds to a *Numbering Plan Area* (NPA):

Montreal 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 PE

Glos. (VI.11)

A *pictorial element* representing a trunk line interface.

trunk prefix

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 trunk prefix is also used for calls from one of these countries to another.

TS-provider

See:

transport service provider; TS-provider.

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

Rec. G.106

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-stage selection

Recs. E.164, I.331

An interworking method whereby an address in the originating ISDN network is used to access an Interworking Unit (IWU) which is a point of an exit (outlet) or an entry (inlet) to another network. A second stage of selection is then used to indicate the address in the destination network.

two tone modulation

See:

frequency-exchange modulation; two tone modulation.

two way alternate (TWA)

Rec. T.62

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.

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)

Rec. T.62

User information is transferred in both directions simultaneously, i.e. both terminals are simultaneously a source as well as a sink.

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

Glos. (VI.11)

A *type* is a set of properties for entities. The classes of *types* in SDL are *blocks*, *channels*, *data items*, *procedures*, *processes*, *signals* and *systems*. A *type* may be composed from entities of the same class, in which case these entities are sub-types (e.g. a *block* composed from *sub-blocks*).

type definition

Glos. (VI.11)

A *type definition* defines the properties of a *type*.

type I risk

Rec. G.106

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 risk

Rec. G.106

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 P transmultiplexer (TMUX-P)

Rec. G.791

A transmultiplexing equipment in which the analogue interface is made up of several groups.

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. G.106

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 (Signalling System R2)

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 which is in a frozen state.

unavailability

See:

asymptotic unavailability, U.

unblocking-acknowledgement signal

Rec. Q.254

A signal sent in response to an unblocking signal indicating that the speech circuit has been unblocked.

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.

undercharging probability

Rec. G.106

The *probability* that an effective call will be undercharged for any reason.

undetected fault time

Rec. G.106

The *time interval* between a *failure* and recognition of the resulting *fault*.

See Figure 3/G.106.

unidirectional

Recs. E.600, Q.9

A qualification which implies that the transmission of information always occurs in one direction.

unidirectional

Rec. I.130

This value applies when the information flow of messages is provided only 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.

uniform

Rec. I.130

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 within the working range are equal. (See Figure 2/G.701.)

uniformity

Rec. I.130

This attribute refers to the commonality or differences of the attributes of the individual connection elements involved in a given connection.

unilateral control

Recs. G.701, Q.9

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.

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.

universal access number service

Sup. 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, Glos. (VI.3)

A message with an inappropriate signal content, an incorrect signal direction, or an inappropriate place in the message sequence.

unrestricted digital information

I.130

Transfer of information sequence of bits at its specified bit rate without alteration.

unscheduled maintenance

Rec. G.106

The *maintenance* carried out, not in accordance with an established time schedule, but e.g. after reception of an indication regarding the state of an *item*.

unstructured

Rec. I.130

This value is applicable when the telecommunication service or connection neither provides structural boundaries nor preserves structural integrity.

unsuccessful call

Rec. U.140

A call attempt which does not result in the establishment of a complete connection.

unsuccessful call

*Series X **

A call attempt which does not result in the establishment of a data connection.

up state

Rec. G.106

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*.

See Figure 2/G.106.

up time

Rec. G.106

The *time interval* during which an *item* is in an *up state*.

See Figure 3/G.106.

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 radio section, that a signal applied at its input port is outside its prescribed maintenance limit.

useful life

Rec. G.106

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 user is 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 : 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.400

A person or computer application or process who make use of MHS.

user

Rec. Z.341

The human being in *man-machine communication*.

user (of the signalling system)

Glos. (VI.7, VI.8)

A functional entity, typically a telecommunication service, which uses a signalling network to transfer information.

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)

Rec. X.400

Typically, a set of computer processes (for example, an editor, a file system, a word processor) that are used to create, inspect, and manage the storage of messages. There is typically one user per UA. During message preparation, the originator communicates with his UA via an input/output (I/O) device (for example, a keyboard, display, printer, facsimile machine, and/or telephone). Also by means of these devices, the UA communicates to its user any messages received from the MTS. To send and receive messages, the UA interacts with the MTS via the submission and delivery protocol.

user agent entity (UAE)

Rec. X.400

An entity in the UAL of the Application Layer that controls the protocol associated with cooperating UAL services. It exchanges control information with the MTAE or SDE in the layer below. The control information is the information the MTL requires to create the appropriate envelope and thus provide the desired message transfer service elements.

user agent layer (UAL)

Rec. X.400

The layer that contains the UAEs.

user assistance

Rec. Z.341

Information displayed by the *system* to help the *user* to perform the task.

user class of service

Rec. X.15

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 communication objectives of that application-process.

user functions

Rec. Q.711

Functional entities which use the services of the SCCP.

user handling time, T_{cu}

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 error probability

Rec. X.140

User information error probability is the ratio of total incorrect user information units to total successfully transferred user information units *plus* incorrect user information units in a specified sample.

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

A transferred user information unit is defined to be an incorrect user information unit when the value of one or more digits in the unit is in error, or when some, but not all, digits in the unit are lost digits or extra digits (i.e. digits that were not present in the original signal).

user information loss probability

Rec. X.140

User information loss probability is the ratio of total lost user information units to total transmitted user information units in a specified sample.

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

A transmitted user information unit is declared to be a lost user information unit when none of the bits in the unit are delivered to the intended destination user within the specified timeout period, and the network is responsible.

User information may also remain undelivered as a result of user information refusal — i.e. non-delivery attributable to excessive delay on the part of a user.

user information misdelivery probability

Rec. X.140

User information misdelivery probability is the ratio of total misdelivered user information units to total user information units transferred between a specified source and destination user in a specified sample.

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

A misdelivered user information unit is a user information unit transferred from a source user to a particular destination user that was actually intended for delivery to a different destination user. It is considered inconsequential whether the information is correct or incorrect in content.

user information transfer delay

Rec. X.140

User information transfer delay is the value of elapsed time between the start of transfer and successful transfer of a specified user information unit (e.g. block).

user information transfer denial probability

Rec. X.140

User information transfer denial probability is the ratio of total transfer denials to total transfer samples during a specified observation period.

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

A transfer sample is a discrete observation of network performance in transferring user information between a specified source and destination user. A transfer sample begins on input of a selected user information digit at the source user interface, and continues until the outcomes of a given number of transfer attempts have been determined.

A transfer denial is a transfer sample in which the observed performance is worse than a specified minimum acceptable level.

user information transfer rate

Rec. X.140

User information transfer rate is the total number of successfully transferred user information units in an individual transfer sample divided by the input/output time for that sample. See Figure 4/X.140.

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

Rec. I.112

The interface between the terminal equipment and a network termination at which interface the access protocols apply.

user of a telecommunication network

See:

user; user of a telecommunication network.

User Part

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

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 signalling system.

user service

Rec. X.15

A service available on demand to a user and provided as part of a public data network transmission service.

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.

V

valid input signal

Glos. (VI.11)

At each *state* in a *process* there is a set of *signal names* for *signals* which can either be *input*. A *valid input signal* is a *signal name* which is a member of any of these sets.

valid SPDU

Rec. X.225

An SPDU which complies with the requirements of Recommendation X.225 with respect to structure and encoding.

validation of the called Teletex terminal [validation result (positive or negative)]

Rec. F.201, Sup. No. 1 (II.4)

This validation is performed by the CF to verify that the Teletex terminal is an available one, i.e. either the Teletex terminal has been called with this address (validation call) or this address has been controlled in a data base (see Recommendation F.201, § 4.1.3).

value

Glos. (VI.11)

A data *value* of a *data type* is one of the *values* which are associated with a *variable* of that *data type*, and which can be used with an *operator* requiring a *value* of that *data type*.

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

Glos. (VI.11)

A *variable* is an entity owned by a *process* which can be assigned a *value*. A *variable* yields the last value which was assigned to it when it is accessed.

variable definition

Glos. (VI.11)

A *variable definition* defines an *instance* of a *data type*.

variable text

Rec. Z.341

A string of *information units* which contains information unique to the event which caused the *output*.

variance (of a random variable)

Rec. G.106

The *expectation* of the square of the difference between a *random variable* and the *expectation* of this variable.

variate

See:

random variable; variate.

video

Rec. I.130

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*, an entire *field* or within a part of a *field*.

videography

Sup. No. 1 (II.4)

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 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.

Videotex frame

Rec. F.300, Sup. 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

Rec. F.300, Sup. No. 1 (II.4)

A function of a computer providing access to data base(s) of other computer(s). This may include selection and/or protocol conversion and/or dialogue handling functions.

Videotex host computer

Rec. F.300, Sup. No. 1 (II.4)

The 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 information provider

Rec. F.300, Sup. No. 1 (II.4)

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, Sup. No. 1 (II.4)

A Videotex service facility in which a user obtains information by means of a dialogue with a data base.

Videotex message handling

Rec. F.300, Sup. 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, Sup. No. 1 (II.4)

An organised set of one or more frames.

Videotex service

Rec. F.300, Sup. 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.

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 centre

Rec. F.300, Sup. No. 1 (II.4)

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 facilities

Rec. F.300, Sup. 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

Rec. F.300, Sup. No. 1 (II.4)

The set of functionalities required by a Videotex service.

videotex service provider

Rec. F.300, Sup. No. 1 (II.4)

A party responsible to the user for the provision and operation of a Videotex service.

videotex systems

Rec. F.300

A Videotex system is the hardware and software used to implement a Videotex service. For examples of possible service configurations, see Annex A to Recommendation F.300.

videotex terminal

Sup. 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 (often a suitably modified television receiver);
- 3) identification capability, either automatic or manual;
- 4) 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-to-terminal messaging

Rec. F.300, Sup. 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 transaction

Rec. F.300, Sup. 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 information providers.

videotex user

Rec. F.300

A person who, by means of a Videotex terminal, uses the Videotex service.

videotex, interactive videography

Sup. 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.

view

Glos. (VI.11)

A *variable* can be *viewed* if the *value* associated with the *variable* is *revealed* by the *process* owning the *variable* and another *process* can access the *value*.

view definition

Glos. (VI.11)

A *view definition* is a part of a *process definition* which defines and which *variables* are owned by another *process* and are only *viewed* by the process containing the *view definition*.

viewing expression

Glos. (VI.11)

A *viewing expression* is used within an *expression* to indicate that the latest *value* of a *viewed variable* is obtained.

virtual call

*Series X **

A user facility in which a call set-up procedure and a call clearing procedure will determine a period of communication between two DTEs in which user's data will be transferred in the network in the packet mode of operation. All the user's data is delivered from the network in the same order in which it is received by the network.

Note 1 — This facility requires end-to-end transfer control of packets within the network.

Note 2 — Data may be delivered to the network before the call set-up has been completed but it will not be delivered to the destination address if the call set-up attempt is unsuccessful.

Note 3 — Multi-access DTEs may have several virtual calls in operation at the same time.

virtual call; switched virtual connection

Recs. D.11, X.15

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 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 sources 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.

visible display

Rec. Z.341

The entire physical screen of a visual display terminal.

visited mobile service switching centre (MSC)

Recs. Q.9, Q.70

The MSC, other than the home MSC, controlling the area in which a roaming subscriber is currently located.

visited public land mobile network (PLMN)

Recs. Q.9, Q.70

The PLMN, other than the home PLMN, in which a roaming subscriber is currently located.

visual telephone service

Rec. H.100

The visual telephone service is 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.

voice dialling service

Sup. 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-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

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.

volatile fault

See:

intermittent fault; volatile fault; transient fault.

volume

Sup. No. 8 (V)

An electrical quantity which is related to *speech power* and is measured by means of a specified instrument (e.g. a volume indicator) at a stated point in a telephone circuit.

W

waiting time ; queueing time

Rec. E.600

The interval between the registration of a demand for a resource and the start of the requested action, or the abandonment of the demand if earlier.

wander

Rec. G.701

Long term non-cumulative variations of the significant instants of a digital signal from their ideal positions in time.

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

Rec. G.106

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

Rec. G.106

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

Rec. G.106

That possible later period in the life of a *repaired 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.

wide area telephone service

Sup. 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.

window

Rec. Z.341

A part of the *display area* (sometimes the entire *display area*) which is used for entering and/or displaying functionally related data.

window information

Rec. X.224

Information contained in a TPDU relating to the upper and the lower window edges.

windowing

See:

scrolling; windowing.

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.)

Y

Y-ratio

Rec. P.10

The ratio between the sending and receiving efficiencies of a passive *telephone set* circuit.

yes or no test

Rec. M.700

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.

Z

Z condition

See:

A condition; Z condition.

PART II

LIST OF ABBREVIATIONS AND ACRONYMS

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
A-A	A-A	A-A	Analogue-analogue (<i>Series O</i>)
AA	AA	AA	Abort accept (<i>Series X</i>)
AAIC	CIAC	CIAC	Accounting authority identification code (<i>Series D, E, F</i>)
A/B	A/B	A/B	Answerback (<i>Series F, T, U</i>)
AB	AB	AB	Abort (<i>Series X</i>)
ABCF	FCIA		Adaptive break-in control function (<i>Series G</i>)
ABM	ABM	ABM	Asynchronous balanced mode (<i>Series X</i>)
ABR	TTTR	TTPR	Answer-Bid-Ratio (<i>Series Q</i>)
AC	ACP	AC	Accept (<i>Series X</i>)
ACB	SAP	ACI	Access barred signal (<i>Series Q</i>)
ACE	ECBF	ECBF	Audio-connecting equipment (<i>Series G</i>)
ACE	ELLA	EAA	Automatic calling equipment (<i>Series S</i>)
ACK	AR	AR	Acknowledge (<i>Series I, Q</i>)
ACK	ACK	ACK	Acknowledge (<i>Series T</i>)
ACM	MDC	ACO	Address complete message (<i>Series Q</i>)
ACR	ACR	ACR	Absolute category rating (<i>Series P</i>)
ACU	ACU	ACU	Acknowledgement signal unit (<i>Series Q</i>)
A-D	A-D	A-N	Analogue-digital (<i>Series O</i>)
AD	DA	AD	Activity discard (<i>Series X</i>)
ADA	ADA	ADA	Activity discard ack (<i>Series X</i>)
ADC	DCT	ACT	Address complete signal, charge (<i>Series Q</i>)
ADE	EDA	EDA	Attenuation distortion equivalent (<i>Series G</i>)
ADI	SDI	ADI	Address incomplete signal (<i>Series Q</i>)
ADM	MDA	MAD	Adaptive delta modulation (<i>Series P</i>)
ADMD	DGAD	ADMD	Administration management domain (<i>Series X</i>)
ADN	DCN	ACS	Address complete signal, no charge (<i>Series Q</i>)
ADPCM	MICDA	MICDA	Adaptive differential pulse code modulation (<i>Series E, G, I, P, Q</i>)
ADX	DCP	ACP	Address complete signal, coin box (<i>Series Q</i>)
AE	FA	AE	Activity end (<i>Series X</i>)
AE	EA	AE	Application entity (<i>Series X</i>)
AEA	AFA	AEA	Activity end ack (<i>Series X</i>)
AEN	AEN	AEN	Articulation rating (affaiblissement équivalent pour la netteté) (<i>Series P</i>)
AERM	MA	STEA	Alignment error rate monitor (<i>Series Q</i>)
AFC	ALT	ALT	Address complete signal, charge, subscriber free (<i>Series Q</i>)
AFN	ALN	ALS	Address complete signal, no charge, subscriber free (<i>Series Q</i>)
AFX	DCLP	AFX	Address-complete signal, subscriber-free, coin-box (<i>Series Q</i>)
AFX	ALP	ALP	Address complete signal, coin box, subscriber free (<i>Series Q</i>)
AGC	CAG	CAG	Automatic gain control (<i>Series G</i>)
AHLF	FCSA	AHLF	Additional high layer functions (<i>Series I</i>)
AI	IA	AI	Activity interrupt (<i>Series X</i>)
AIA	AIA	AIA	Activity interrupt ack (<i>Series X</i>)
AIS	SIA	SIA	Alarm indication signal (<i>Series G, I, M, O, Q, X</i>)
AK	AC	ARD	Data acknowledgement (<i>Series Q, X</i>)
AK TPDU	UDPT AC	TPDU AK	Data Acknowledge TPDU (<i>Series X</i>)
ALLF	FCIA	ALLF	Additional low layer functions (<i>Series I</i>)
AMI	AMI	AMI	Alternate mark inversion (<i>Series G, O</i>)
AMVFT	TAMA		Amplitude-modulated voice-frequency telegraph (<i>Series H, R</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
ANC	RCT	RAT	Answer signal, charge (<i>Series Q</i>)
ANM	RST	REP	Answer (<i>Series Q</i>)
ANN	RST	RST	Answer signal, no charge (<i>Series Q</i>)
ANU	SRS	RSI	Answer signal, unqualified (<i>Series Q</i>)
APB	APB	APB	Active position backward (<i>Series T</i>)
APD	APD	APD	Active position down (<i>Series T</i>)
APDU	UDPA	APDU	Application protocol data unit (<i>Series X</i>)
APF	APF	APF	Active position forward (<i>Series T</i>)
APH	APH	APH	Active position home (<i>Series T</i>)
APL	APL	CMI	Average picture level (<i>Series N</i>)
APR	APR	APR	Active position return (<i>Series T</i>)
APU	APU	APU	Active position up (<i>Series T</i>)
AR	RA	AR	Activity resume (<i>Series X</i>)
ARIMA			Autoregressive integrated moving average (<i>Series E</i>)
ARPAP	ARPAP	ARPAP	Aluminium-resin-polythene-aluminium-polythene (<i>Series G</i>)
AS	SA	SA	Alignment signal (<i>Series J</i>)
AS	CA	AS	Activity start (<i>Series X</i>)
ASCH			American standard code for information interchange (<i>Series G</i>)
ASD	DED	DED	Adverse State Detector (<i>Series V</i>)
ASP	POA	ASP	Assignment source point (<i>Series I, Q</i>)
ASR	TTR	TPR	Answer seizure ratio (<i>Series G</i>)
ATC			Additional trunk capacity (<i>Series E</i>)
ATIC	ATIC	ATIC	Time assignment with sample interpolation (<i>Series G</i>)
ATM	MPA		Alternative test method (<i>Series G</i>)
ATME No. 1	ATME N.º 1	AAMT nº 1	CCITT Automatic transmission measuring equipment (<i>Series O</i>)
ATME No. 2	ATME N.º 2	AAMT nº 2	CCITT automatic transmission measuring and signalling testing equipment (<i>Series M, O, Q</i>)
AU	UA	AU	Access unit (<i>Series I, X</i>)
BAC	CBA	BAC	Block-acknowledged counter (<i>Series Q</i>)
BAS	BAS	BAS	Basic activity subset (<i>Series T, X</i>)
BASN	NSBA	BASN	Block-acknowledged sequence number (<i>Series Q</i>)
BBR	BRB	BRB	Circuit blocked by reception of the blocking signal (<i>Series Q</i>)
BBS	BEB	BEB	Circuit blocked by sending the blocking signal (<i>Series Q</i>)
BC	CP	MFS	Bearer capability (<i>Series I, Q</i>)
BCC	CBC	BCC	Block-completed counter (<i>Series Q</i>)
BCC	CCC		Blind courtesy copy (<i>Series X</i>)
BCD	BCD	BCD	Binary coded decimal (<i>Series I, O, Q</i>)
BCH	BCH	BCH	Bose, Chaudhuri and Hocquengham code (<i>Series H</i>)
BCS	BCS	BCS	Basic combined subset (<i>Series T, X</i>)
BCSN	NSBC	BCSN	Block-completed sequence number (<i>Series Q</i>)
BCUG	GCUB	GFUB	Bilateral closed user group (<i>Series X</i>)
BCUGO	GCUBAS	GFUBAS	Bilateral closed user group with outgoing access (<i>Series X</i>)
BEL	BEL	BEL	Bell (<i>Series T</i>)
BER	TEB	BER	Bit error ratio (<i>Series G, M, Q</i>)
BHLF	FCSB	BHLF	Basic high layer functions (<i>Series I</i>)
BIB	BII	BIR	Backward indicator bit (<i>Series Q</i>)
BIBR	BIIR	BIR-R	BIB received (<i>Series Q</i>)
BIBT	BIIT	BIR-E	BIB to be transmitted (<i>Series Q</i>)
BIBX	BIIE	BIR-A	BIB expected (<i>Series Q</i>)
BIC	CISO	BIC	Bearer identification code (<i>Series Q, X</i>)
BID	DIB	DIB	Block interaction diagram (<i>Series Z</i>)
BITE	ETAT	ETAR	Backward interworking telephone events (<i>Series Q</i>)
BK BK			Break (<i>Series F</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
BLA	ARB	BLA	Blocking-acknowledgement signal (<i>Series Q</i>)
BLLF	FCIB	BLLF	Basic low layer functions (<i>Series I</i>)
BLO	BLO	BLO	Blocking signal (<i>Series Q</i>)
BLR	BLR	RBL	Blocking signal reception (<i>Series Q</i>)
BLS	BLE	EBL	Blocking signal sending (<i>Series Q</i>)
BMU	BMU	BMU	Basic measurement unit (<i>Series T</i>)
BNF	BNF	BNF	Backus-Naur Form (<i>Series X, Z</i>)
BS	BS	BS	Backspace (<i>Series T, X</i>)
BSM	MPE		Backward set-up message (<i>Series Q</i>)
BSN	NSI	NSR	Backward sequence number (<i>Series Q</i>)
BSNR	NSIR	NSR-R	Backward sequence number received (<i>Series Q</i>)
BSNT	NSIT	NSR-E	Backward sequence number of next SU to be transmitted (<i>Series Q</i>)
BSS	SSB	BSS	Basic Synchronized Subset (<i>Series X</i>)
BSU	UCS	DCF	Bearer Switchover Unit (<i>Series R</i>)
BTNJ	BAJN	JN	Bits from tributaries available for negative justification (<i>Series G</i>)
BTPJ	BAJP	JP	Bits from tributaries available for positive justification (<i>Series G</i>)
C	C	C	Connect (<i>Series I, Q</i>)
CA	AC	ARC	Connect acknowledge (<i>Series I, Q</i>)
CA	LLA	AA	Call accepted (<i>Series I, Q</i>)
CAD	RAL	CAD	Call acceptance delay (<i>Series X</i>)
CAM	CAM	CAM	Call accepted message (<i>Series X</i>)
CAN	CAN	CAN	Cancel (<i>Series T</i>)
CB1-3	COL1-3	CB1-3	Clear-back signal No. 1-No. 3 (<i>Series Q</i>)
CBA	ARS	RCA	Changeback acknowledgement signal (<i>Series Q</i>)
CBD	ORS	RCO	Changeback declaration signal (<i>Series Q</i>)
CBK	COL	RAC	Clear-back signal (<i>Series Q</i>)
CC	IP	IP	Country code (<i>Series E, I</i>)
CC	CC	COE	Congestion control (<i>Series Q</i>)
CC	CC	CCO	Connection confirm (<i>Series Q, X</i>)
CC	PCN	CC	Continuity-check (<i>Series Q</i>)
CC	LLC	CE	Call connected (<i>Series I, Q</i>)
CC	CC	CC	Character code (<i>Series T</i>)
CC	cc		Courtesy copy (<i>Series X</i>)
CC	CC	CC	Call connected (<i>Series X</i>)
CC TPDU	UDPT-CC	TPDU CC	Connection Confirm TPDU (<i>Series X</i>)
CCBS	CLAO	ROC	Completion of calls to busy subscriber (<i>Series Q</i>)
CCF	FCO	CCN	Continuity-failure signal (<i>Series Q</i>)
CCH	IPC	INCC	Continuity-check indicator (<i>Series Q</i>)
CCI	PCL	CCE	Continuity-check incoming (<i>Series Q</i>)
CCL	SLA	RAD	Calling party clear signal (<i>Series Q</i>)
CCM	MSC	SC	Circuit supervision message (<i>Series Q</i>)
CCO	PCS	CCS	Continuity-check outgoing (<i>Series Q</i>)
CCP	CCP		Call confirmation protocol (<i>Series X</i>)
CCR	PPC	CCD	Continuity-check-request signal (<i>Series Q</i>)
CCS	SCC	CS	Common channel signalling (<i>Series Q</i>)
CCSN	RSCC	RSCS	Common channel signalling network (<i>Series X</i>)
CCT	CCT	CCT	Telephone circuit (<i>Series Q</i>)
CD	DC	CD	Capability data (<i>Series X</i>)
CDA	ADC	CDA	Capability data ack (<i>Series X</i>)
CDC	CDC	CDC	Characteristic distortion compensation (<i>Series R</i>)
CDCL	CDCL	CDCL	Command document capability list (<i>Series T</i>)
CDD	CDD	CDD	Command document discard (<i>Series T</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
CDE	CDE	CDE	Command document end (<i>Series T</i>)
CDI			Called line identity (<i>Series X</i>)
CDPB	CDPB	CDPB	Command document page boundary (<i>Series T</i>)
CDR	CDR	CDR	Command document resynchronize (<i>Series T</i>)
CDS	CDS	CDS	Command document start (<i>Series T, U, X</i>)
CDT	CDT	CDT	Credit (field) (<i>Series X</i>)
CDUI	CDUI	CDUI	Command document user information (<i>Series T</i>)
CED	CED	CED	Called station identification (<i>Series T</i>)
CELTIC	CELTIC	CELTIC	Concentrateur exploitant les temps d'inoccupation des circuits (<i>Series G</i>)
CES	ETC	STC	Coast earth station (<i>Series M, U</i>)
CF	UC	UC	Conversion facility (<i>Series F, T</i>)
CFL	SLI	ECH	Call-failure signal (<i>Series Q</i>)
CFM	MCL	CSR	CCBS facility message (<i>Series Q</i>)
CFR	CFR	CFR	Confirmation to receive (<i>Series T</i>)
CGB	BGC	BLG	Circuit group blocking (<i>Series Q</i>)
CGBA	ARBG	BGA	Circuit group blocking acknowledgement (<i>Series Q</i>)
CGC	CHC	EFC	Circuit-group-congestion signal (<i>Series E, Q</i>)
CGRR	RRGC	RZGR	Circuit group reset receipt (<i>Series Q</i>)
CGRS	ERGC	RZGE	Circuit group reset sending (<i>Series Q</i>)
CGU	DGC	DBF	Circuit group unblocking (<i>Series Q</i>)
CGUA	ARDG	DGA	Circuit group unblocking acknowledgement (<i>Series Q</i>)
CHG	MTA	TAX	Charging message (<i>Series Q</i>)
CHM	MPA	PR	Changeover and changeback messages (<i>Series Q</i>)
CIC	CIC	CIC	Circuit identification code (<i>Series Q, X</i>)
CIG	CIG	CIG	Calling subscriber identification (<i>Series T</i>)
CIL	CIL		Call identification line (<i>Series F, T</i>)
CIR	PIL	IDD	Calling-line-identity-request signal (<i>Series Q</i>)
CK	BCE	CRT	Check bits (<i>Series Q</i>)
CLC	CL	CL	Clear confirmation (<i>Series I, Q</i>)
CLCD	RCL	CLCD	Clear confirmation delay (<i>Series X</i>)
CLF	FIN	FIN	Clear-forward signal (<i>Series Q</i>)
CLI	MIL	IDL	Calling-line-identity message (<i>Series Q</i>)
CLI	IL	IL	Clear indication (<i>Series I, Q</i>)
CLR	PL	DL	Clear request (<i>Series I, Q</i>)
CLRD	RPL	CLRD	Clear request delay (<i>Series X</i>)
CLU	MIN	IDN	Calling-line-identity-unavailable signal (<i>Series Q</i>)
CMB	BMV	CMB	Cyclic redundancy check message block (<i>Series G</i>)
CMC	MLC	DMA	Call modification complete (<i>Series Q</i>)
CMI			Coded mark inversion (<i>Series G</i>)
CMR	RMC	REMC	Common-mode rejection (<i>Series O</i>)
CMR	PML	MAD	Call modification request (<i>Series Q</i>)
CMS	SMC	SMC	Circuit multiplication system (<i>Series M, O</i>)
CN	CN	NM	Combined delivery/non-delivery notification (<i>Series U</i>)
CN	CN	CN	Connect (<i>Series X</i>)
CNG	CNG	CNG	Calling tone (<i>Series T</i>)
CNP	CIM	CLI	Connection-not-possible signal (<i>Series Q</i>)
CNS	CIN	CLN	Connection-not-successful signal (<i>Series Q</i>)
COA	APR	PCA	Changeover acknowledgement signal (<i>Series Q</i>)
COF	COF	COF	Confusion signal (<i>Series Q</i>)
CON	CON	CON	Cursor on (<i>Series T</i>)
COO	OPR	PCO	Changeover order signal (<i>Series Q</i>)
CORE	ERCG	ERCG	Corrected overall reference equivalent (<i>Series G</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
COT	CON	CCP	Continuity signal (<i>Series Q</i>)
COT	COT	COT	Class-of-traffic (<i>Series U</i>)
COTC			Class-of-traffic-check (<i>Series U</i>)
COV	SPR	COV	Changeover signal (<i>Series Q</i>)
CP	LLC	AC	Call proceeding (<i>Series I, Q</i>)
CPA	RAL	RED	Calling party answer (<i>Series Q</i>)
CPC	CTL	STA	Call processing control (<i>Series Q</i>)
CPM	MAB	DDL	Called party free message (<i>Series Q</i>)
CR	PC	DCO	Connection request (<i>Series Q, X</i>)
C/R	I/R	C/R	Command/response field bit (<i>Series I, Q</i>)
CR	PLL	DA	Call request (<i>Series I, Q</i>)
CR	CR	CR	Carriage return (<i>Series T, X</i>)
CR TPDU	UDPT PC	TPDU CR	Connection Request TPDU (<i>Series X</i>)
CRC	VRC	CRC	Cyclic redundancy check (<i>Series G</i>)
CRE	ERC	ERC	Corrected reference equivalent (<i>Series G, P</i>)
CREF	CRCH	RFC	Connection refused (<i>Series Q</i>)
CRG	TAS	TAX	Charging (<i>Series Q</i>)
CRI	RPL	CRE	Continuity-recheck incoming (<i>Series Q</i>)
CRM	RSV	RDG	Closed user group selection and validation response message (<i>Series Q</i>)
CRO	RPS	CRS	Continuity-recheck outgoing (<i>Series Q</i>)
CRP	CRP	CRP	Command repeat (<i>Series T</i>)
CRS	RIC	RAZ	Circuit reset (<i>Series Q</i>)
CS	ST	ST	Communication satellite (<i>Series G</i>)
CS	CS	CS	Clear screen (<i>Series T</i>)
CSA	CSA	CSA	Command session abort (<i>Series T</i>)
CSC	CSC	CSC	Control signalling code (CSC) (<i>Series R, U, X</i>)
CSCC	CSCC	CSCC	Command session change control (<i>Series T, X</i>)
CSE	CSE	CSE	Command session end (<i>Series T</i>)
CSE(r)	CSE(r)	CSE(r)	Command session suspend (<i>Series T</i>)
CSI	CSI	CSI	Called subscriber identification (<i>Series T</i>)
CSM	MSL	SA	Call supervision message (<i>Series Q</i>)
CSPDN	RPDCC	RPDCC	Circuit switched public data network (CSPDN) (<i>Series F, I, T, X</i>)
CSS	SCF	CLR	Connection-successful signal (<i>Series Q</i>)
CSS	CSS	CSS	Command session start (<i>Series T, X</i>)
CSS(r)	CSS(r)	CSS(r)	Command suspended session reactivate (<i>Series T</i>)
CSSN	NSEC	CSSN	Circuit state sequence number (<i>Series Q</i>)
CSTD	CSTD	CSTD	Command session typed data (<i>Series T</i>)
CSTW	CSTW	CSTW	Command session TWS (<i>Series T</i>)
CSUI	CSUI	CSUI	Command session user information (<i>Series T</i>)
CSVC	RSVG	SGVR	Closed user group selection and validation response (<i>Series Q</i>)
CSVR	PSVG	SGVD	Closed user group selection and validation request (<i>Series Q</i>)
CT	CT	CT	(International) transit centre (<i>Series G</i>)
CTE	EMC	EMV	Channel-translating equipment (<i>Series G</i>)
CTS	ITC	IT	Channel time slot (<i>Series G</i>)
CU	CU	CU	Commitment unit (<i>Series T</i>)
CUG	GCU	GFU	Closed user group (<i>Series F, I, Q, U, X</i>)
CVM	PSV	VGU	Closed user group validation check message (<i>Series Q</i>)
CVS	MPV	SGV	Closed user group selection and validation check request message (<i>Series Q</i>)
D	D	D	Disconnect (<i>Series I, Q</i>)
DA	AD	DA	Digital access (<i>Series M</i>)
D-A	D-A	N-A	Digital-analogue (<i>Series O</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
DA	AD	AFD	Demand assignment (<i>Series M, Q</i>)
DAEDR	DADR	DAD – R	Delimitation, alignment, error detection (reception) (<i>Series Q</i>)
DAEDT	DADT	DAD-E	Delimitation, alignment, error detection (transmitting) (<i>Series Q</i>)
DC1	DC1	DC1	Device control one (<i>Series T</i>)
DC2	DC2	DC2	Device control two (<i>Series T</i>)
DC3	DC3	DC3	Device control three (<i>Series T</i>)
DC4	DC4	DC4	Device control four (<i>Series T</i>)
DC	CD	DC	Disconnect confirm (<i>Series X</i>)
DC TPDU	UDPT CD	TPDU DC	Disconnect Confirm TPDU (<i>Series X</i>)
DCC	IPD	IPD	Data country codes (<i>Series F, X</i>)
DCE	ETCD	ETCD	Data circuit terminating equipment (<i>Series I, Q, S, T, V, X</i>)
DCN	DCN	DCN	Disconnect (<i>Series T</i>)
DCP	PCD	CCD	Data coordinating point (<i>Series M</i>)
DCR	DCR	DCR	Degradation category rating (<i>Series P</i>)
DCS	DCS	DCS	Digital command signal (<i>Series T, X</i>)
D-D	D-D	N-N	Digital-digital (<i>Series O</i>)
DDA	ZVD	ZVD	Defined display area (<i>Series T</i>)
DDI	MDE	SDPS	Direct-dialling-in (<i>Series E, I, Q</i>)
DEL	DEL	DEL	Delete (<i>Series T</i>)
DHS	DHS	DHS	Digital handshaking speed (<i>Series T</i>)
DIF	FID	DIF	Document interchange format (<i>Series X</i>)
DIS	DIS	DIS	Digital identification signal (<i>Series T</i>)
DISC	DISC	DISC	Disconnect (<i>Series I, Q, X</i>)
DIV	DIV	TNBT	Data-in – voice (<i>Series G</i>)
DL	ED	LD	Data link (<i>Series G</i>)
DLC	CED	CLO	Signalling-data-link-connection-order signal (<i>Series Q</i>)
DLCI	ICED	DLCI	Data link connection identifier (<i>Series I, Q</i>)
DLE	DLE	DLE	Data link escape (<i>Series T</i>)
DLF			Direct line filter (<i>Series G</i>)
DLM	MED	CL	Signalling-data-link-connection-order message (<i>Series Q</i>)
DLT	DLT	DLT	Down-loading termination procedure (<i>Series T</i>)
DM	MD	MN	Digital multiplexer (<i>Series G</i>)
DM	DM	DM	Disconnect mode (<i>Series I, Q</i>)
DMA	AMD	AMD	Deferred maintenance alarm (<i>Series M</i>)
DMOS	NMOD	NOMD	Degradation mean opinion score (<i>Series P</i>)
DN	NE	NR	Delivery notification (<i>Series U</i>)
DN	DN	DN	Disconnect (<i>Series X</i>)
DNI	DNI		Digital non-interpolated (<i>Series Q</i>)
DNIC	CIRD	CIRD	Data network identification code (<i>Series F, U, X</i>)
DOV	DOV	TNSV	Data-over-voice (<i>Series G</i>)
DP	ID	DP	Decadic pulsing (signalling) (<i>Series Q</i>)
DP	DP		Dot pattern (<i>Series T</i>)
DPC	CPD	CPD	Destination point code (<i>Series Q, X</i>)
DPCM	MICD	MICD	Differential pulse code modulation (<i>Series G, H</i>)
DPN	TDN	CNN	Digital path not provided signal (<i>Series Q</i>)
DR	PD	DR	Disconnect request (<i>Series X</i>)
DR TPDU	UDPT PD		Disconnect Request TPDU (<i>Series X</i>)
DRCS	JCDR	JCDR	Dynamically redefinable character set (<i>Series F, T</i>)
DRN	DRN	DRN	Document reference number (<i>Series T</i>)
DRS	SRD	SNR	Digital reference sequence (<i>Series G, Q</i>)
DRS	SLD	LD	Delayed release signal (<i>Series Q</i>)
DS	AD	DS	Document storage (<i>Series X</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
DSE	CCD	CCD	Data switching exchange (<i>Series D, X</i>)
DSI	IDP	CNP	Digital speech interpolation (<i>Series E, G, Q</i>)
DSP	DSP		Digital sound-programme (<i>Series G</i>)
DSP	DSP	DSP	Device stop (<i>Series T</i>)
DST	DST	DST	Device start (<i>Series T</i>)
DST-REF	REF-DST		Destination Reference (field) (<i>Series X</i>)
DT1	DT1	DT1	Data form 1 (<i>Series Q</i>)
DT2	DT2	DT2	Data form 2 (<i>Series Q</i>)
DT	DT	DT	Data (<i>Series X</i>)
DT	TD	DT	Data transfer (<i>Series X</i>)
DT TPDU	UDPT DT	TPDU DT	Data TPDU (<i>Series X</i>)
DTC	DTC	DTC	Digital transmit command (<i>Series T</i>)
DTE	ETD	ETTD	Data terminal equipment (<i>Series E, I, Q, S, V, X</i>)
DTF	FTD	FTD	Direct transfer filter (<i>Series G</i>)
DTMF			Dual tone multi-frequency (<i>Series G</i>)
DU	DU	DU	Delivery unit (<i>Series T</i>)
DUIB	DUIB	DUIB	Document user information block (<i>Series T</i>)
DUP	PUD	SSUD	Data user part (<i>Series Q, X</i>)
D-W			Durbin-Watson (<i>Series E</i>)
DW	DW	DW	Device wait (<i>Series T</i>)
EA	AA	ARX	Expedited data acknowledgement (<i>Series Q, X</i>)
EA	ED	EA	Address field extension bit (<i>Series I, Q</i>)
EA TPDU	UDPT AA	TPDU EA	Expedited Acknowledge TPDU (<i>Series X</i>)
EAM	MAR	EXR	Extended-answer-message indication (<i>Series Q</i>)
EARS	EARS	EARS	Electro-acoustic rating system (<i>Series P</i>)
ECA	AER	PUA	Emergency changeover acknowledgement signal (<i>Series Q</i>)
ECG	ECG	ECG	Electro-cardiogram (<i>Series V</i>)
ECM	MEP	PU	Emergency changeover message (<i>Series Q</i>)
ECO	PER	PUO	Emergency changeover order signal (<i>Series Q</i>)
ECRP	PRA	PRE	Earcap reference point (<i>Series P</i>)
ECT	TCE	TCE	Echo cancellation technique (<i>Series V</i>)
ED	DA	DEX	Expedited data (<i>Series Q, X</i>)
ED	DE	ED	Exception data (<i>Series X</i>)
ED TPDU	UDPT DA	TPDU ED	Expedited Data TPDU (<i>Series X</i>)
EDO			Equipment design objectives (<i>Series G</i>)
EFDS	% dSSE	% dSSE	Error free deciseconds (<i>Series X</i>)
EFS	SSE	SSE	Error free seconds (<i>Series G, M, X</i>)
EFSM	MEFA	EFSM	Extended finite-state machine (<i>Series Z</i>)
ELT	TTE	ELT	Emergency-load-transfer signal (<i>Series Q</i>)
EM	EM	EM	End of medium (<i>Series T</i>)
ENQ	ENQ	ENQ	Enquiry (<i>Series T</i>)
EOA	EOA	EOA	End of address (<i>Series F</i>)
EOC	CFC	CFG	«End of Cluster» code (<i>Series H</i>)
EOC	EOC	EOC	End-of-contents (<i>Series T, X</i>)
EOFB	FDBF	EOFB	End-of-facsimile block (<i>Series T</i>)
EOI	EOI	EOI	End of input (<i>Series F</i>)
EOL	EOL	EOL	End-of-line (<i>Series T</i>)
EOM	EOM	EOM	End of message (<i>Series F, T, U</i>)
EOP	EOP	EOP	End-of-procedure (<i>Series T</i>)
EOS	EOS		End-of-selection (<i>Series U</i>)
EOSR	EOSR	EOSR	End of status request signal (<i>Series U</i>)
EOT	EOT	EOT	End of transmission (<i>Series F, T</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
EOT	FMU	FIN de TSDU	End of TSDU mark (<i>Series X</i>)
ER	ER	ER	TPDU error (<i>Series X</i>)
ER	IE	ER	Exception report (<i>Series X</i>)
ER TPDU	UDPT ER	TPDU ER	Error TPDU (<i>Series X</i>)
ERP	PRO	PRO	Ear reference point (<i>Series P</i>)
ERR	ERR	ERR	Protocol data unit error (<i>Series Q</i>)
ESC	ESC	ESC	Escape (<i>Series T</i>)
ESTS	SPSE	SESE	Echo Suppressor Testing System (<i>Series O</i>)
ESU	USC	ESU	Exchange signalling unit (<i>Series Q</i>)
ET	TC	ET	Exchange termination (<i>Series I, Q</i>)
ET	TC	TC	Exchange Terminal (<i>Series Q</i>)
ETB	ETB	ETB	End of transmission block (<i>Series T</i>)
ETR	FDA	FAA	Easy-to-reach (<i>Series E</i>)
ETX	ETX	ETX	End of text (<i>Series T</i>)
EUM	IAL	EXT	Extended-unsuccessful-backward set-up information message indication (<i>Series Q</i>)
EX	DA	EX	Expedited data (<i>Series X</i>)
F	BAN	F	Flag (<i>Series Q</i>)
FAA	FAA	SUAC	Facility accepted (<i>Series Q</i>)
FAD	FAD	SUDS	Facility deactivated (<i>Series Q</i>)
FAI	INFA	SUIN	Facility information (<i>Series Q</i>)
FAM	MDA	AD	Forward-address message (<i>Series Q</i>)
FAR	PFA	SUDM	Forward request (<i>Series Q</i>)
FAS	SAT	VT	Frame alignment signal (<i>Series G</i>)
FAS	SAM	FAS	Multiframe alignment signal (<i>Series I</i>)
FAS	SAT	SVT	Frame alignment signal (<i>Series G, O</i>)
FAX 4	FAX 4	FAX 4	Group 4 facsimile service (<i>Series F</i>)
FCC	CCF		Flow control confirmation (<i>Series X</i>)
FCF	FCF	FCF	Facsimile control field (<i>Series T</i>)
FCM	MCF	CF	Signalling traffic flow control messages (<i>Series Q</i>)
FCS	SVT	FCS	Frame check sequence (<i>Series I, Q, T, X</i>)
FDM	MDF	MRF	Frequency division multiplex (<i>Series M, Q</i>)
FDT	TDF	FDT	Formal description technique (<i>Series X</i>)
FEC	FEC	CESR	Forward error correction (<i>Series M, X</i>)
FF	FF	FF	Form feed (<i>Series T, X</i>)
FIB	BID	BIA	Forward indicator bit (<i>Series Q</i>)
FIBR	BIDR	BIA-R	FIB received (<i>Series Q</i>)
FIBT	BIDT	BIA-E	FIB transmitted (<i>Series Q</i>)
FIBX	BIDE	BIA-A	FIB expected (<i>Series Q</i>)
FIF	FIF	FIF	Facsimile information field (<i>Series T, X</i>)
FIFO	PEPS	PAPS	First in – first out (<i>Series X</i>)
FISU	USR	TSR	Fill-in signal unit (<i>Series Q</i>)
FITE	ETAD	ETAV	Forward interworking telephone events (<i>Series Q</i>)
FM			Frequency-modulation (<i>Series H</i>)
FMEA	FMEA	AMDE	Fault modes and effect analysis (<i>Series G</i>)
FMECA	FMECA	AMDEC	Fault modes, effects and criticality analysis (<i>Series G</i>)
FMVFT	TAMF	THMF	Frequency-modulated voice-frequency telegraph (<i>Series H, R</i>)
FN	FN	FN	Finish (<i>Series X</i>)
FOC	FDC	FC	Factor of cooperation (<i>Series T</i>)
FOT	INT	IOP	Forward-transfer signal (<i>Series Q</i>)
FRJ	RFA	SURF	Facility reject (<i>Series Q</i>)
FRMR	FRMR	FRMR	Frame reject (<i>Series X</i>)
FRS	SFR	SRF	Fundamental reference system (<i>Series P</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
FRXD		FRXD	Fully automatic reperforator transmitter distributor (<i>Series U</i>)
FSK	MDF	MDF	Frequency shift keying (<i>Series R</i>)
FSM	MEL	EA	Forward set-up message (<i>Series Q</i>)
FSM	MEF	FSM	Finite-state machine (<i>Series Z</i>)
FSN	NSD	NSA	Forward sequence number (<i>Series Q</i>)
FSNC	NSDA	NSA-C	Forward sequence number of last message signal unit accepted by remote level 2 (<i>Series Q</i>)
FSNF	NSDP	NSA-P	FSN of the oldest MSU in the RTB (<i>Series Q</i>)
FSNL	NSDU	NSA-D	FSN of the last MSU in the RTB (<i>Series Q</i>)
FSNR	NSDR	NSA-R	FSN received (<i>Series Q</i>)
FSNT	NSDT	NSA-E	FSN of the last MSU transmitted (<i>Series Q</i>)
FSNX	NSDE	NSA-A	FSN expected (<i>Series Q</i>)
FST	CCC	CDT	Field start code (<i>Series H</i>)
FTA	FTA		Fault tree analysis (<i>Series G</i>)
FTT	FTT	FTT	Failure to train (<i>Series T</i>)
FWHM		LTMH	Full width half maximum (<i>Series G</i>)
G4	G4		Group 4 (<i>Series T</i>)
G3	G3	G3	Group 3 (<i>Series X</i>)
G3 Fax	Fax G3	Fax G3	Group 3 facsimile type (<i>Series X</i>)
GC	GC	GC	Group command (<i>Series T</i>)
GDF	RP	RP	Group distribution frame (<i>Series G</i>)
GFI	IGF	IGF	General format identifier (<i>Series X</i>)
GI		GI	Group identification (<i>Series T</i>)
GME	EMG	EMG	Group-modulating equipment (<i>Series G</i>)
GMT	GMT	TMG	Greenwich mean time (<i>Series D, E, F</i>)
GOS	GDS		Grade of service (<i>Series E</i>)
GRA	ARG	RZA	Circuit group reset-acknowledgement message (<i>Series Q</i>)
GRM	MSG	SG	Circuit group supervision messages (<i>Series Q</i>)
GRQ	MPG	DEG	General request message (<i>Series Q</i>)
GRS	MRG	RZG	Circuit group reset message (<i>Series Q</i>)
GSM	MIE	ING	General forward set-up information message (<i>Series Q</i>)
GSM	GSM	GSM	Graphic size modification (<i>Series T</i>)
GSTN	RTGC	RTPG	General Switched Telephone Networks (<i>Series V</i>)
GT	DT	GT	Give tokens (<i>Series X</i>)
GTA	ADT	GTA	Give tokens ack (<i>Series X</i>)
GTC	CDT	GTC	Give tokens confirm (<i>Series X</i>)
GTE	EMP	EMP	Group-translating equipment (<i>Series G</i>)
GTEI	IETG	ITPEG	Group terminal endpoint identifier (<i>Series I, Q</i>)
H0	E0	H0	Heading code (<i>Series Q</i>)
H1	E1	H1	Heading code (<i>Series Q</i>)
HBA	ABE	BHA	Hardware failure oriented group blocking-acknowledgement message (<i>Series Q</i>)
HBUR	RBDF	BDFR	Hardware failure oriented circuit group blocking and unblocking receipt (<i>Series Q</i>)
HBUS	EBDF	BDFE	Hardware failure oriented circuit group blocking and unblocking sending (<i>Series Q</i>)
HDB3	HDB3	HDB3	HDB3 (high density bipolar 3 code) (<i>Series G, O</i>)
HDLC	HDLC	HDLC	High-level data link control (<i>Series I, Q, T, V, X</i>)
HDTM	MTSD	MTSD	Half-duplex transmission module (<i>Series T</i>)
HDX			Half-duplex (<i>Series X</i>)
HF			High frequency (<i>Series K</i>)
HGB	BGE	BLH	Hardware failure oriented group blocking message (<i>Series Q</i>)
HGU	DGE	DBH	Hardware failure oriented group unblocking message (<i>Series Q</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
HL	HL	DV	Half-life (<i>Series G</i>)
HLF	FCS	HLF	High layer functions (<i>Series I</i>)
HLL	AMB	ATS	Half-loop loss (<i>Series G</i>)
HMCg	HCGS	OEC	Signalling link congestion (<i>Series Q</i>)
HMDc	HDCM	ODC	Message discrimination (<i>Series Q</i>)
HMDT	HDTM	ODT	Message distribution (<i>Series Q</i>)
HMRT	HENM	OAC	Message routing (<i>Series Q</i>)
HRC	CFR	CFR	Hypothetical reference circuit (<i>Series G, J</i>)
HRDL	EDFR	LNFR	Hypothetical reference digital link (<i>Series G</i>)
HRDP	TDFR		Hypothetical reference digital path (<i>Series G</i>)
HRDS	SDFR	SNFR	Hypothetical reference digital section (<i>Series G</i>)
HRX	XFR	CFR	Hypothetical reference connection (<i>Series G</i>)
HRX	CFR	CFR	Hypothetical reference connection (<i>Series G</i>)
HSD	HSD	HSD	Honestly significant difference (<i>Series P</i>)
HSRC	CFRS	CFRS	Hypothetical signalling reference connection (<i>Series Q</i>)
HT	HT	HT	Horizontal tabulation (<i>Series T, X</i>)
HTR	DDA	DAA	Hard-to-reach (<i>Series E, Q</i>)
HUA	ADE	DHA	Hardware failure oriented group unblocking-acknowledgement message (<i>Series Q</i>)
I	I	I	Information (<i>Series I, Q, X</i>)
IA5	AI N.º 5	AI n° 5	International alphabet No. 5 (<i>Series I, Q, R, T, V, X</i>)
IA	AI	IA	International alphabet (<i>Series X</i>)
IAC	CAI	CAI	Initial alignment control (<i>Series Q</i>)
IACK	ACI	IACK	Service acknowledgement signal (<i>Series U</i>)
IAEA	OIEA	AIEA	International Atomic Energy Agency (<i>Series K</i>)
IAI	MIA	MIS	Initial address message with additional information (<i>Series Q</i>)
IAM	MID	MIA	Initial address message (<i>Series E, Q</i>)
IC	LLEN	AE	Incoming call (<i>Series I, Q</i>)
ICC	CIL	CTE	Incoming trunk circuit (<i>Series Q</i>)
ICN	NGI	NGI	International CUG Number (<i>Series X</i>)
ICS	ICS	ICS	Identification of character set (<i>Series T</i>)
ID	ID	ID	Identity (<i>Series I, Q, X</i>)
IDD			International direct dialling (<i>Series E</i>)
ID/id	ID/id	ID/id	Identification (<i>Series I, Q</i>)
IDN	RDI	RNI	Integrated digital networks (<i>Series G, H, Q</i>)
IDSE	CICD	CICD	International data switching exchanges (<i>Series X</i>)
IEC	CEI	CEI	International Electrotechnical Commission (<i>Series K</i>)
IEEE	IEEE	IEEE	Institute of electrical and electronics engineers (<i>Series P</i>)
IEV	VEI	VEI	International Electrotechnical Vocabulary (<i>Series P, R, S</i>)
IGS	IGS	IGS	Identify graphic subrepertoire (<i>Series F, X</i>)
ILIL	AILE	APLL	Input longitudinal interference loss (<i>Series G, O</i>)
IM	MEU	IM	Inter-telex SFU messages (<i>Series U</i>)
IM-UAPDU	USPAU-MI	UAPDU IM	IP-message user agent protocol data unit (<i>Series X</i>)
IMA	IMA	IMA	Input message acknowledgement (<i>Series F, U</i>)
IMC	CMI	CMI	International maintenance centre (<i>Series E</i>)
IMDTC	CITDM	CTIDM	International Multiple Destination Television Connection (<i>Series N</i>)
IMF	FMI	FMI	International monetary fund (<i>Series D</i>)
IMSI	IEMI	IISM	International mobile station identity (<i>Series E, Q</i>)
INF	INF	INF	Information (<i>Series Q</i>)
INIT	INIC	INIT	Initiate (<i>Series I, Q</i>)
INMARSAT	INMARSAT	INMARSAT	International maritime satellite organization (<i>Series F, X</i>)
INMC			International network management centre (<i>Series E</i>)
INR	PIN	IND	Information request (<i>Series Q</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
I/O	E/S	E/S	Input/Output (<i>Series X, Z</i>)
IOC	IDC	MCD	Index of cooperation (<i>Series T</i>)
IP	IP	IP	ISDN access port (<i>Series I, X</i>)
IP	PU	BI	ISDN interworking unit port (<i>Series I, Q</i>)
IP	IP	IP	Interpersonal (<i>Series X</i>)
IPBX	PBXI		International private branch exchange (<i>Series G</i>)
IPDN	RPDI	RPID	International public data network (<i>Series X</i>)
IPM	MIP	IPM	Interpersonal messaging (<i>Series X</i>)
IPMS	SMIP	IPMS	Interpersonal messaging system (<i>Series X</i>)
IPP	PTI	PPI	International phototelegraph position (<i>Series E</i>)
IPSS	SICP	SICP	International packet switching service (<i>Series M</i>)
IRQ	PI	IRQ	Interworking service request identifier (<i>Series U</i>)
IRS	SIR	SRI	Intermediate reference system (<i>Series P</i>)
IRV	VIR		International reference version (<i>Series T</i>)
IS1 (US)	IS1 (US)	IS1 (US)	Information separator one (Unit separator) (<i>Series T</i>)
IS2 (RS)	IS2 (RS)	IS2 (RS)	Information separator two (Record separator) (<i>Series T</i>)
IS3 (GS)	IS3 (GS)	IS3 (GS)	Information separator three (Group separator) (<i>Series T</i>)
IS4 (FS)	IS4 (FS)	IS4 (FS)	Information separator four (File separator) (<i>Series T</i>)
ISC	CCI	CCI	International switching centre (<i>Series E, G, M, Q</i>)
ISCC	CCSI	CCSI	International service coordination centre (<i>Series M</i>)
ISDN	RDSI	RNIS	Integrated services digital network (<i>Series E, F, G, H, I, Q, T, X</i>)
ISDN UP	PURDSI	SSU RNIS	Integrated services digital network user part (<i>Series Q</i>)
ISMC	CIMC	CIMC	International switching maintenance centre (<i>Series M</i>)
ISO	ISO	ISO	International organization for standardization (<i>Series I, Q, V, X</i>)
ISP	PSI	PSI	International signalling point (<i>Series Q</i>)
ISP	ISP	ISP	Interactive session protocol (<i>Series T</i>)
ISPC	CRI	CRI	International sound programme centre (<i>Series D, J, M, N</i>)
ISPC	CPSI	CPSI	International signalling point code (<i>Series Q</i>)
ISTC	CICP	CCEI	International switching and testing centre (<i>Series R</i>)
ISU	UIS	ISU	Initial signal unit (<i>Series E, Q</i>)
ISU	USI	ISU	Instrument signalling unit (<i>Series Q</i>)
IT	PI	TIN	Inactivity test (<i>Series Q</i>)
ITA1	ATI N.º 1	ATI n° 1	International telegraph alphabet No. 1 (<i>Series R</i>)
ITA2	ATI N.º 2	ATI n° 2	International telegraph alphabet No. 2 (<i>Series F, R, S, T, V, X</i>)
ITA3	ATI N.º 3	ATI n° 3	International telegraph alphabet No. 3 (<i>Series R</i>)
ITA4	ATI N.º 4	ATI n° 4	International telegraph alphabet No. 4 (<i>Series R</i>)
ITA	ATI	ITA	International telegraph alphabet (<i>Series X</i>)
ITC	CTI	CTI	International transit centre (<i>Series G</i>)
ITC	CIT	CTI	International television centre (<i>Series M, N</i>)
ITD	ITD	ITD	Input transaction accepted for delivery (<i>Series F, U</i>)
ITMC	CIMT	CIMT	International transmission maintenance centre (<i>Series M</i>)
ITPC	CIT	CTI	International television programme centre (<i>Series D</i>)
ITS			Insertion test signals (<i>Series N</i>)
IU	UI	UI	Interworking unit (<i>Series E, I, V, X</i>)
IU	IU	IU	Interaction unit (<i>Series T</i>)
IWF	FIF	IWF	Interworking functions (<i>Series I</i>)
IWU	UIF	UIF	Interworking unit (<i>Series E, I, X</i>)
JCB	BCJ	BIJ	Justification control bit (<i>Series G</i>)
JLR	ISEN	ESJ	Junction loudness rating (<i>Series G, P</i>)
KUWE	LBSV	KUWE	Lower bound on upper window edge held by remote transport entity (<i>Series X</i>)
L1	N1	N1	Level 1 (<i>Series Q</i>)
L2	N2	N2	Level 2 (<i>Series Q</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
L3	N3	N3	Level 3 (<i>Series Q</i>)
L4	N4	N4	Level 4 (<i>Series Q</i>)
L _E	L _E	L _E	Earphone coupling loss (<i>Series P</i>)
LAN	RAL	RLE	Local area network (<i>Series I</i>)
LAP	LAP	LAP	Link access procedures (<i>Series X</i>)
LAPD	LAPD	LAPD	Link access procedure on the D-channel (<i>Series I, Q</i>)
LCL	ACL	ACL	Longitudinal conversion loss (<i>Series G, I, K, O, Q</i>)
LCS	GI	LCS	Line conditioning signals (<i>Series T</i>)
LCTL	ATCL	ATCL	Longitudinal conversion transfer loss (<i>Series G, K, O</i>)
LDE	LDE	LDE	Length exceeded indication (<i>Series U</i>)
LE	AEPE	LE	Listener echo loss (<i>Series G</i>)
LE	CL	LE	Local exchange (<i>Series G</i>)
LED	LED	DEL	Light emitting diode (<i>Series G</i>)
LF	LF	LF	Line feed (<i>Series T, X</i>)
LFA	PAT	PVT	Loss of frame alignment (<i>Series G</i>)
LFU	SDEF	FIC	Link forced uninhibit signal (<i>Series Q</i>)
LI	IL	IL	Length indicator (<i>Series Q, T, X</i>)
LIA	SRIE	INA	Link inhibit acknowledgement signal (<i>Series Q</i>)
LID	SIED	RIN	Link inhibited denied signal (<i>Series Q</i>)
LIFO	LIFO	DAPS	Last in – first out (<i>Series X</i>)
LIL	PSI	AIS	Loudness insertion loss (<i>Series G, P</i>)
LIL	AIL	AIL	Longitudinal impedance (<i>Series G</i>)
LIN	SIE	INO	Link inhibit signal (<i>Series Q</i>)
LLF	FCI	LLF	Low layer functions (<i>Series I</i>)
LLSC	CCE	GCSF	Link set control (<i>Series Q</i>)
LOI	IOE	IOE	Listening opinion index (<i>Series P</i>)
LOL	NSL	NSL	Longitudinal output level (<i>Series G</i>)
LOS	LFS	LHS	Line-out-of-service signal (<i>Series Q</i>)
LR	IS	ES	Loudness rating (<i>Series G, P</i>)
LRGP	PAGIS	PGES	Loudness rating guard-ring position (<i>Series P</i>)
LS0	LS0	LS0	Locking shift 0 (<i>Series T</i>)
LS1	LS1	LS1	Locking shift 1 (<i>Series T</i>)
LS2	LS2	LS2	Locking shift 2 (<i>Series T</i>)
LS3	LS3	LS3	Locking shift 3 (<i>Series T</i>)
LSAC	CAE	GCSA	Signalling link activity control (<i>Series Q</i>)
LSB	LSB	LSB	Least significant bit (<i>Series R, X</i>)
LSC	CSL	LSC	Line signalling channel (<i>Series Q</i>)
LSC	CEE	SET	Link state control (<i>Series Q</i>)
LSDA	AED	GCAL	Signalling data link allocation (<i>Series Q</i>)
LSDS	SED	GCLR	Stand-by data link selection (<i>Series Q</i>)
LSLA	AES	GCAC	Signalling link activation (<i>Series Q</i>)
LSLD	DES	GCDA	Signalling link deactivation (<i>Series Q</i>)
LSLR	RES	GCRE	Signalling link restoration (<i>Series Q</i>)
LS1R	LS1R	LS1R	Locking shift 1 right (<i>Series T</i>)
LS2R	LS2R	LS2R	Locking shift 2 right (<i>Series T</i>)
LS3R	LS3R	LSR3	Locking shift 3 right (<i>Series T</i>)
LSSU	UEE	TSE	Link status signal units (<i>Series Q</i>)
LST	CCL	CDL	Line Start code (<i>Series H</i>)
LSTA	ATS	GCAT	Signalling terminal allocation (<i>Series Q</i>)
LSU	UAS	LSU	Lone signal unit (<i>Series Q</i>)
LTA	ATC	LTA	Load-transfer-acknowledgement signal (<i>Series Q</i>)
LTC			Last trunk capacity (<i>Series E</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
LTE	ETL	ETL	Line terminating equipment (<i>Series G</i>)
LTL	ATL	ATL	Longitudinal transfer loss (<i>Series G</i>)
LTR	STC	LTR	Load-transfer signal (<i>Series Q</i>)
LTS	STL	STL	Local telephone system (<i>Series P</i>)
LUA	SRDE	FIA	Link uninhibit acknowledgement signal (<i>Series Q</i>)
LUN	SDE	FIO	Link uninhibit signal (<i>Series Q</i>)
LWE	BIV	LWE	Lower window edge (<i>Series X</i>)
M	M	M	Modifier function bit (<i>Series I, Q</i>)
M	O	M	Mandatory (<i>Series X</i>)
MAA	ASMA	MAA	Major sync point (<i>Series X</i>)
MAD	MAD		Mean administrative delay (<i>Series G</i>)
MADT	TMIA	IMC	Mean accumulated downtime (<i>Series G, Q</i>)
MAIDT	TMIIA	IIMC	Mean accumulated intrinsic downtime (<i>Series Q</i>)
MAP	PSMA	MAP	Major sync point (<i>Series X</i>)
MART	MART		Mean active repair time (<i>Series G</i>)
MBA	ABM	BMA	Maintenance oriented group blocking-acknowledgement message (<i>Series Q</i>)
MBS	SMB	MBS	Multi-block synchronization signal unit (<i>Series Q</i>)
MBUR	RBDM	BDMR	Maintenance oriented circuit group blocking and unblocking receipt (<i>Series Q</i>)
MBUS	EBDM	BDME	Maintenance oriented circuit group blocking and unblocking sending (<i>Series Q</i>)
MC	CM	CM	Maritime centre (<i>Series G</i>)
MCA	APMR	MCA	Manual-changeover-acknowledgement signal (<i>Series Q</i>)
MCC	IPM	IPSM	Mobile country code (<i>Series E, Q</i>)
MCF	MCF	MCF	Message confirmation (<i>Series T</i>)
MCI	ILM	IAM	Malicious call identification (<i>Series Q</i>)
MCO	PMR	MCO	Manual-changeover signal (<i>Series Q</i>)
MCS	ECM	ETEM	Multiple congestion states (<i>Series Q</i>)
MD	DG	MD	Management domain (<i>Series X</i>)
MDF			Main distribution frame (<i>Series K</i>)
MDT	TMI	TMI	Mean down time (<i>Series G</i>)
ME	EM	EM	Maintenance entity (<i>Series G, M</i>)
MEA	CEM	AEM	Maintenance entity assembly (<i>Series M</i>)
MF			Medium frequency (<i>Series K</i>)
MF	MF	MF	Multi-frequency (<i>Series O, Q</i>)
MFC	CMF	MFC	Multi-frequency code (signalling) (<i>Series E, Q</i>)
MFPB	MFPT	MFPB	Multi-frequency pushbutton (<i>Series E, Q</i>)
MGB	BGM	BLM	Maintenance oriented group blocking message (<i>Series Q</i>)
MGMT	SGE	GES	Management system (<i>Series Q</i>)
MGU	DGM	DBM	Maintenance oriented group unblocking message (<i>Series Q</i>)
MH	TM	MH	Message handling (<i>Series X</i>)
MHS	STM	STM	Message handling system (<i>Series F, X</i>)
MI	IM	IM	Maintenance information (<i>Series M</i>)
MIA	ASME	MIA	Minor sync ack (<i>Series X</i>)
MID	MID	MID	Maritime identification digit (<i>Series E, F, Q, U</i>)
MIM	MIG	IG	Management inhibit message (<i>Series Q</i>)
MIP	PSME	MIP	Minor sync point (<i>Series X</i>)
MIR	MIR	MIR	Magnification/reduction (<i>Series T</i>)
ML	ML	DMV	Mean-life (<i>Series G</i>)
MLC	MLC	CML	Multilink control field (<i>Series X</i>)
MLD	MLD		Mean logistic delay (<i>Series G</i>)
MLP	MLP	PML	Multilink procedure (<i>Series X</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
MMH	MMH		Maintenance man-hours (<i>Series G</i>)
MLL	LHM	LHM	Man-machine language (<i>Series E, M, Q, Z</i>)
MMM	MMGM	MMM	Multiunit network management and maintenance message (<i>Series Q</i>)
MNC	IRM	CRM	Mobile network code (<i>Series E, Q</i>)
MNRU	ARRM	ARBM	Modulated noise reference unit (<i>Series P</i>)
MOS	NMO	NOM	Mean opinion score (<i>Series P</i>)
MPDU	UDPM	MPDU	Message protocol data unit (<i>Series X</i>)
MPF	MPF	FCM	Multichannel peak factor (<i>Series G</i>)
MPR	PRM	INU	Misdialled trunk prefix (<i>Series Q</i>)
MPS	MPS	MPS	Multipage signal (<i>Series T</i>)
MRF	SRM	MRF	Message-refusal signal (<i>Series Q</i>)
MRP	PRB	PRB	Mouth reference point (<i>Series P</i>)
MRT	MRT		Mean repair time (<i>Series G</i>)
MS	SM	SM	Measurement signal (<i>Series J</i>)
MSB	MSB	MSB	Most significant bit (<i>Series X</i>)
MSC	CCM	CCM	Mobile-service switching centre (<i>Series Q, U</i>)
MSDSE	CCDMS	CCDSM	Maritime satellite data switching exchange (<i>Series X</i>)
MSE	SEM	SEM	Maintenance sub-entities (<i>Series M</i>)
MSIN	NIEM	NISM	Mobile station identification number (<i>Series E, Q</i>)
MSSC	CCSMS	CCMS	Maritime satellite switching centre (<i>Series Q, U</i>)
MSU	USM	TSM	Message signal unit (<i>Series Q</i>)
MT	TM	TM	Maritime terminal (<i>Series G</i>)
MT	TRM	MT	Message transfer (<i>Series X</i>)
MTA	ATM	MTA	Message transfer agent (<i>Series X</i>)
MTAE	EATM	MTAE	Message transfer agent entity (<i>Series X</i>)
MTBF	MTBF	MTBF	Mean time between failures (<i>Series G, M, Q</i>)
MTE	EMGT	MTE	Mastergroup translating equipment (<i>Series G</i>)
MTL	CTM	MTL	Message transfer layer (<i>Series X</i>)
MTP	PTM	SSTM	Message transfer part (<i>Series Q, X</i>)
MTRS	MTRS	TMRS	Mean time to restore service (<i>Series M</i>)
MTS	STRM	MTS	Message transfer system (<i>Series X</i>)
MTT	TMP	TEM	Maritime test terminal (<i>Series M</i>)
MTTF	MTTF	TFMD	Mean time to failure (<i>Series G, M</i>)
MTTFF	MTTFF		Mean time to first failure (<i>Series G</i>)
MTTR	MTTR	MTTR	Mean time to repair (<i>Series G, Q</i>)
MU	MU		Multiple destination unidirectional (<i>Series M</i>)
MUA	ADM	DMA	Maintenance oriented group unblocking-acknowledgement message (<i>Series Q</i>)
MUM	MMU	MUM	Multi-unit message (<i>Series Q</i>)
MUT	TMD	TMD	Mean up time (<i>Series G</i>)
MXU	UTM	UTM	Message transfer unit (<i>Series U</i>)
NA	AN	NA	Numerical aperture (<i>Series G</i>)
NACK	RN	ACN	Negative acknowledgement (<i>Series Q</i>)
NAE	ADR	NAE	Network addressing extension (<i>Series X</i>)
NAK	NAK	NAK	Negative acknowledge (<i>Series T</i>)
NBR	NBR		Number (<i>Series F</i>)
NC	CR		Noise criterion (<i>Series P</i>)
NC	CR	CR	Network connection (<i>Series T, X</i>)
NCCD	RCLR	NCCD	Network-dependent call connection delay (<i>Series X</i>)
NCCID	RILLR	NCCID	Network-dependent call clear indication delay (<i>Series X</i>)
NCID	RILR	NCID	Network clear indication delay (<i>Series X</i>)
NCS	ECR	SCR	Network coordination station (<i>Series M, Q, U</i>)
NDC	IND	IND	National destination code (<i>Series E, I</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
NDN	NNE	MNR	Non-delivery notification (<i>Series F, U, X</i>)
NDSE	CNCD	CNCD	National data switching exchange (<i>Series X</i>)
NF	NF	NF	Not finished (<i>Series X</i>)
NIC	MCIC	NIC	Nearly-instantaneous compandored modulation (<i>Series P</i>)
NIC	CIR	CIR	Network Identification Code (<i>Series U</i>)
NL			Network Layer (<i>Series X</i>)
NL	NL	NL	New line (<i>Series X</i>)
NMM	SGM	NMM	Network-management and maintenance signal (<i>Series Q</i>)
NMS	SGR	SGR	Network management signal (<i>Series E, Q</i>)
NMSI	INEM	INSM	National mobile station identity (<i>Series E, Q</i>)
NMSI	IEMN	INSM	National mobile station identity (<i>Series Q</i>)
NN	NN	NN	National number (<i>Series X</i>)
NNC	CRN	ERN	National-network-congestion signal (<i>Series Q</i>)
NNM	MNN	NN	Node-to-node message (<i>Series Q</i>)
NOK	I	NOK	Not OK (<i>Series Q</i>)
NOSFER	NOSFER	NOSFER	New fundamental system for the determination of reference equivalents (nouveau système fondamental pour la détermination des équivalents de référence) (<i>Series P</i>)
NPAI	IDPR	NPAI	Network protocol address information (<i>Series X</i>)
NPCI	ICPR	ICPR	Network protocol control information (<i>Series Q</i>)
NPCID	RILPR	NPCID	Network portion clear indication delay (<i>Series X</i>)
NPO			Network performance objectives (<i>Series G</i>)
NPR	RPR	RPB	Noise power ratio (<i>Series G</i>)
NPTD	RTPR	NPTD	Network-dependent data packet transfer delay (<i>Series X</i>)
NR	NR		Non-reactive (<i>Series G</i>)
NR	IR		Noise rating (<i>Series P</i>)
NS	SR	SR	Network service (<i>Series T, X</i>)
NSAP	PASR	NSAP	Network service access point (<i>Series X</i>)
NSC	NSC	NSC	Non-standard facilities command (<i>Series T</i>)
NSDU	UDSR	UDSR	Network service data units (<i>Series Q, X</i>)
NSF	NSF	NSF	Non-standard facilities (<i>Series T</i>)
N(S)N	NN(S)	NN(S)	National (significant) number (<i>Series E, I</i>)
NSP	PSN	PSN	National signalling point (<i>Series Q</i>)
NSPC	CRN	CRN	National sound-programme centre (<i>Series N</i>)
NSS	NSS	NSS	Non-standard facilities set-up (<i>Series T</i>)
NSSDU	UDSSN	NSSDU	Normal data session service data unit (<i>Series X</i>)
NT	TR	NT	Network termination (<i>Series I</i>)
NTC	CNT	CTN	National television centre (<i>Series N</i>)
NTN	NTR	NTR	Network terminal number (<i>Series X</i>)
NUI	NUI	NUI	Network user identification (<i>Series F, X</i>)
NUL	NUL	NUL	Null (<i>Series T</i>)
OAM	EAM	OAM	Operational, administrative and maintenance (<i>Series I</i>)
OCC	CCO	CCO	Operations control centre (<i>Series M</i>)
ODA	ODA	ODA	On-line delivery acknowledgement (<i>Series F</i>)
OGC	CIS	CTS	Outgoing trunk circuit (<i>Series Q</i>)
OLL	ABA	ABO	Open-loop loss (<i>Series G</i>)
OLR	ISG	EGS	Overall loudness rating (<i>Series P</i>)
OMAP	PAOM	SSAEM	Operations and maintenance application part (<i>Series Q</i>)
OMC	COM	CEMGR	Operations, maintenance and network management centre (<i>Series Q</i>)
OMC	COM	CEM	Operation and maintenance centre (<i>Series E, Z</i>)
OPC	CPO	CPO	Originating point code (<i>Series Q, X</i>)
OPDU	UDPO	OPDU	Operation protocol data unit (<i>Series X</i>)
O/R	O/D	O/R	Originator/Recipient (<i>Series X</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
OSB	ASSS	AESS	Output signal balance loss (<i>Series G</i>)
OSB	SSS	ESS	Output signal balance (<i>Series O</i>)
OSI	ISA	OSI	Open systems intrconnection (<i>Series I, Q, T, X</i>)
OSIE	EISA		Open systems interconnection environment (<i>Series X</i>)
OTS	STO		Operator telephone system (<i>Series P</i>)
OVE	EQG	EQG	Overall R25 equivalent (<i>Series P</i>)
OVE _{LR}	EQG _{IS}	EGS _{ES}	Overall loudness rating (<i>Series G</i>)
OWC		OWC	One-way communication (<i>Series F, T</i>)
P1	P1	P1	Message transfer protocol (<i>Series X</i>)
P2	P2	P2	Interpersonal messaging protocol (<i>Series X</i>)
P3	P3	P3	Submission and delivery protocol (<i>Series X</i>)
P5	P5	P5	Teletex access protocol (<i>Series X</i>)
P _c	P _c	P _c	Family of content protocols (<i>Series X</i>)
P _t	P _t	P _t	Family of interactive terminal to system protocols (<i>Series X</i>)
PA	AP	PA	Presentation architecture (<i>Series T</i>)
PABX	CAP	PABX	Private automatic branch exchange (<i>Series I, M, Q</i>)
PAD	EDD	ADP	Packet assembly/disassembly facility (<i>Series F, I, Q, X</i>)
PAM	MDP	FAP	Pass along (<i>Series Q</i>)
PAU	PAU	PAU	Pause (<i>Series Q</i>)
PBC	CRP		Programme booking centre (<i>Series D, M, N</i>)
PBX	PBX	PBX	Private branch exchange (<i>Series G, I, Q</i>)
PC	CP	CP	Primary centre (<i>Series G</i>)
PCD	PCD	PCD	Presentation capabilities descriptor (<i>Series T</i>)
PCI	ICP	ICP	Protocol control indicator (<i>Series Q</i>)
PCI	ICP	PCI	Protocol-control-information (<i>Series X</i>)
PCM	MIC	MIC	Pulse code modulation (<i>Series G, H, M, O, P, Q, R</i>)
PCR	RCP	RCP	Preventive cyclic retransmission (<i>Series Q</i>)
p.d.f.	f.d.p.	f.d.p.	Probability density function (<i>Series G</i>)
PDN	RPD	RPD	Public data network (<i>Series E, F, I, T, V, X</i>)
PDN	PDN	PDN	Positive Delivery Notification (<i>Series F</i>)
PDU	PDU	PDU	Protocol data unit (<i>Series T, X</i>)
PE	EP	PE	Protocol elements (<i>Series T</i>)
P/F	P/F	P/F	Poll/final bit (<i>Series I, Q, X</i>)
PFS	PFS	PFS	Page format selection (<i>Series X</i>)
PGI	IGP	IGP	Parameter group identifier (<i>Series T, X</i>)
PH	TP	PH	Packet handling (<i>Series I</i>)
PH	TP	TP	Packet handler (<i>Series I, Q</i>)
PI	IP	PI	Parameter Identifier (<i>Series X</i>)
PIN	PIN	PIN	Procedure interrupt negative (<i>Series T</i>)
PIP	PIP	PIP	Procedural interrupt positive (<i>Series T</i>)
PIS	PIS	PIS	Procedure interrupt signal (<i>Series T</i>)
PLD	PLD	PLD	Partial line down (<i>Series T, X</i>)
PLMN	RMTP	RMTP	Public land mobile network (<i>Series E, Q</i>)
PLU	PLU	PLU	Partial line up (<i>Series T, X</i>)
PMA	AMI	AMI	Prompt maintenance alarm (<i>Series M</i>)
PMS	SMP	SMP	Permitted maximum signal (<i>Series J</i>)
PNIC	CIRPD	CIRP	Private data network identification code (<i>Series X</i>)
POC	CIP	SIP	Procesor outage control (<i>Series Q</i>)
PPCI	ICPP	PPCI	Presentation protocol control information (<i>Series T</i>)
PPDU	UDPP	PPDU	Presentation protocol data unit (<i>Series T</i>)
ppm	ppm		Parts per million (<i>Series G, H</i>)
PPM		PPM	Peak programme meter (<i>Series J</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
PR	PR	PR	Prepare (<i>Series X</i>)
PRBS	SBSA	SBPA	Pseudo-random binary sequence (<i>Series G</i>)
PRI-EOM	PRI-EOM	PRI-EOM	Procedure interrupt – End-of-message (<i>Series T</i>)
PRI-EOP	PRI-EOP	PRI-EOP	Procedure interrupt – End-of-procedure (<i>Series T</i>)
PRI-MPS	PRI-MPS	PRI-MPS	Procedure interrupt – Multipage signal (<i>Series T</i>)
PRMD	DGPR	PRMD	Private management domain (<i>Series X</i>)
PRS	SRP	SRP	Planning reference system (<i>Series G</i>)
PS	ET	SP	Phototelegraph station (<i>Series M, T</i>)
PSDTN	RPDCP	RPDCP	Packet switched data transmission network (<i>Series I</i>)
PSDTS	STDPC		Packet switched data transmission services (<i>Series I, X</i>)
PSDU	UDSP	PSDU	Presentation service data unit (<i>Series T</i>)
PSPDN	RPDCP	RPDCP	Packet switched public data network (<i>Series F, I, Q, T, V, X</i>)
PSTN	RTPC	RTPC	Public switched telephone network (<i>Series E, F, I, T, V, X</i>)
PT	PT	PT	Pattern transfer (<i>Series T</i>)
PTSP	PTSP		Proceed-to-select protocol (<i>Series X</i>)
PUTB			Put-back (<i>Series F</i>)
PV	VP	VP	Parameter value (<i>Series T, X</i>)
PVC	PVC	PCV	Polyvinylchloride (<i>Series L</i>)
PVC	CVP	CVP	Permanent virtual circuit (<i>Series F, X</i>)
QC	CC	CQ	Quaternary centre (<i>Series G</i>)
qd	UDC	dq	Quantizing distortion unit (<i>Series G</i>)
QOS	CDS	QOS	Quality of Service (<i>Series E, I, X</i>)
QRSS			Quasi-random signal source (<i>Series M</i>)
R	L	L	Release (<i>Series I, Q</i>)
RA	AR	RA	Resynchronize ack (<i>Series X</i>)
RA1-3	RRE1-3	RA1-3	Reanswer signal No. 1-No. 3 (<i>Series Q</i>)
RAJ	RAJ	RAJ	Receiving ability jeopardized (<i>Series T</i>)
RAN	RRE	NRP	Reanswer signal (<i>Series Q</i>)
RBA	ARCB	RBA	Reset-band-acknowledgement message (<i>Series Q</i>)
RBI	ARCBR	RBI	Reset-band-acknowledgement, all circuits idle signal (<i>Series Q</i>)
RC	CR	REC	Reception control (<i>Series Q</i>)
RC	LC	FL	Release complete (<i>Series I, Q</i>)
RCAT	CPACC	GRTE	Signalling route set congestion test control (<i>Series Q</i>)
RCF			Remote call forwarding (<i>Series E</i>)
RCM	RMC	RMA	Reject connect modify message (<i>Series Q</i>)
RCP	PCR	CCR	Restoration control point (<i>Series M</i>)
RCRE	ERCR	ERCR	Receiving corrected reference equivalent (<i>Series P</i>)
RCT	MPR	TER	Signalling-route-set-congestion-test message (<i>Series Q</i>)
RDCLP	RDCLP	RDCLP	Response document capability list positive (<i>Series T</i>)
RDDP	RDDP	RDDP	Response document discard positive (<i>Series T</i>)
RDEP	RDEP	RDEP	Response document end positive (<i>Series T</i>)
RDF	RBF	RBF	Repeater distribution frame (<i>Series G</i>)
RDGR	RDGR	RDGR	Response document general reject (<i>Series T</i>)
RDPBN	RDPBN	RDPBN	Response document page boundary negative (<i>Series T</i>)
RDPBP	RDPBP	RDPBP	Response document page boundary positive (<i>Series T</i>)
RDRP	RDRP	RDRP	Response document resynchronize positive (<i>Series T</i>)
RE	ER	ER	Reference equivalents (<i>Series P</i>)
REJ	REJ	REJ	Reject (<i>Series X</i>)
REL	LIB	LIB	Release (<i>Series Q</i>)
RER	TER	RER	Residual error rate (<i>Series X</i>)
RES	REA	RPR	Resume (<i>Series Q</i>)
RESP		PCER	Reference equivalent speaking position (<i>Series P</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
RF	RZ	RF	Refuse (<i>Series X</i>)
RFS			Ready-for-service (<i>Series M</i>)
RFS	PPT	PAE	Ready for sending (<i>Series V</i>)
RJ	RCH	REJ	Reject (<i>Series Q, X</i>)
RJ TPDU	UDPT RZ	TPDU RJ	Reject TPDU (<i>Series X</i>)
RLC	LIC		Release complete (<i>Series Q</i>)
RLF	RLF	RLF	Reverse line feed (<i>Series T, X</i>)
RLG	LGU	LIG	Release-guard signal (<i>Series Q</i>)
RLR	ISR	ESR	Receiving loudness rating (<i>Series P</i>)
RLSD	LIDO		Released (<i>Series Q</i>)
r.m.s.			Root mean square (<i>Series O</i>)
RMSE			Root mean square error (<i>Series E</i>)
RNR	RNR	RNR	Receive not ready (<i>Series X</i>)
ROW			«Rights of way» (<i>Series D</i>)
RP	IA	LA	Renter's premises (<i>Series M</i>)
RPOA	EPER	EPR	Recognized private operating agency (<i>Series U</i>)
RR	ER	RH	Radio-relay system (<i>Series G</i>)
RR	RR	RR	Receive ready (<i>Series X</i>)
RRE	ERR	ERR	Receive reference equivalent (<i>Series G, P</i>)
RR25E	ER25R	ER25R	Receiving R25 equivalent (<i>Series P</i>)
RRUN			Re-run (<i>Series F</i>)
RS	RS	RS	Resynchronize (<i>Series X</i>)
RSAP	RSAP	RSAP	Response session abort positive (<i>Series T</i>)
RSB	RCB	RSB	Reset-band signal (<i>Series Q</i>)
RSC	CRI	CRI	Reset confirmation (<i>Series Q</i>)
RSC	RCI	RZC	Reset-circuit signal (<i>Series Q</i>)
RSCCP	RSCCP	RSCCP	Response session change control positive (<i>Series T, X</i>)
RSEN(r)	RSEN(r)	RSEN(r)	Response session suspend negative (<i>Series T</i>)
RSEP	RSEP	RSEP	Response session end positive (<i>Series T</i>)
RSEP(r)	RSEP(r)	RSEP(r)	Response session suspend positive (<i>Series T</i>)
RSM	MPR	TR	Signalling-route-set-test message (<i>Series Q</i>)
RSR	PRI	DRI	Reset request (<i>Series Q</i>)
RSRT	CPC	GRTF	Signalling route set test control (<i>Series Q</i>)
RSSN	RSSN	RSSN	Response session start negative (<i>Series T</i>)
RSSN(r)	RSSN(r)	RSSN(r)	Response suspended session reactivate negative (<i>Series T</i>)
RSSP	RSSP	RSSP	Response session start positive (<i>Series T, X</i>)
RSSP(r)	RSSP(r)	RSSP(r)	Response suspended session reactivate positive (<i>Series T</i>)
RST	PRS	TRS	Signalling-route-set-test signal (<i>Series Q</i>)
RSTWN	RSTWN	RSTWN	Response session TWS negative (<i>Series T</i>)
RSTWP	RSTWP	RSTWP	Response session TWS positive (<i>Series T</i>)
RSUI	RSUI	RSUI	Response session user information (<i>Series T</i>)
RTAC	CTA	GRTA	Transfer allowed control (<i>Series Q</i>)
RTB	MRT	TRT	Retransmission buffer (<i>Series Q</i>)
RTC	CRA		Restart confirmation (<i>Series Q</i>)
RTC	RTC	RTC	Return to control (<i>Series T</i>)
RTCC	CTC	GRTC	Transfer controlled control (<i>Series Q</i>)
RTM	MPR		Reference test method (<i>Series G</i>)
RTN	RTN	RTN	Retrain negative (<i>Series T</i>)
RTP	RTP	RTP	Retrain positive (<i>Series T</i>)
RTPC	CTP	GRTI	Transfer prohibited control (<i>Series Q</i>)
RTR	PRA		Restart request (<i>Series Q</i>)
RTRC	CTR	GRTR	Transfer restricted control (<i>Series Q</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
RTS	PDT	DPE	Request To Send (<i>Series V</i>)
RTS	STF	RTS	Reliable transfer server (<i>Series X</i>)
RU	RU	RU	Recovery unit (<i>Series T</i>)
RVL	NVR	NVR	Reference vocal level (<i>Series P</i>)
S	S	S	Supervisory (<i>Series I, Q</i>)
S	ES	E	Setup (<i>Series I, Q</i>)
SA	AS	AS	Service alarm (<i>Series M</i>)
SA	AES	ARE	Setup acknowledge (<i>Series I, Q</i>)
SABM	SABM	EMEA	Set asynchronous balanced mode (<i>Series I, Q, X</i>)
SABME	SABME	SABME	Set asynchronous balanced mode extended (<i>Series I, Q, X</i>)
SAM	MSD	MSA	Subsequent address message (<i>Series Q</i>)
SAM1-7	MSD1-7	SAM 1-7	Subsequent address message No. 1-No. 7 (<i>Series Q</i>)
SANC	CZRS	CZRS	Signalling area/network code (<i>Series Q</i>)
SAO	SDU	MSS	Subsequent address message with one signal (<i>Series Q</i>)
SAP	PAS	SAP	Service access point (<i>Series I, Q</i>)
SAPI	IPAS	SAPI	Service access point identifier (<i>Series I, Q, X</i>)
SBA	ABL	BSA	Software generated group blocking-acknowledgement message (<i>Series Q</i>)
SBM	MEC	SE	Successful-backward-set-up information message (<i>Series Q</i>)
SBR	ERP	SBR	Standby-ready signal (<i>Series Q</i>)
SBUR	RBDL	BDLR	Software generated circuit group blocking and unblocking receipt (<i>Series Q</i>)
SBUS	EBDL	BDLE	Software generated circuit group blocking and unblocking sending (<i>Series Q</i>)
SC	CS	CS	Secondary centre (<i>Series G</i>)
SCCP	PCCS	SSCS	Signalling connection control part (<i>Series Q</i>)
SCM	SCM	SCM	Select coding method (<i>Series T</i>)
SCPC	SCPC	SCPC	Single channel per carrier (<i>Series M, Q, V, X</i>)
SCRE	ERCE	ERCE	Send corrected reference (<i>Series G, P, Q</i>)
SCU	USCS	SCU	Signalling System Control Unit (<i>Series Q</i>)
SCUG	SCUG	SCUG	Start of closed user group sequence (<i>Series U</i>)
SDC	SDC	SDC	Select dot composition (<i>Series T</i>)
SDE	EDE	SDE	Submission and delivery entity (<i>Series X</i>)
SDF	RS	RS	Supergroup distribution frame (<i>Series G</i>)
SDL	LED	LDS	Specification and description language (<i>Series I, Q, X, Z</i>)
SDL/GR	LED/GR	LDS/GR	Specification and description language - graphic representation (<i>Series Z</i>)
SDL/PR	LED/PR	LDS/PR	Specification and description language - phrase representation (<i>Series Z</i>)
SDR	DEG	DTS	Special drawing rights (<i>Series D, E</i>)
SDU	UDS	SDU	Service-data-unit (<i>Series X</i>)
SEC	CEC	EEC	Switching equipment congestion (<i>Series E</i>)
SES	ETB	STN	Ship earth station (<i>Series M, U</i>)
SETAB	SETAB	SETAB	Working standards with subscribers'equipment (système-étalons de travail avec appareils d'abonné) (<i>Series P</i>)
SETED	SETED	SETED	Working standard having an electro-dynamic microphone and receiver (système-étalon de travail avec microphone et récepteur électrodynamique) (<i>Series P</i>)
SF	CE	ETC	Status field (<i>Series Q</i>)
SFC	SFF	CEF	Sensitivity/frequency characteristics (<i>Series P</i>)
SFD	DFS	SFD	Simple formattable document (<i>Series X</i>)
SFERT	SFERT		European master reference system for telephone transmission (système fondamental européen de référence pour la transmission téléphonique) (<i>Series P</i>)
SFU	UAR	UER	Store and forward unit (<i>Series F, U</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
SGB	BGL	BLS	Software generated group blocking message (<i>Series Q</i>)
SGR	SGR	SGR	Select graphic rendition (<i>Series T, X</i>)
SGU	DGL	DBS	Software generated group unblocking message (<i>Series Q</i>)
SHS	SHS	SHS	Select horizontal spacing (<i>Series T, X</i>)
SI	IS	INS	Service indicator (<i>Series Q, X</i>)
SI	SI	SI	Shift-in (<i>Series T</i>)
SI	IU	SI	SPDU Identifier (<i>Series X</i>)
SIB	IO	ETOC	Status indication «B» («Busy») (<i>Series Q</i>)
SIE	IAE	ETAU	Status indication «E» («emergency alignment») (<i>Series Q</i>)
SIF	CIS	INF	Signal information field (<i>Series Q, X</i>)
SIN	IAN	ETAN	Status indication «N» («normal alignment») (<i>Series Q</i>)
SIO	OIS	SER	Service information octet (<i>Series Q</i>)
SIO	IFA	ETAP	Status indication «out of alignment» (<i>Series Q</i>)
SIOS	IFS	ETHS	Status indication «out of service» (<i>Series Q</i>)
SIPO	IIP	ETIP	Status indication «processor outage» (<i>Series Q</i>)
SIS	SIS	SIS	Sound-in-sync (<i>Series D</i>)
SITU			Situation (<i>Series F</i>)
SL	AE	AS	Stability loss (<i>Series G</i>)
SL	ES	CS	Signalling link (<i>Series Q</i>)
SLC	CES	COC	Signallink link code (<i>Series Q</i>)
SLM	GES	GCS	Signalling link management (<i>Series Q</i>)
SLP	SLP	PLU	Single link procedure (<i>Series X</i>)
SLR	ISE	ESE	Send loudness rating (<i>Series G, P, Q</i>)
SLS	SES	SCS	Signalling link selection code (<i>Series Q</i>)
SLTA	AMPS	ESCA	Signalling link test message acknowledgement (<i>Series Q</i>)
SLTM	MPES	ESCO	Signalling link test message (<i>Series Q</i>)
SMF	SMT	SMT	Submultiframe (<i>Series G</i>)
SMH	TMS	OMS	Signalling message handling (<i>Series Q</i>)
SMPDU	UDPMS	SMPDU	Service message protocol data unit (<i>Series X</i>)
SMTE	EMGC	SMTE	Supermastergroup translating equipment (<i>Series G</i>)
SMXU	UTMS	UTMS	Service message transfer unit (<i>Series U</i>)
SN	NA	NA	Subscriber's number (<i>Series E, I</i>)
SNM	SGRS	SNM	Signalling-network-management signal (<i>Series Q</i>)
SO	SO	SO	Shift-out (<i>Series T</i>)
SOA	SOA		Start of address (<i>Series F</i>)
SOH	SOH	SOH	Start of heading (<i>Series T</i>)
SOM	SOM	SOM	Start-of-message signal (<i>Series F</i>)
SP	PS	PS	Signalling point (<i>Series I, Q</i>)
SP	SP	SP	Space (<i>Series T, X</i>)
SPADE	SPADE	SPADE	Single channel per carrier, PCM, multiple access demand assignment, equipment (<i>Series M</i>)
SPC	CPA	SPC	Stored program controlled (<i>Series M, Z</i>)
SPD	SPD	SPD	Select presentation direction (<i>Series T</i>)
SPDU	SPDU	SPDU	Receipt of session protocol data unit (<i>Series T</i>)
SPDU	UDPS	SPDU	Session Protocol Data Unit (<i>Series X</i>)
SPITE	ETIC	ETIC	Switching processing interface telephone events (<i>Series Q</i>)
SPM	MP	SPM	Session Protocol Machine (<i>Series X</i>)
SPRC	CPS	CPS	Signalling procedure control (<i>Series Q</i>)
SR-UAPDU	UDPAU-IE	UAPDU SR	Status report user agent protocol data unit (<i>Series X</i>)
SRA	AEP	SRA	Standby-ready-acknowledgement signal (<i>Series Q</i>)
SRC-REF	REF-ORG		Source Reference (field) (<i>Series X</i>)
SRE	ERE	ERE	Send reference equivalent (<i>Series G, P</i>)
SR25E	ER25E	ER25E	Sending R25 equivalent (<i>Series P</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
SREJ	SREJ	SREJ	Selective reject (<i>Series X</i>)
SRM	GRS	GRS	Signalling route management (<i>Series Q</i>)
SRPT	IE	RE	Status report (<i>Series U</i>)
SRQ	PE	DRE	Status request (<i>Series U</i>)
SS2	SS2	SS2	Single shift (<i>Series T</i>)
SS3	SS3	SS3	Single shift (<i>Series T</i>)
SS	SS	SS	Session service (<i>Series X</i>)
S.S. No. 6	SS N.º 6	S.S. n° 6	Signalling System No. 6 (<i>Series E, M</i>)
SSA	SSD	SSD	Subsystem-available (<i>Series Q</i>)
SSAP	PASS	SSAP	Session service access point (<i>Series X</i>)
SSB	ABO	SSB	Subscriber-busy signal (electrical) (<i>Series Q</i>)
SSB	ABO	OCC	Subscriber-busy signal (electrical) (<i>Series Q</i>)
SSC	SSC	SSE	Subsystem-congested (<i>Series Q</i>)
SSDU	UDSS	SSDU	Session service data unit (<i>Series X</i>)
SSF	CSS	DSS	Sub-service field (<i>Series Q</i>)
SSL	ASB	ADB	Semi-loop loss (<i>Series G</i>)
SSP	SSP	SSI	Subsystem-prohibited (<i>Series Q</i>)
SST	SST	SST	Subscriber-transferred signal (<i>Series Q</i>)
SST	TIE	TSI	Send-special-information-tone signal (<i>Series Q</i>)
SSU	USS	SSU	Subsequent signal unit (<i>Series E, Q</i>)
ST	SFN	ST	End-of-pulsing signal (<i>Series Q</i>)
STC	CCP	CCE	Switching and testing centre (<i>Series R</i>)
STD			State transition diagram (<i>Series Q</i>)
STE	EMS	EMS	Supergroup-translating equipment (<i>Series G</i>)
STE	TES	TES	Signalling terminal (<i>Series X</i>)
STLC	CPES	ESC	Signalling link test control (<i>Series Q</i>)
STLR	ISEL	ASEL	Sidetone loudness rating (<i>Series P</i>)
STM	GTS	GTS	Signalling traffic management (<i>Series Q</i>)
STMR	IEEL	AELM	Sidetone masking rating (<i>Series P</i>)
STP	PTS	PTS	Signalling transfer point (<i>Series I, M, Q</i>)
STPR	AELP	AELP	Sidetone power rating (<i>Series P</i>)
STRE	EREL	EREL	Sidetone reference equivalent (<i>Series P</i>)
STTC	STTC	STTC	Start of transit through-connect signal (<i>Series U</i>)
STX	STX	STX	Start of text (<i>Series T</i>)
SU	US	SU	Signal unit (<i>Series Q</i>)
SU	US	TS	Signal unit (<i>Series Q, X</i>)
SUA	ADL	DSA	Software generated group unblocking-acknowledgement (<i>Series Q</i>)
SUB	SUB	SUB	Substitute character (<i>Series T, X</i>)
SUD	SUD	SUD	Session user data (<i>Series T</i>)
SUERM	MUS	STTS	Signal unit error rate monitor (<i>Series Q</i>)
SV	VU	SV	Speech voltmeter (<i>Series P</i>)
SVS	SVS	SVS	Select vertical spacing (<i>Series T, X</i>)
SWEPL	SWEPL	SWEPL	Scaled weighted echo path loss (<i>Series P</i>)
SYN	SYN	SYN	Synchronous idle (<i>Series T</i>)
SYU	USIN	SYU	Synchronization signal unit (<i>Series Q</i>)
T	T	T	SUERM threshold (<i>Series Q</i>)
TA		TA	Transferred account (<i>Series D</i>)
TA	AT	AT	Terminal adaptor (<i>Series I, Q, V, X</i>)
TAA	ATA	TAA	Transfer-allowed acknowledgement signal (<i>Series Q (S.S. Nos. 6 and 7)</i>)
TAED	DEAT	DEAT	Telex automatic emitting devices (<i>Series F</i>)
TASI	TASI	TASI	Time assignment speech interpolation (<i>Series G</i>)
TB	MT	TEM	Transmission buffer (<i>Series Q</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
TBR	TBR	TBR	Transport block reject (<i>Series T</i>)
TBRL	AET	AET	Terminal balance return loss (<i>Series G</i>)
TBRL	AEPT	TBRL	Terminal balance return loss (<i>Series Q</i>)
TC	II	II	Trunk code (<i>Series E, I</i>)
TC	CTe	CTR	Tertiary centre (<i>Series G</i>)
TC	CT		Terrestrial channel (<i>Series Q</i>)
TC	CT	CT	Transport connection (<i>Series T, X</i>)
TCA	TCA	TCA	Transport connection accept (<i>Series T</i>)
TCBC	TCRS	GTCN	Changeback control (<i>Series Q</i>)
TCC		IPT	Telephone country code (<i>Series F, I</i>)
TCC	TCC	TCC	Transport connection clear (<i>Series T</i>)
TCCD	RTCL	TCCD	Total call connection delay (<i>Series X</i>)
TCCID	RTILL	TCCID	Total call clear indication delay (<i>Series X</i>)
TCF	TCF	TCF	Training check (<i>Series T</i>)
TCIC	CICT	CICT	Transit Centre Identification Code (<i>Series U</i>)
TCL	ACT	ACT	Transverse conversion loss (<i>Series G, O, Q</i>)
TCLD	RTLL	TCLD	Total call clearing delay (<i>Series X</i>)
TCOC	TCER	GTCS	Changeover control (<i>Series Q</i>)
TCR	TCR	TCR	Transport connection request (<i>Series T</i>)
TCRC	TCRC	GTRN	Controlled rerouting control (<i>Series Q</i>)
TCTL	ATCT	ATCT	Transverse conversion transfer loss (<i>Series G, O</i>)
TD	DM	TD	Typed data (<i>Series X</i>)
TDF	TDF	TDF	Time differential factor (<i>Series X</i>)
TDM	MDT	MRT	Time division multiplex (<i>Series M, R, U</i>)
TDMA	AMDT	AMRT	Time division multiple access (<i>Series G, Q, X</i>)
TDMA/DSI	AMDT/IDP	AMRT/CNC	Time division multiple access/digital speech interpolation (<i>Series M, O, Q</i>)
TDT	TDT	TDT	Transport data (<i>Series T</i>)
TDX	TDX	TDX	Typed data transfer (<i>Series T</i>)
TE	ET	TE	Terminal equipment (<i>Series I, Q</i>)
TEI	IET	TEI	Terminal endpoint identifier (<i>Series I, Q, X</i>)
TFA	TRA	TAO	Transfer-allowed signal (<i>Series Q</i>)
TFC	TFC	TCO	Transfer-controlled message (<i>Series Q</i>)
TFM	MTR	TF	Transfer-prohibited and transfer-allowed messages (<i>Series Q</i>)
TFP	PTR	TIO	Transfer-prohibited signal (<i>Series Q</i>)
TFR	TRR	TRO	Transfer restricted signal (<i>Series Q</i>)
TFRC	TCRF	GTRS	Forced rerouting control (<i>Series Q</i>)
TGF	FTP	FTP	Through-group filter (<i>Series G</i>)
THD	DAT	DHT	Total harmonic distortion (<i>Series J</i>)
TIC	CTI	CTI	Terminal international centre (<i>Series M, T</i>)
TID	IDT	TID	Terminal identification (<i>Series X</i>)
TIE	EIT	EIT	Time interval error (<i>Series G, Q</i>)
TIF	TIF	TIF	Text image format (<i>Series T</i>)
TIF	FIT	TIF	Text interchange format (<i>Series X</i>)
TIF0	TIF.0	TIF0	Text interchange format 0 (<i>Series X</i>)
TIF.0	TIF.0	TIF-0	Text image format 0 (<i>Series T</i>)
TIF.1	TIF.1	TIF.1	Text interchange format 1 (<i>Series X</i>)
TIG	GIT	GIT	Telegram identification group (<i>Series F</i>)
TLAC	TCDE	GTSD	Link availability control (<i>Series Q</i>)
TLL	LTL	LTL	Total scanning line-length (<i>Series T</i>)
TLX	TLX	TLX	Telex (<i>Series X</i>)
TMP-IL	CMT-LI	CMT-LI	Transmission maintenance point (international line) (<i>Series M</i>)
TMUX-P	TMUX-P	TMUX-P	Type P transmultiplexer (<i>Series G</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
TMUX-S	TMUX-S	TMUX-S	Type S transmultiplexer (<i>Series G</i>)
TNC	CTN	CTN	Terminal national centre (<i>Series M, T</i>)
TNIC	CIRT	CIRT	Telex Network Identification Code (<i>Series U</i>)
TOL	NST	NST	Transverse output level (<i>Series G</i>)
TP	PT	PT	Transport protocol (<i>Series T</i>)
TP	DP	DP	Two procedures modem (TP modem) (<i>Series V</i>)
TPA	APT	TIA	Transfer-prohibited acknowledgement signal (<i>Series Q</i>)
TPDU	UDPT	UDPT	Transport protocol data unit (<i>Series T, X</i>)
TPF	TPF	TPF	Text processable format (<i>Series T</i>)
TPTD	RTTPR	TPTD	Total data packet network transfer delay (<i>Series X</i>)
TR	TR	TR	Transfer restricted (<i>Series Q</i>)
TRCC	CCCR	GTER	Signalling route set congestion control (<i>Series Q</i>)
TRL	PRT	AT	Transverse return loss (<i>Series G</i>)
TS	IT		Time slot (<i>Series G</i>)
TS	ST	ST	Transport service (<i>Series T, X</i>)
TS-user	Usuario ST	TS-USER	Transport Service user (<i>Series X</i>)
TSAP	PAST	PAST	TS access points (<i>Series T, X</i>)
TSAP-ID	ID-PAST	ID de TSAP	Transport service access point identifier (<i>Series X</i>)
TSC	CIT	CIT	Time slot code (<i>Series X</i>)
TSDU	UDST	TSDU	Transport service data unit (<i>Series T, X</i>)
TSF	FTS	FTS	Through-supergroup filter (<i>Series G</i>)
TSFC	CFTS	GTFX	Signalling traffic flow control (<i>Series Q</i>)
TSI	TSI	TSI	Transmitting subscriber identification (<i>Series T</i>)
TSRC	CEN	GTAC	Signalling routing control (<i>Series Q</i>)
TSSDU	UDSSM	TSSDU	Typed data session service data unit (<i>Series X</i>)
TT	TT	TT	Text transfer (<i>Series U</i>)
TTC	TTC	TTC	Transit through-connect signal (<i>Series U, X</i>)
TTD	TTD	TTD	Transit centres through-connected signal (<i>Series U, X</i>)
TTL	ATT	ATT	Transverse transfer loss (<i>Series G</i>)
TTL	TTL	TTL	Transistor-transistor logic (<i>Series O</i>)
TTNIC	CIRTT	CIRTT	Temporary telex network identification code (<i>Series U</i>)
TTR	TRT	TTR	Time to try reassignment/resynchronization (<i>Series X</i>)
TTX	TTX	TTX	Teletex (<i>Series F, X</i>)
TTXAU	UATTX	TTXAU	Teletex access unit (<i>Series X</i>)
TUP	PUT	SSUT	Telephone user part (<i>Series Q</i>)
TV	TV	TV	Television (<i>Series T</i>)
TWA	TWA	TWA	Two-way alternate (<i>Series F, T</i>)
TWR	TER	TWR	Time to wait for reassignment/resynchronization (<i>Series X</i>)
TWS	TWS	TWS	Two-way simultaneous (<i>Series F, T</i>)
TXC	CT	EMI	Transmission control (<i>Series Q</i>)
U	U	U	Unnumbered (<i>Series I, Q</i>)
UA	UA	UA	Unnumbered acknowledgement (<i>Series I, Q, X</i>)
UA	AU	UA	User agent (<i>Series X</i>)
UAE	EAU	UAE	User agent entity (<i>Series X</i>)
UAL	CAU	UAL	User agent layer (<i>Series X</i>)
UAPDU	UDPAU	UAPDU	User agent protocol data unit (<i>Series X</i>)
UBA	ARD	DBA	Unblocking-acknowledgement signal (<i>Series Q</i>)
UBL	DBL	DBO	Unblocking signal (<i>Series Q</i>)
UBM	MEI	EE	Unsuccessful-backward-set-up-information message (<i>Series Q</i>)
UC	UC	UC	User-class character (<i>Series U</i>)
UCCD	RCLU	UCCD	User-dependent call connection delay (<i>Series X</i>)
UCCID	RILLU	UCCID	User-dependent call clear indication delay (<i>Series X</i>)

<i>English</i>	<i>Spanish</i>	<i>French</i>	<i>Meaning</i>
UDT	DTU	DSC	Unitdata (<i>Series Q</i>)
UDTS	SDTU	RSC	Unitdata service (<i>Series Q</i>)
UFI	IFA	IDA	Upstream failure indication (<i>Series G, M</i>)
UI	IU	IU	Unit interval (<i>Series G, O, Q</i>)
UI	UI	UI	Unnumbered information (<i>Series I, Q</i>)
ULL	LUL	LUL	Usable scanning line-length (<i>Series T</i>)
UMPDU	UDPMU	UMPDU	User message protocol data unit (<i>Series X</i>)
UMXU	UTMU	UTMU	User message transfer unit (<i>Series U</i>)
UNB	CII	CEN	Counter of unreasonable BSN (<i>Series Q</i>)
UNF	CDI	CEB	Counter of unreasonable FIB (<i>Series Q</i>)
UNN	NNA	NNU	Unallocated-number signal (<i>Series Q</i>)
UP	PU	SSU	User part (<i>Series Q</i>)
UPTD	RTPU	UPTD	User-dependent data packet transfer delay (<i>Series X</i>)
USR	IUU	UAU	User-to-user information (<i>Series Q</i>)
UTC	UTC	UTC	Coordinated universal time (<i>Series D, E, F, N, X</i>)
UWE	BSV	UWE	Upper window edge (<i>Series X</i>)
VASP	EVA		Virtual analogue switching points (<i>Series G</i>)
VC	LLV	CV	Virtual calls (<i>Series X</i>)
VDT			Visual display terminals (<i>Series Z</i>)
VFT	TA		Voice-frequency telegraph (<i>Series H, R</i>)
VFTE	ETA	ETH	Voice-frequency telegraph equipment (<i>Series M</i>)
VT	VT	VT	Vertical tabulation (<i>Series T, X</i>)
WEPL	WEPL	WEPL	Weighted listener echo path loss (<i>Series P</i>)
XSSDU	UDSSA	XSSDU	Expedited session service data unit (<i>Series X</i>)
YR-TU-NR	NR-VT-UT	N° de YR-TU	Sequence number response (field) (<i>Series X</i>)

PART III

TRILINGUAL GLOSSARY

A

- A condition ; Z condition**
S: estado A; estado Z
F: état A (Z)
- A element ; Z element**
S: elemento A; elemento Z
F: moment A (Z)
- abbreviated address calling**
S: llamada con dirección abreviada
F: numérotation abrégée
- 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
- absent subscriber service**
S: servicio de abonado ausente
F: service des abonnés absents
- absolute address**
S: dirección absoluta
F: adresse absolue
- abstract data type**
S: tipo de datos abstractos
F: type de données abstrait
- abstract syntax**
S: sintaxis abstracta
F: syntaxe abstraite
- 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
- acceptor ; accepting SS-user**
S: aceptador; usuario SS aceptante
F: accepteur; utilisateur du service de session accepteur
- access**
S: acceso
F: accès
- access barred**
S: acceso prohibido
F: 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 and rate**
S: canal de acceso y velocidad
F: canal et débit 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 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 protocol**
S: protocolo de acceso
F: protocole d'accès
- access protocol ; signalling access protocol, information access coding/protocol**
S: protocolo de acceso; protocolo de acceso señalización; protocolo/codificación de acceso a la información
F: protocole d'accès, protocole d'accès pour la signalisation, codage/protocole pour l'accès à l'information
- access to supplementary services**
S: acceso a servicios suplementarios
F: accès aux services supplémentaires
- accessibility of a connection to be established**
S: accesibilidad de una conexión por establecer
F: accessibilité d'une communication à établir
- accessible field**
S: campo accesible; campo de entrada
F: champ accessible
- 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 alicuota 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
- 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 acústica artificial
F: voix artificielle acoustique
- acoustic coupler (in telephony)**
S: acoplador acústico (en telefonometría)
F: coupleur acoustique (en téléphonométrie)
- acoustic coupling (to telephone line)**
S: acoplamiento acústico (a la línea telefónica)
F: couplage acoustique (à une ligne téléphonique)
- 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)
- 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
- active maintenance time**
S: tiempo de mantenimiento activo
F: temps de maintenance active
- active operator**
S: operador activo
F: opérateur actif
- active position**
S: posición activa
F: position active
- active position addressing (APA)**
S: direccionamiento de posición activa
F: adressage de position active (APA, codé 1/15)
- 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	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	ageing fault; wearout fault S: avería por envejecimiento; avería por desgaste F: panne par vieillissement; panne par usure
active signalling link S: enlace de señalización activo F: canal sémaphore (à l'état) actif	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	aggregate signal S: señal global; señal compuesta; señal multiplexada F: signal composite
actual parameter S: parámetro efectivo F: paramètre effectif	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	alarm call services S: servicio de despertador F: service du réveil
actual parameter list S: lista de parámetros efectivos F: liste de paramètres effectifs	address-delimiter S: delimitador de dirección F: délimiteur d'adresse	alarm indication signal (AIS) S: señal de indicación de alarma (SIA) F: signal d'indication d'alarme (SIA)
adaptive break-in echo suppressor S: supresor de eco con intervención adaptativa F: suppresseur d'écho à intervention adaptable	address-incomplete signal S: señal de dirección incompleta F: signal d'adresse incomplet	alarm statement S: sentencia de alarma F: instruction d'alarme
adaptive channel allocation S: asignación adaptable de canales F: affectation dynamique adaptable des voies	address-incomplete signal S: señal de dirección incompleta F: signal de numéro incomplet	algorithm S: algoritmo F: algorithme
adaptive differential pulse code modulation (ADPCM) S: modulación por impulsos y código diferencial adaptativo (MICDA) F: modulation par impulsions et codage différentiel adaptatif (MICDA)	address separator S: separador de dirección F: séparateur d'adresse	aligner S: alineador F: aligneur
adaptive predictor S: predictor adaptativo F: prédicteur adaptatif	address signal S: señal de dirección (sistema de señalización R1) F: signal d'adresse (système de signalisation R1)	alignment error rate monitoring S: monitor de tasa de errores en la alineación F: surveillance du taux d'erreur pendant la procédure d'alignement
adaptive quantizing S: cuantificación adaptativa F: quantification adaptative	address signal (Signalling System R2) S: señal de dirección (sistema de señalización R2) F: signal d'adresse (système de signalisation R2)	allocation symbol S: símbolo de atribución F: symbole d'allocation
add / remove S: adición/supresión F: ajouter/supprimer	addressing S: direccionamiento F: adressage	allow S: permitir F: autorisation
additional header information S: información adicional de encabezamiento F: information supplémentaire d'en-tête	addressing (network addressing) S: direccionamiento (direccionamiento de la red) F: adressage (adressage du réseau)	alphabet (telegraph or data) S: alfabeto (telegráfico o de datos) F: alphabet (télégraphique ou de données)
additional information S: información adicional F: information supplémentaire; information additionnelle	administrative delay (for corrective maintenance) S: retardo administrativo (para el mantenimiento correctivo) F: délai administratif (pour la maintenance corrective)	alphanumeric keyboard S: teclado alfanumérico F: clavier alphanumérique
additional-save-set S: conjunto de conservación adicional F: ensemble de mise en réserve supplémentaire	administrative processor S: procesador de gestión F: processeur de gestion	alternate mark inversion code (AMI code) S: código de inversión de marcas alternada; código AMI F: code bipolaire; code bipolaire alternant; code bipolaire strict
address S: dirección F: adresse	administrative system S: sistema administrativo F: système d'administration	alternate mark inversion signal S: señal de inversión de marcas alternada F: signal bipolaire; signal bipolaire alternant
address (in circuit switching) S: dirección (en conmutación de circuitos) F: adresse (en commutation de circuits)	adverse state S: estado desfavorable F: état défavorable	alternate mark inversion violation S: violación de inversión de marcas alternada F: violation de bipolarité
address (in information processing) S: dirección (en tratamiento de la información) F: adresse (en traitement de l'information)	ageing failure; wearout failure S: fallo por envejecimiento; fallo por desgaste F: défaillance par vieillissement; défaillance par usure	alternating current (a.c.) signalling S: señalización en corriente alterna; señalización en c.a. F: signalisation en courant alternatif
address (in network addressing) S: dirección (en direccionamiento de red) F: adresse (dans l'adressage du réseau)		alternative class S: clase alternativa F: classe de repli
address-complete signal, charge S: señal de dirección completa, con tasación F: signal de numéro complet, avec taxation		alternative hypothesis H₁ S: hipótesis alternativa H ₁ F: hypothèse alternative (H ₁)
address-complete signal, coin-box S: señal de dirección completa, teléfono de previo pago F: signal de numéro complet, publiphone		alternative (alternate) route S: ruta alternativa F: voie d'acheminement détourné
address-complete signal, no charge S: señal de dirección completa, sin tasación F: signal de numéro complet, sans taxation		alternative routing (of signalling) S: encaminamiento alternativo (de señalización) F: acheminement (de signalisation) de secours
address-complete signals (Signalling System R2) S: señales de dirección completa (sistema de señalización R2) F: signaux d'adresse complète (système de signalisation R2)		alternative selection signals S: pluralidad de señales de selección F: pluralité des codes de signaux de sélection
		alternative test method S: método de prueba alternativo F: méthode de mesure de remplacement

alternative traffic route S: ruta de tráfico alternativa F: voie d'acheminement de trafic détourné	answer signal, charge S: señal de respuesta, con tasación F: signal de réponse, avec taxation	array S: matriz F: tableau
alternative traffic routing S: encaminamiento alternativo (de tráfico) F: acheminement détourné; détournement	answer signal, no charge S: señal de respuesta, sin tasación F: signal de réponse, sans taxation	artificial ear S: oído artificial F: oreille artificielle
amplitude- and phase-corrected echo S: eco corregido en amplitud y en fase F: écho corrigé en amplitude et en phase	answerback unit S: transmisor automático de indicativo F: émetteur automatique d'indicatif	artificial mouth S: boca artificial F: bouche artificielle
amplitude-corrected echo S: eco corregido en amplitud F: écho corrigé en amplitude	answerback unit simulator S: simulador de transmisor automático de indicativo F: simulateur d'émetteur d'indicatif	artificial mouth excitation signal S: señal de excitación de la boca artificial F: signal d'excitation de la bouche artificielle
amplitude modulation S: modulación de amplitud F: modulation d'amplitude	answering delay S: demora de respuesta F: durée de sonnerie	artificial voice S: voz artificial F: voix artificielle
amplitude quantized control S: control por cuantificación de amplitud F: synchronisation quantifiée	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	to assemble S: ensamblar F: assembler
amplitude quantized control S: control por cuantificación de amplitud F: mode à quantification d'amplitude		assembler; assembly program S: ensamblador; programa de ensamblaje F: assembleur; programme d'assemblage
analogue channel S: canal analógico F: voie analogique		assembly language S: lenguaje de ensamblaje F: langage d'assemblage
analogue control S: control analógico F: synchronisation analogique		assignment statement S: sentencia de asignación F: instruction d'affectation
analogue control S: control analógico F: mode analogique		associated mode (of signalling) S: modo (de señalización) asociado F: mode (de signalisation) associé
analogue repeater S: repetidor analógico F: répéteur analogique		associated mode of operation S: modo de explotación asociado F: mode d'exploitation «associé»
analogue signal S: señal analógica F: signal analogique		associated signalling S: señalización asociada F: signalisation associée
anisochronous S: anisócrono F: anisochrone		(asymptotic) availability, A; (steady-state) availability S: disponibilidad asintótica; disponibilidad en régimen permanente, A F: disponibilité asymptotique (A); disponibilité
anisochronous transmission S: transmisión anisócrona F: transmission anisochrone		asymptotic mean availability $\bar{A}$ S: disponibilidad media asintótica $\bar{A}$ F: disponibilité moyenne asymptotique, $\bar{A}$
annotation S: anotación F: annotation		asymptotic mean unavailability $\bar{U}$ S: indisponibilidad media asintótica $\bar{U}$ F: indisponibilité moyenne asymptotique, $\bar{U}$
annotation symbol S: símbolo de anotación F: symbole d'annotation		asymptotic unavailability, U S: indisponibilidad asintótica U F: indisponibilité asymptotique, (U)
answer bid ratio (ABR) S: tasa de tentativas de toma con respuesta (TTTR) F: taux de tentatives de prises avec réponse (TTPR)		attenuation coefficient S: coeficiente de atenuación F: coefficient d'affaiblissement
answer seizure ratio (ASR) S: tasa de tomas con respuesta (TTR) F: taux de prises avec réponse (TPR)		attenuation, A (λ) S: atenuación A (λ) F: affaiblissement A (λ)
answer signal S: señal de respuesta F: signal de réponse		attenuation/frequency distortion S: distorsión de atenuación/frecuencia F: distorsion d'affaiblissement en fonction de la fréquence
answer signal (sent in the backward direction) S: señal de respuesta (transmitida hacia atrás) F: signal de réponse (émis dans le sens «en arrière»)		attribute S: atributo F: attribut
answer signal (Signalling System R1) S: señal de respuesta (sistema de señalización R1) F: signal de réponse (système de signalisation R1)		audible indication S: indicación audible F: indication audible
answer signal (Signalling System R2) S: señal de respuesta (sistema de señalización R2) F: signal de réponse (système de signalisation R2)		automatic alternative routing S: encaminamiento alternativo automático F: acheminement automatique sur voie secondaire
	arc S: arco F: arc	automatic answering S: respuesta automática F: réponse automatique
	arc current S: corriente de arco F: courant d'arc	automatic booked call service S: servicio de llamadas automáticas prefijadas F: service de demande automatique d'une communication
	arc voltage S: tensión de arco F: tension d'arc	
	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: expresión aritmética F: expression arithmétique	

automatic calling
S: llamada automática
F: appel automatique

automatic credit card service
S: servicio automático con tarjeta de crédito
F: service automatique de cartes de crédit

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 sequential connection
S: conexión automática secuencial
F: connexion automatique en séquence

automatic service
S: servicio automático
F: service automatique

automatic switching equipment
S: equipo de conmutación automática
F: équipement de commutation automatique

automatic switching equipment
S: equipo de conmutación automática
F: commutateur automatique

automatic system
S: sistema automático
F: système automatique

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 cobro revertido automático
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 (performance)
S: disponibilidad
F: disponibilité

availability in analogue cable transmission systems
S: disponibilidad de los sistemas de transmisión analógicos por cable
F: disponibilité des systèmes de transmission analogique par câbles

axiom
S: axioma
F: axiome

B

B'
S: B'
F: 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

Backus Naur Form (BNF)
S: forma Backus Naur (FBN)
F: forme de Backus Naur (FBN)

backward channel
S: canal de retorno
F: voie de retour

backward echo
S: eco hacia atrás
F: écho (vers l'amont)

backward indicator bit
S: bit indicador inverso
F: bit indicateur vers l'arrière

backward sequence number
S: número secuencial inverso
F: numéro de séquence vers l'arrière

backward signal
S: señal hacia atrás
F: signal vers l'arrière

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 attribute set
S: conjunto básico de atributos
F: ensemble d'attributs de base

base station (in mobile station networks)
S: estación de base (en redes con estaciones móviles)
F: station de base (dans des réseaux de stations mobiles)

base station area
S: zona de estación de base
F: zone de la station de base

basic access
S: acceso básico
F: accès 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 measurement unit (BMU)
S: unidad de medida básica (BMU)
F: unité de mesure de base (BMU)

basic object
S: objeto básico
F: objet de base

basic SDL
S: LED básico
F: LDS de base

basic session reference
S: referencia básica de la sesión
F: référence de base de la session

baud (Bd)
S: baudio (Bd)
F: baud (Bd)

Baudot telegraphy
S: telegrafía Baudot
F: télégraphie Baudot

bearer service
S: servicio portador
F: service support

behaviour
S: comportamiento
F: comportement

bias distortion
S: distorsión asimétrica
F: distorsion biaisée

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
S: dígito binario; bit
F: élément binaire; bit

binary figure
S: cifra binaria
F: chiffre binaire

binary numeral
S: numeral binario
F: nombre binaire

binary rate
S: velocidad binaria
F: débit binaire

binary serial signalling rate
S: velocidad de transmisión binaria en serie
F: débit binaire série

binary tariff system
S: sistema binario de tarificación
F: système de tarification binaire

bit combination
S: combinación de bits
F: combinaison binaire

bit error rate
S: proporción de errores en los bits
F: taux d'erreur sur les bits (binons)

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-interleaved transmission
S: transmisión con entrelazado de bits
F: transmission multiplex à moments entrelacés

bit-order of transmission
S: orden de transmisión de los bits
F: ordre de transmission des bits

bit sequence independence
S: independencia de la secuencia de bits
F: indépendance de la séquence des bits

block
S: bloque
F: bloc

block (data)
S: bloque (de datos)
F: bloc (de données)

block (text block)
S: bloque; bloque de texto
F: bloc; bloc de texte

block-acknowledged counter
S: contador de bloques de los que se ha acusado recibo
F: compteur des blocs dont il est accusé réception

block check
S: control por bloque
F: contrôle par 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 error rate
S: proporción de errores en los bloques
F: taux d'erreur sur les blocs

block interaction diagram
S: diagrama de interacción de bloques
F: diagramme d'interaction de blocs

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 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 symbol
S: símbolo de bloque
F: symbole de bloc

block tree diagram
S: diagrama de árbol de bloques
F: diagramme d'arbre de blocs

blocking
S: bloqueo
F: groupage

blocking-acknowledgement signal
S: señal de acuse de recibo de bloqueo
F: signal d'accusé de réception de blocage

blocking; congestion
S: bloqueo; congestión
F: encombrement (congestion)

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»)

blocking signal (Signalling System R2)
S: señal de bloqueo (sistema de señalización R2)
F: signal de blocage (système de signalisation R2)

body
S: cuerpo
F: corps

Boolean
S: booleano
F: booléen

border area
S: zona marginal
F: bordure

border area
S: zona lateral
F: zone périphérique

both way
S: en ambos sentidos
F: à double sens

BQ cycle; response cycle
S: ciclo BQ; ciclo de respuesta
F: cycle BQ; cycle de réponse

break-in hangover time
S: tiempo de bloqueo para la intervención
F: temps de maintien pour l'intervention

broadcast communication
S: comunicación de difusión
F: communication de 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

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

burst isochronous
S: transmisión isócrona en ráfagas
F: isochronisme par paquets (isochronisme interrompu)

busy
S: ocupado; ocupación
F: occupation, occupé

busy-flash signal (sent in the backward direction)
S: señal de ocupado (transmitida hacia atrás)
F: signal d'occupation (émis dans le sens «en arrière»)

busy hour
S: hora cargada
F: heure chargée

busy period
S: periodo de ocupación ininterrumpida
F: période d'occupation ininterrompue

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

byte-serial transmission
S: transmisión de multibits en serie
F: transmission multiplet-série

C

call
S: llamada
F: appel

call
S: comunicación
F: communication

call (in software); procedure call
S: llamada (en soporte lógico); llamada de procedimiento
F: appel (en logiciel); appel de procédure

(telex) call
S: llamada (téllex); comunicación téllex
F: communication (téllex)

call abandonment probability
S: probabilidad de abandono de una tentativa de llamada
F: probabilité d'abandon (d'une tentative d'appel)

call accepted
S: llamada aceptada
F: acceptation 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 attempt, abandoned S: tentativa de llamada abandonada F: tentative d'appel abandonnée	call not accepted S: llamada no aceptada F: appel non accepté	calling line identification facility S: identificación de la línea que llama F: identification de la ligne du demandeur
call attempt, completed; call attempt, effective; call attempt, answered S: tentativa de llamada completada; tentativa de llamada eficaz; tentativa de llamada contestada F: tentative d'appel ayant abouti (tentative d'appel efficace)	call not accepted signal S: señal de rechazo de la llamada F: signal de refus d'appel	calling line identification signal S: señal de identificación de la línea que llama F: signal d'identification de la ligne appelante
call attempt, lost S: tentativa de llamada perdida F: tentative d'appel perdue	call phases S: fases de la comunicación F: phases d'une communication (service télétext)	calling network service (NS) user S: usuario servicio de red llamante; usuario SR llamante F: utilisateur du service de réseau appelant
call attempt, successful; call attempt, fully-routed S: tentativa de llamada fructuosa; tentativa de llamada totalmente encaminada F: tentative d'appel acheminée	call progress signal S: señal de progresión de la llamada F: signal de progression de l'appel	calling number indication service S: servicio de indicación del número del abonado que llama F: service d'indication du numéro du demandeur
call-back when busy terminal installation becomes free S: repetición de la llamada cuando se libera la instalación terminal ocupada F: reprise d'un appel lorsqu'une installation terminale occupée redevient libre	call release time S: tiempo de liberación de la comunicación F: temps de libération	calling party's category indicator S: indicador de la categoría del abonado que llama F: indicateur de catégorie du demandeur
call clearing delay S: tiempo de liberación de la llamada F: temps de libération	call request S: petición de comunicación F: demande de communication	calling party's category indicator S: indicador de la categoría del abonado que llama F: indicateur de la catégorie du demandeur
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 request signal S: señal de petición de llamada F: signal de demande d'appel	calling party's category signals (Signalling System R2) S: señales de categoría del abonado que llama (sistema de señalización R2) F: signal indiquant la catégorie du demandeur (système de signalisation R2)
call confirmation signal S: señal de confirmación de llamada F: signal de confirmation d'appel	call rerouting S: reencaminamiento de llamada F: réacheminement d'appel	calling signal S: señal de llamada F: signal d'appel
call congestion; probability of loss; loss S: congestión de llamadas; bloqueo de llamadas; probabilidad de pérdida; pérdida F: encombrement d'appel (probabilité de perte, perte)	call route S: ruta de llamada F: voie d'acheminement d'appel	calling SS-user S: usuario SS llamante F: utilisateur du service de session appelant
call-connected signal S: señal de comunicación establecida F: signal de communication établie	call routing S: encaminamiento de llamada F: acheminement des appels	calling station response S: respuesta de la estación llamante F: réponse du poste d'appel
call control character S: carácter de control de la llamada F: caractère de commande d'appel	call set-up time S: tiempo de establecimiento de la llamada F: temps d'établissement d'une communication	calling terminal S: terminal llamante; terminal que llama F: équipement terminal demandeur
call control procedure S: procedimiento de control de la llamada F: procédure de commande d'appel	call set-up time S: tiempo de establecimiento de la comunicación F: temps d'établissement des communications	calling tone S: tono de llamada F: tonalité d'appel
call control signals S: señales de control de la comunicación F: signaux de commande des appels	call spill-over S: rebasamiento de llamada F: empiètement de communications	calling TS user S: usuario ST llamante F: utilisateur du service de transport appelant
call demand S: demanda de llamada F: demande d'appel	call string S: cadena de llamada F: chaîne d'appel	calls barred S: llamadas prohibidas F: appels interdits (spécialisés)
call establishment S: establecimiento de la comunicación F: établissement de l'appel	call waiting services S: servicios de indicación de llamada en espera F: services d'appel en instance	cancellation (A_{CANC}) S: compensación; cancelación (A _{COMP}) F: annulation (A _{NL})
call-failure signal S: señal de llamada infructuosa F: signal d'échec de l'appel	call waiting tone S: tono de indicación de llamada en espera F: tonalité d'appel en attente	capability S: capacidad F: capacité; capabilité (d'une entité)
call identifier S: identificador de la llamada F: identificateur de communication	called line identification facility S: identificación de la línea llamada F: identification de la ligne du demandé	carrier transmission S: transmisión por portadoras F: transmission par courants porteurs
call information S: información de llamada F: information d'appel	called line identification signal S: señal de identificación de la línea llamada F: signal d'identification de la ligne appelée	cataleptic failure; catastrophic failure (deprecated) S: fallo cataleptico; fallo catastrófico (desaconsejado) F: défaillance cataleptique
call intensity S: intensidad de llamadas F: intensité d'appel	called network service (NS) user S: usuario servicio de red llamado; usuario SR llamado F: utilisateur du service de réseau appelé	category of access S: categoría de acceso F: catégorie d'accès
call intent S: intento de llamada F: intention d'appel	called SS-user S: usuario SS llamado F: utilisateur du service de session appelé	CCITT MML S: LHM del CCITT F: langage homme-machine du CCITT
	called terminal S: terminal llamado F: équipement terminal demandé	
	called TS user S: usuario ST llamado F: utilisateur du service de transport appelé	
	called/calling party address S: dirección llamada/llamante F: adresse du demandé/du demandeur	

CCITT MML

S: LHM del CCITT

F: LHM du CCITT

centralized-clock interface

S: interfaz de reloj centralizado

F: interface à horloge centralisée

centralized clock interface

S: interfaz de reloj centralizado

F: jonction à horloge centrale

centralized control signalling

S: señalización de control centralizada

F: signalisation de commande 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

centrex service

S: servicio centrex

F: service centrex

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 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

F: retour sur canal sémaphore normal
(retour sur la liaison normale)**changeback**

S: retorno (al enlace normal)

F: retour sur la liaison normale

changeback code

S: código de retorno al enlace de servicio

F: code de retour sur canal sémaphore normal

changeover

S: paso a enlace de reserva

F: passage sur canal sémaphore de secours
(passage sur liaison de réserve)**changeover**

S: paso (a un enlace de reserva)

F: 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

S: canal; canal de transmisión

F: voie; voie de transmission

channel; access channel

S: canal; canal de acceso

F: canal; canal d'accès

channel

S: canal

F: canal

channel associated signalling

S: señalización asociada al canal

F: signalisation voie par voie

channel definition

S: definición de canal

F: définition de canal

channel gate

S: puerta de canal

F: porte de canal

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 symbol

S: símbolo de canal

F: symbole de canal

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

S: carácter

F: caractère (d'écriture)

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 des caractères

character box

S: casilla de carácter

F: case de caractère

character box element

S: elemento de casilla de carácter

F: élément à case de caractère

character check

S: control por carácter

F: contrôle par caractère

character coded text

S: texto con codificación de caracteres

F: texte utilisant un codage de caractères

character cycle

S: ciclo de carácter

F: cycle de caractère

character error rate

S: proporción de errores en los caracteres

F: taux d'erreur sur les caractères

character error rate of a telegraph connection

S: tasa de errores en los caracteres de una conexión telegráfica

F: taux d'erreur sur les caractères d'une connexion télégraphique

character format

S: formato de carácter

F: format de caractère

character-interleaved transmission

S: transmisión con entrelazado de caracteres

F: transmission multiplex à caractères entrelacés

character mode transmission

S: transmisión en modo carácter

F: transmission en mode caractère

character path

S: trayecto de los caracteres

F: trajet des caractères

character rate

S: velocidad de caracteres

F: rapidité de transfert de caractères

character-serial transmission

S: transmisión de caracteres en serie

F: transmission caractère-série

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 switching

S: conmutación de caracteres

F: commutation de caractères

characteristic

S: característica

F: caractère (statistique)

characteristic distortion

S: distorsión característica

F: distorsion caractéristique

chargeable duration; charged duration

S: duración tasable; duración tasada

F: durée taxable — durée taxée

charging in progress PE

S: elemento pictográfico de tasación en curso

F: élément graphique de chargement en cours

Charstring

S: cadena de caracteres

F: chaîne de caractères

check bit

S: bit de control

F: bit de contrôle

check loop

S: bucle de pruebas de continuidad

F: 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

CHILL

S: CHILL

F: CHILL

(chromatic) dispersion

S: dispersión (cromática)

F: dispersion chromatique

circuit

S: circuito; circuito de telecomunicación

F: circuit; circuit de télécommunications

(electric) circuit

S: circuito (eléctrico)

F: circuit (électrique)

... circuit (specific function)

S: circuito de ...

F: circuit de ... (fonction déterminée)

circuit access points

S: puntos de acceso al circuito

F: point d'accès au circuit

circuit control station S: estación directora de circuito F: station directrice de circuit	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»)	coast station identity S: identidad de estación costera F: identité de la station côtière
circuit group S: haz de circuitos F: faisceau (de circuits)	clear-back signal (Signalling System R2) S: señal de colgar (sistema de señalización R2) F: signal de raccrochage (système de signalisation R2)	code S: código F: code
circuit-group-congestion signal S: señal de congestión en el haz de circuitos F: signal d'encombrement du faisceau des circuits	clear confirmation S: confirmación de liberación F: confirmation de libération	code (telegraph or data) S: código (telegráfico o de datos) F: code (télégraphique ou de données)
circuit sub-control station S: estación subdirectora de circuito F: station sous-directrice de circuit	clear confirmation delay (CLCD) S: retardo de confirmación de liberación (RCL) F: temps de confirmation de libération	code character S: carácter de código F: caractère (télégraphique)
circuit subgroup S: subhaz de circuitos F: sous-faisceaux	clear forward signal S: señal de fin (desconexión) F: signal de fin	code combination S: combinación de código F: combinaison de code
circuit-switched connection S: conexión por conmutación de circuitos F: connexion par commutation de circuits	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»)	code conversion S: conversión de código F: transcodage
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	clear forward signal (Signalling System R2) S: señal de fin (sistema de señalización R2) F: signal de fin (système de signalisation R2)	code conversion S: conversión de código F: conversion de code
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	clear request delay (CLRD) S: retardo de petición de liberación (RPL) F: temps de demande de libération	code converter S: convertidor de código; transcodificador F: transcodeur; convertisseur de code
circuit switching S: conmutación de circuitos F: commutation de circuits	clearing S: liberación F: libération	code dependent channel S: canal dependiente del código F: voie dépendante du code
circuit switching exchange; switch (circuit) S: centro de conmutación de circuitos; conmutador (de circuitos) F: commutateur de circuits	clearing signal S: señal de liberación F: signal de libération	code dependent system S: sistema dependiente del código F: système lié au code utilisé
circuit; telecommunication circuit S: circuito; circuito de telecomunicaciones F: circuit; circuit de télécommunications	clock S: reloj F: générateur de rythme; horloge	code division S: división en código F: répartition en code
circuit test access point S: punto de acceso para las medidas de circuito F: point d'accès pour les mesures de circuit	clock control signal S: señal de control de reloj F: signal de commande d'horloge	code element S: elemento de código F: élément de code
cladding S: revestimiento F: gaine	closed-circuit working S: funcionamiento en circuito cerrado F: transmission par fermeture de circuit ou par envoi de courant	code extension S: extensión de código; ampliación de código F: extension de code
cladding mode stripper S: supresor de modos propagados por el revestimiento F: supprimeur de mode de gaine	closed user group S: grupo cerrado de usuarios F: groupe fermé d'utilisateurs	code independent channel S: canal independiente del código F: voie indépendante du code
clarifying text S: texto aclaratorio F: texte explicatif	closed user group with outgoing access S: grupo cerrado de usuarios con acceso de salida F: groupe fermé d'utilisateurs avec accès sortant	code independent system S: sistema independiente del código F: système indépendant du code utilisé
class A function S: función de la clase A; función LHM F: fonction de la classe A	closed window S: ventana cerrada F: fenêtre fermée	code table S: tabla de código F: tableau de code
class B function S: función de clase B F: fonction de la classe B	co-located exchange concentrator S: concentrador de central local F: concentrateur de central local	code word S: palabra de código F: mot de code
class C function S: función de clase C F: fonction de la classe C	coast earth station (CES) S: estación terrena costera (ETC) F: station terrienne côtière (STC)	codec S: codec F: codec
class of service S: clase de servicio F: classe de service	coast earth station test position S: posición de pruebas de una estación terrena costera F: position d'essai d'une station terrienne côtière	coded character set; code S: juego de caracteres codificados; código F: jeu de caractères codés; code
(user) class of service signal S: señal de clase de servicio (de usuario) F: signal de catégorie	coast station S: estación costera F: station côtière	coded inband signalling S: señalización codificada dentro de banda F: signalisation dans la bande avec codage
clear-back signal S: señal de colgar F: signal de raccrochage		codirectional interface S: interfaz codireccional F: interface codirectionnelle
		codirectional interfaces S: interfaz codireccional F: jonction codirectionnelle
		coherent significant instant S: instante significativo coherente F: instant significatif cohérent

collection charge S: tasa de percepción F: taxe de perception	common channel exchange, intermediate S: central de canal común, intermedia F: centre utilisant un système de signalisation sur voie commune, intermédiaire	compliance test S: prueba de conformidad F: essai de conformité
combined delivery/non-delivery notification (CN) S: notificación combinada de entrega/no entrega (CN) F: notification mixte de remise ou non-remise (NM)	common channel exchange, last S: central de canal común, última F: centre utilisant un système de signalisation sur voie commune, dernier	component S: componente F: composant
combined local/transit exchange S: central combinada local/de tránsito F: centre mixte urbain et de transit	common channel signalling S: señalización por canal común F: signalisation sur voie commune; signalisation par canal sémaphore	composite loss (or gain) S: pérdida (o ganancia) compuesta F: affaiblissement (ou gain) composite
combined loss (A_{COM}) S: atenuación combinada (A _{COMB}) F: affaiblissement combiné (A _{COM})	commonality S: comunidad de diseño F: communauté de conception	composite object S: objeto compuesto F: objet composite
combined signalling sender and receiver PE S: elemento pictográfico de emisor y receptor de señalización combinados F: élément graphique d'émetteur et de récepteur de signalisation combinée	communicated text area S: zona de texto comunicado F: zone du texte communiqué	composite operations S: operaciones compuestas F: opérations composées
comfort tone S: tono de paciencia F: tonalité de file d'attente	communication S: comunicación F: communication	composite part S: parte compuesta F: partie composite
command S: instrucción (de control) F: commande	communication configuration S: configuraciones de comunicación F: configuration de la communication	compound parameter argument S: argumento de parámetro compuesto F: argument de paramètre composé
command S: instrucción; orden F: commande	communications network provider S: proveedor de red de comunicación F: fournisseur de réseau de communication	compression limiter S: limitador de compresión F: limiteur de compression
command (in MML) S: instrucción; orden (en LHM) F: commande (en LHM)	compandor advantage S: ventaja de un compansor F: avantage du compresseur-extenseur	computer language; machine language S: lenguaje de computador; lenguaje de máquina F: langage-machine
command code S: código de instrucción F: code de commande	compatibility S: compatibilidad F: compatibilité	concatenation S: concatenación F: concaténation
command entry sequence S: secuencia de introducción de instrucción F: séquence d'introduction de commande	compelled signalling (general sense) S: señalización de secuencia obligada (sentido general) F: signalisation asservie (sens général)	concealment S: ocultación F: masquage
command identifier (CI); response identifier (RI) S: identificador de instrucción (II); identificador de respuesta (IR) F: identificateur de commande (IC); identificateur de réponse (IR)	compelled signalling (fully compelled; continuous compelled) S: señalización de secuencia obligada; señalización de secuencia totalmente obligada; señalización de secuencia continuamente obligada F: signalisation asservie; signalisation entièrement asservie; signalisation continuellement asservie	concentration (in a switching stage) S: concentración (en una etapa de conmutación) F: concentration (dans un étage de commutation)
command language S: lenguaje de instrucciones; lenguaje de órdenes F: langage de commande	to compile S: compilar F: compiler	concrete syntactical form S: forma sintáctica concreta F: forme syntaxique concrète
command reference S: referencia de instrucción F: référence de commande	compiler; compiling program S: compilador; programa compilador F: compilateur	concrete syntax S: sintaxis concreta F: syntaxe concrète
command sequence number S: número secuencial de instrucción F: numéro de séquence de commande	complete fault; function-preventing fault S: avería completa F: panne complète	concurrent S: concurrente F: simultanée
comment S: comentario F: commentaire	complete telegraph channel S: canal telegráfico completo F: voie télégraphique complète	conditional (parameter) S: condicional (parámetro) F: paramètre conditionnel
comment (in MML) S: comentario (en LHM) F: commentaire (en LHM)	completion of calls to busy subscribers service S: servicio de llamadas completadas sobre un número ocupado F: service d'aboutissement d'appels adressés à des abonnés occupés	conditional expression S: expresión condicional F: expression conditionnelle
comment (in SDL) S: comentario (en LED) F: commentaire (en LDS)	completion ratio S: tasa de eficacia F: taux d'efficacité	conference call services S: servicio de comunicación pluripartita; servicio de conferencia múltiple F: service de communication conférence
common channel exchange S: central de canal común F: centre utilisant un système de signalisation sur voie commune	completion ratio; efficiency ratio; answer seizure ratio S: relación respuesta/toma; tasa de eficacia F: taux d'efficacité	conference repeater S: repetidor para conferencias F: translation pour conférence
common channel exchange, first S: central de canal común, primera F: centre utilisant un système de signalisation sur voie commune, premier		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)	connection through an exchange S: conexión a través de una central F: connexion à travers un central	continuity check transponder S: transpondedor para pruebas de continuidad F: répondeur pour contrôle de continuité
confirmation of clearing signal S: señal de confirmación de liberación F: signal de confirmation de libération	connection type; ISDN connection type S: tipo de conexión; tipo de conexión de RDSI F: type de connexion; type de connexion RNIS	continuity signal S: señal de continuidad F: signal de continuité
confirmed-service S: servicio confirmado F: service confirmé	connectivity rules S: reglas de conectividad F: règles de connectivité	continuous signal S: señal continua F: signal continu
confusion signal S: señal de confusión F: signal de confusion	connector S: conector F: connecteur	contradirectional interface S: interfaz contradiereccional F: interface contradirectionnelle
congestion tone S: tono de congestión F: tonalité d'encombrement	connector (in SDL) S: conector (en LED) F: connecteur (en LDS)	contradirectional interface S: interfaz contradiereccional F: jonction contradirectionnelle
connect signal (Signalling System R1) S: señal de toma (sistema de señalización R1) F: signal de prise (système de signalisation R1)	constant expression S: expresión constante F: expression constante	control character S: carácter de control F: caractère de commande
connected switching path pictorial element (PE) S: elemento pictográfico de trayecto de conmutación conectado F: élément graphique de chemin de commutation connecté	constant failure intensity period S: periodo de intensidad de fallos constante F: période d'intensité constante de défaillance	control character (in MML) S: carácter de control (en LHM) F: caractère de commande (en LHM)
connection S: conexión; cadena de conexión F: connexion; chaîne de connexion	constant failure rate period S: periodo de tasa de fallos constante F: période de densité constante de défaillance; période de taux constant de défaillance	control circuit S: circuito de control; circuito de conversación; circuito de órdenes F: circuit de conversation
(complete) connection S: conexión completa; cadena de conexión completa F: chaîne de connexion complète; (chemin de) communication	constant value S: valor constante F: valeur constante	control circuit S: circuito de conversación; circuito de control F: circuit de conversation
connection (communication path) S: conexión (trayecto de comunicación) F: connexion (trajet de communication)	constituent S: componente F: élément constitutif	control function S: función de control F: fonction de commande
(complete) connection (in telecommunication) S: conexión (completa) (en telecomunicaciones) F: chaîne de connexion complète, (chemin de) communication	constructor S: constructor F: constructeur	control key S: tecla de control F: touche de commande
connection accessibility S: accesibilidad de una conexión F: accessibilité	consumer's risk (point) S: (punto de) riesgo del consumidor F: (point du) risque du client	control procedure S: procedimiento de control F: procédure de commande
connection attribute; ISDN connection attribute S: atributo de conexión; atributo de conexión de RDSI F: attribut de connexion; attribut de connexion RNIS	content S: contenido F: contenu	control signalling rate S: velocidad de señalización de control F: débit de la signalisation de commande
connection configuration S: configuración de conexión F: configuration de la connexion	content portion S: porción de contenido F: portion de contenu	control station S: estación directora F: station directrice
connection element; ISDN connection element S: elemento de conexión; elemento de conexión de RDSI F: élément de connexion; élément de connexion RNIS	contents S: contenido (primario) F: contenu	controlled maintenance S: mantenimiento controlado F: maintenance dirigée
connection identity S: identidad de la conexión F: identification de connexion	continental circuit S: circuito continental F: circuit continental	controlled rerouting S: reencaminamiento controlado F: retour sous contrôle sur route normale
connection in progress S: conexión en curso F: communication en cours d'établissement	continental connection S: conexión continental F: communication continentale	controlled slip S: deslizamiento controlado F: glissement commandé
connection performance S: características de funcionamiento de la conexión F: performance relative aux connexions	continental exchange S: central continental F: centre continental	controlling exchange S: central directora F: centre directeur
connection retainability S: retención (de una conexión) F: continuité (d'une chaîne de connexion)	continuation character S: carácter de continuación F: caractère suite	controlling operator S: operadora directora F: opératrice directrice
connection section S: sección de conexión F: section de connexion sémaphore	continuity check S: prueba de continuidad F: contrôle de continuité	controlling operator S: operador director; operador controlador F: opérateur directeur
	continuity check S: prueba de continuidad F: essai de continuité	controlling station (on a circuit) S: estación directora (de un circuito) F: station directrice (sur un circuit)
	continuity check transceiver S: transmisor receptor para pruebas de continuidad; transceptor para pruebas de continuidad F: émetteur-récepteur pour essais de continuité	conventional degree of distortion S: grado convencional de distorsión F: degré conventionnel de distorsion
		convergence S: convergencia F: convergence

convergence time S: tiempo de convergencia F: temps de convergence	country-code indicator; echo-suppressor indicator (Signalling System R2) S: indicación de indicativo de país; indicación de supresor de eco (sistema de señalización R2) F: indicateurs d'indicatifs de pays et de supprimeur d'écho (système de signalisation R2)	crossbar system S: sistema de barras cruzadas F: système automatique «crossbar»
conversation time S: duración de conferencia F: durée de conversation	country (or administration) of destination S: país (o Administración) de destino F: pays (ou Administration) de destination	cumulative exchange service unaccessibility S: inaccesibilidad acumulativa de una central F: inaccessibilité au service du central accumulée
conversational mode S: modo conversacional; modo dialogado F: mode conversation; mode dialogué	country (or administration) of origin S: país (o Administración) de origen F: pays (ou Administration) d'origine	current turnoff time S: tiempo de corte de la corriente F: temps de rétablissement
conversion facility (CF) S: unidad de conversión (UC) F: unité de conversion (UC)	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	cursor S: cursor F: curseur
cooperating user agent S: agente de usuario cooperante. F: agent d'utilisateur coopérant	create S: crear F: créer	cursor control functions S: funciones de control de cursor F: fonctions de commande du curseur
core S: núcleo F: cœur	create request action S: acción de petición de crear F: action de demande de création	cursor off (COF) S: cursor inactivo F: curseur arrêté (COF)
core area S: superficie del núcleo F: zone du cœur	create request node S: nodo de petición de crear F: nœud de demande de création	cursor on (CON) S: cursor activo F: curseur en marche (CON)
core centre; cladding surface centre S: centro del núcleo; centro de la superficie del revestimiento F: centre du cœur; centre de la surface de la gaine	create request symbol S: símbolo de petición de crear F: symbole de demande de création	customer S: cliente F: client
core diameter; cladding surface diameter S: diámetro del núcleo; diámetro de la superficie del revestimiento F: diamètre du cœur; diamètre de la surface de la gaine	create symbol S: símbolo de crear F: symbole de création	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
core diameter deviation; cladding surface diameter deviation S: desviación del diámetro del núcleo; desviación de la superficie del revestimiento F: écart sur le diamètre du cœur; écart sur le diamètre de la surface de la gaine	critical defect S: defecto crítico F: défaut critique	customer recorded information service S: servicio de información grabada por el abonado F: service particulier d'information enregistrée
core tolerance field; cladding surface tolerance field S: campo de tolerancia del núcleo; campo de tolerancia de la superficie del revestimiento F: champ de tolérance du cœur; champ de tolérance de la surface de la gaine	critical defective S: defectuoso crítico F: défectueux critique	cut-off wavelength S: longitud de onda de corte F: longueur d'onde de coupure
core/cladding surface concentricity error S: error de concentricidad del núcleo/superficie del revestimiento F: erreur de concentricité cœur/surface de la gaine	critical failure S: fallo crítico F: défaillance critique	cyclic code S: código cíclico F: code cyclique
corrected equivalent resistance error S: error de resistencia equivalente corregido F: écart équivalent corrigé	critical fault S: avería crítica F: panne critique	cyclic distortion S: distorsión cíclica F: distorsion cyclique
corrected reference equivalent (CRE) (ERC) S: equivalente de referencia corregido F: équivalent de référence corrigé (ERC)	critical region S: región crítica F: région critique	
correction character S: carácter de corrección F: caractère de correction	critical state S: estado crítico F: état critique	D
corrective maintenance; repair S: mantenimiento correctivo; reparación F: maintenance corrective; réparation; dépannage	critical values S: valores críticos F: valeurs critiques	D' S: D' F: D'
correspondent (N)-entities S: entidades (N) interlocutoras F: entités (N) correspondantes	cross-exchange check (cross-office) S: verificación a través de la central F: vérification du trajet dans le central	dash (in Morse code) S: raya (en código Morse) F: trait (en code Morse)
country code S: indicativo de país F: indicatif de pays	cross-office check S: verificación a través de la central; prueba a través de la central F: vérification de la voie de conversation dans le central (le centre)	data base S: base de datos F: base de données
country-code indicator S: indicador de indicativo de país F: indicateur d'indicatif de pays	cross-office check S: prueba de continuidad a través de la central F: contrôle de continuité à travers un commutateur	data carrier failure detector S: detector de interrupción de la portadora de datos F: détecteur d'interruption de la porteuse de données
	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}	data channel S: canal de datos F: voie de données
	crossbar switch S: conmutador de barras cruzadas F: commutateur crossbar	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 signalling rate transparency S: transparencia a la velocidad binaria F: transparence du débit binaire	dBrn S: dBrn F: dBrn
data channel, analogue S: canal de datos, analógico F: voie de données analogique	data sink S: sumidero de datos F: puits de données	dBrS S: dBrS F: dBrS
data channel, digital S: canal de datos, digital F: voie de données (numérique)	data source S: fuente de datos F: source de données	DCE clear indication S: indicación de liberación por el ETCD F: indication de libération par l'ETCD
data circuit S: circuito de datos F: circuit de transmission de données	data station S: estación de datos F: station de données	DCE waiting S: ETCD en espera F: ETCD en attente
data circuit S: circuito de datos F: circuit de données	data structure S: estructura de datos F: structure de données	DEACTIVATE S: DESACTIVAR F: DÉSACTIVATION
data circuit-terminating equipment (DCE) S: equipo de terminación del circuito de datos (ETCD) F: équipement de terminaison du circuit de données (ETCD)	data switching exchange S: central de conmutación de datos F: centre de commutation de données	deactivate S: desactivar F: désactiver
data collection S: agrupación de datos F: collecte de données	data terminal equipment (DTE) S: equipo terminal de datos (ETD) F: équipement terminal de traitement de données (ETTD)	dead time S: tiempo muerto F: temps mort
data communication S: comunicación de datos F: communication de données	data transfer S: transferencia de datos F: transfert de données	deblocking S: desbloqueo F: dégroupage
data communication networks S: redes de comunicación de datos F: réseaux de communications de données	data transfer rate S: velocidad de transferencia de datos F: rapidité de transfert de données	to debug (in programming) S: depurar (en programación) F: mettre au point (en programmation)
data concentrator S: concentrador de datos F: concentrateur de données	data transfer requested S: transferencia de datos pedida F: transfert de données demandé	decentralized control signalling S: señalización de control descentralizada F: signalisation de commande décentralisée
data connection S: conexión de datos F: communication de données	data transmission S: transmisión de datos F: transmission de données	decentralized multi-endpoint-connection S: conexión de puntos extremos múltiples descentralizada F: connexion multipoint décentralisée
data element S: elemento de datos F: élément de données	data type S: tipo de datos F: type de donnée	decentralized multipoint S: multipunto descentralizado F: liaisons multipoints décentralisées
data item S: ítem de datos; elemento de datos F: objet de données; données	data type definition S: definición de tipo de datos F: définition de type de donnée	decimal numeral S: numeral decimal F: nombre décimal
data link S: enlace de datos F: liaison de données	Data User Part S: parte de usuario de datos F: Sous-système Utilisateur Données	decision S: decisión F: décision
data phase S: fase de datos F: phase de données	Data User Part handling time, T_{hu} S: tiempo de tratamiento de la parte de usuario de datos T_{hu} F: temps de traitement pour le Sous-système Utilisateur Données, T_{hu}	decision (in SDL) S: decisión (en LED) F: décision (en LDS)
data processing S: proceso de datos videotex; tratamiento de datos videotex; procesamiento de datos videotex F: traitement des données vidéotex	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	decision circuit S: circuito de decisión F: circuit de décision
data security S: seguridad de los datos F: sécurité des données	dBm S: dBm F: dBm	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
data-sensitive fault S: avería dependiente de los datos F: panne mise en évidence par les données	dBm0 S: dBm0 F: dBm0	decision name S: nombre de decisión F: nom de décision
data set S: conjunto de datos F: ensemble de données	dBm0p S: dBm0p F: dBm0p	decision node S: nodo de decisión F: nœud de décision
data signal S: señal de datos F: signal de données	dBm0s S: dBm0s F: dBm0s	decision symbol S: símbolo de decisión F: symbole de décision
data signal quality detection S: detección de la calidad de la señal de datos F: détection de la qualité du signal de données	dBQ0ps S: dBQ0ps F: dBQ0ps	decision value S: valor de decisión F: valeur de décision
data signalling rate S: velocidad binaria; velocidad de señalización de datos F: débit binaire	dBQ0s S: dBQ0s F: dBQ0s	declare! S: declarar! F: déclarer!
	dBr S: dBr F: dBr	decoder S: decodificador F: décodeur
		decoding S: decodificación F: décodage

decomposition meta-language S: metalenguaje de descomposición; metalenguaje de estructura de información F: métalangage de subdivision	delayed delivery S: entrega diferida F: remise différée	design defect S: defecto de diseño F: défaut de conception
default option S: opción por defecto; opción supletoria F: option par défaut	delete S: borrar F: suppression	design failure S: fallo de diseño F: défaillance de conception
default value S: valor por defecto F: valeur par défaut	delimit S: delimitador F: délimiteur	design fault S: avería de diseño F: panne de conception
defect S: defecto F: défaut	delivery S: entrega F: remise	to designate S: designar F: désigner
defective; defective item S: defectuoso; elemento defectuoso F: défectueux; entité défectueuse	delivery confirmation S: confirmación de entrega F: confirmation de remise	designation method S: método con designación F: méthode avec désignation
deferred maintenance S: mantenimiento diferido F: maintenance différée	delivery envelope S: sobre de entrega F: enveloppe de remise	despotic (synchronized) network S: red despótica (sincronizada) F: réseau (à synchronisation) despotique
defined display area S: zona de visualización definida F: zone de visualisation définie	delivery notification (DN) S: notificación de entrega (NE) F: notification de remise (NR)	destination S: destino F: destination
degree of early anisochronous parallel distortion S: grado de la distorsión anisócrona de adelanto en la transmisión en paralelo F: degré de distorsion parallèle anisochrone en avance	delivery of messages S: entrega de mensajes F: remise des messages	destination code S: código de destino F: code télex de destination
degree of gross start-stop distortion S: grado de distorsión arritmica global F: degré de distorsion arithmique globale	delta modulation S: modulación delta F: modulation delta	destination country (or Administration) S: país (o Administración) de destino F: pays (ou Administration) de destination
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)	demand (communication) S: demanda (comunicación) F: à la demande (communication)	destination identifier S: identificador de destino F: identificateur de destination
degree of isochronous distortion S: grado de distorsión isócrona F: degré de distorsion isochrone	demand operating S: explotación en servicio rápido F: exploitation en service rapide	destination PDN S: RPD de destino F: RPD de destination
degree of late anisochronous parallel distortion S: grado de distorsión anisócrona de retraso en la transmisión en paralelo F: degré de distorsion parallèle anisochrone en retard	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	destination point code S: código del punto de destino F: code du point de destination
degree of standardized test distortion S: grado de distorsión normalizado de prueba F: degré de distorsion d'essai normalisé	democratic network S: red democrática; red democrática mutuamente sincronizada F: réseau démocratique; réseau à synchronisation mutuelle démocratique	destination prologue S: prólogo de destino F: prologue de destination
degree of start-stop distortion S: grado de distorsión arritmica F: degré de distorsion arithmique	democratic (mutually synchronized) network S: red democrática (mutuamente sincronizada) F: réseau démocratique (à synchronisation mutuelle)	destination SFU S: UAR de destino F: UER de destination
degree of synchronous start-stop distortion; degree of start-stop distortion at the actual mean modulation rate S: grado de distorsión arritmica en el sincronismo; grado de distorsión en el sincronismo a la velocidad media real de modulación F: degré de distorsion arithmique au synchronisme; degré de distorsion arithmique à la rapidité réelle moyenne	demultiplexer S: demultiplexor F: démultiplexeur	destruction characteristic S: característica de destrucción F: conditions de destruction
delay-dialling signal (Signalling System R1) S: señal de demora (sistema de señalización R1) F: signal invitant à différer la numérotation (système de signalisation R1)	demultiplexing S: demultiplexación F: démultiplexage	determinate fault S: avería clara F: panne franche
delay mode of operation S: modo de operación con espera de llamadas F: mode d'exploitation avec attente	dependability S: seguridad de funcionamiento F: sûreté de fonctionnement	determination test S: prueba de determinación F: essai de détermination
delay time S: tiempo de demora F: délai d'attente	dependent (repeater) station S: estación telealimentada; estación de repetidores telealimentada F: station (de répéteurs) téléalimentée	device start (DST) S: arranque de dispositivo F: mise en marche dispositif (DST)
	descrambler S: desaleatorizador F: désembrouilleur	device stop (DSP) S: detención de dispositivo F: arrêt dispositif (DSP)
	description (in SDL) S: descripción (en LED) F: description (en LDS)	device wait (DW) S: espera de dispositivo F: dispositif en attente (DW)
	descriptive name S: nombre descriptivo F: nom descriptif	diagnostic code in Recommendation X.25 S: código de diagnóstico de la Recomendación X.25 F: code de diagnostic dans la Recommandation X.25
	descriptor S: descriptor F: descripteur	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: 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	digital circuit S: circuito digital; circuito de telecomunicación digital F: circuit numérique; circuit de télécommunications numérique	digital radio link S: enlace radiodigital; trayecto radiodigital F: liaison radioélectrique numérique; conduit radioélectrique numérique
dialling-time S: tiempo de marcación F: durée de numérotation	digital connection S: conexión digital F: connexion numérique	digital radio path S: trayecto radiodigital F: conduit hertzien numérique
dialogue element S: elemento de diálogo F: élément de dialogue	digital demultiplexer S: demultiplexor digital F: démultiplexeur numérique	digital radio section S: sección radiodigital F: section radioélectrique numérique
dialogue procedure S: procedimiento de diálogo F: procédure de dialogue	digital demultiplexing S: demultiplexación digital F: démultiplexage numérique	digital radio section S: sección radiodigital F: section hertzienne numérique
dialogue window S: ventana de diálogo F: fenêtre de dialogue	digital distribution frame S: repartidor digital F: répartiteur numérique	digital radio system S: sistema radiodigital F: système radioélectrique numérique
diary service S: servicio de agenda F: service de rappel de date	digital exchange S: central digital F: commutateur numérique	digital radio system S: sistema radiodigital F: système hertzien numérique
dichotomizing search S: búsqueda dicotómica F: recherche dichotomique	digital exchange S: central digital F: centre numérique	digital section S: sección digital F: section numérique
differential echo suppressor S: supresor de eco diferencial F: supprimeur d'écho différentiel	digital filling S: relleno digital F: remplissage numérique	digital signal S: señal digital F: signal numérique
differential modulation S: modulación diferencial F: modulation différentielle	digital line link S: enlace de línea digital; trayecto de línea digital F: liaison de ligne numérique; conduit de ligne numérique	digital sum S: suma digital F: somme numérique
differential pulse code modulation (DPCM) S: modulación por impulsos codificados diferencial (MICD) F: modulation par impulsions et codage différentiel (MICD)	digital line path S: trayecto de línea digital F: conduit de ligne numérique	digital sum variation S: variación de la suma digital F: variation de la somme numérique
differential sensitivity S: sensibilidad diferencial F: sensibilité différentielle	digital line section S: sección de línea digital F: section de ligne numérique	digital switching S: conmutación digital F: commutation numérique
digilogue channel S: canal digi-analógico F: voie digilogue	digital line system S: sistema de línea digital F: système de ligne numérique	digital transmission S: transmisión digital F: transmission numérique
digilogue circuit S: circuito digi-analógico F: circuit digilogue	digital link ; digital transmission link S: enlace digital; enlace de transmisión digital; trayecto digital F: liaison numérique; liaison de transmission numérique; conduit numérique	digital transmission system S: sistema de transmisión digital F: système de transmission numérique
digit S: dígito F: élément numérique	digital multiplex equipment S: equipo múltiplex digital F: équipement de multiplexage numérique	direct access S: acceso directo F: accès sélectif
digit S: cifra; dígito F: chiffre	digital multiplex hierarchy S: jerarquía de los múltiplex digitales F: hiérarchie de multiplexage numérique	direct address S: dirección directa F: adresse directe
digit position S: posición de dígito F: position d'un élément de signal; position d'un élément numérique	digital multiplexer S: multiplexor digital F: multiplexeur numérique	direct current (d.c.) signalling S: señalización en corriente continua; señalización en c.c. F: signalisation en courant continu
digit rate S: velocidad digital F: débit numérique	digital multiplexing S: multiplexación digital F: multiplexage numérique	direct current transmission S: transmisión en corriente continua F: transmission par courant continu
digit sequence integrity S: integridad de la secuencia de dígitos F: intégrité de la suite des éléments numériques	digital network ; integrated digital network S: red digital; red digital integrada F: réseau numérique; réseau numérique intégré	direct dialling-in service S: marcación directa de extensiones F: sélection directe d'un poste supplémentaire
digit time slot S: intervalo de tiempo de dígito F: créneau temporel élémentaire; intervalle de temps élémentaire	digital node ; digital switching node S: nodo digital; nodo de conmutación digital F: point nodal numérique; point nodal de commutation numérique	direct information entry S: introducción directa de información F: introduction directe d'information
digital block S: bloque digital F: bloc numérique	digital path S: trayecto digital F: conduit numérique	direct printer S: impresor directo F: récepteur traducteur imprimeur
digital channel ; digital transmission channel S: canal digital; canal de transmisión digital F: voie numérique; voie de transmission numérique		direct service circuit S: circuito de servicio directo F: circuit de service direct
		direct transit country S: país de tránsito directo F: pays de transit direct
		directive S: directriz F: directive

directly powered (repeater) station S: estación alimentada directamente; estación de repetidores alimentada directamente F: station (de répéteurs) à alimentation indépendante; station (de répéteurs) autoalimentée	distribution frame S: repartidor F: répartiteur	DTE clear request S: petición de liberación por el ETD F: demande de libération émise par l'ETTD
directory inquiry service S: servicio de información sobre guías telefónicas F: service de renseignements concernant les listes d'abonnés	distribution function S: función de distribución F: fonction de répartition	DTE controlled not ready S: ETD no preparado controlado F: ETDD non prêt commandé
directory number of a land mobile station S: número (en la guía de abonados) de una estación móvil terrestre F: numéro international de station mobile	divergence S: divergencia F: divergence	DTE uncontrolled not ready S: ETD no preparado no controlado F: ETDD non prêt automatique
disabled state; outage S: estado de incapacidad F: état d'incapacité	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	DTE waiting S: ETD en espera F: ETDD en attente
disabled time S: tiempo de incapacidad F: temps d'incapacité	do not disturb service S: servicio «no molestar» F: service «ne pas déranger»	DTE/DCE interface S: interfaz ETD/ETCD F: interface ETDD/ETCD
discharge current S: corriente de descarga F: courant de décharge	document S: documento F: document	dual seizure S: doble toma; toma simultánea F: prise simultanée
discharge current, alternating S: corriente alterna de descarga F: courant alternatif de décharge	document body S: cuerpo de documento F: corps du document	dual telephone numbers service S: servicio de duplicidad de números telefónicos F: service de numéros de téléphone doubles
discharge current, impulse S: corriente de choque de descarga F: courant de choc de décharge	document class S: clase de documento F: classe de document	to dump S: vaciar F: vider
discharge voltage S: tensión de descarga F: tension de décharge	document descriptor S: descriptor de documento F: descripteur de document	duplex; full duplex (deprecated) S: dúplex F: duplex; bilatéral simultané
discharge voltage/current characteristic S: característica tensión/corriente de descarga F: caractéristique de la tension de décharge en fonction du courant	document profile S: perfil de documento F: profil de document	duplex operation S: funcionamiento dúplex F: exploitation en duplex
disconnect signal (Signalling System R1) S: señal de fin (sistema de señalización R1) F: signal de fin (système de signalisation R1)	document structure S: estructura de documento F: structure de document	durability S: durabilidad F: durabilité
discretely-timed signal S: señal con temporización discreta F: signal discret; signal temporel discret	document transfer and interactive mode S: modo transferencia de documentos e interactivo F: transfert de documents et mode interactif	(time) duration S: duración F: durée
discretely-timed signal S: señal discretamente temporizada F: signal (temporel) discret	document transfer mode S: modo transferencia de documentos F: mode de transfert de documents	duration S: duración F: durée
disengagement delay S: retardo de abandono F: temps de retrait	documents A through G S: documentos de la A a la G F: documents A à G	duration of a call (conversation time) S: duración de conferencia F: durée de la conversation
disengagement denial probability S: probabilidad de denegación de abandono F: probabilité d'impossibilité de retrait	dot (in Morse code) S: punto (en código Morse) F: point (en code Morse)	dynamically redefinable character sets (DRCS) S: juego de caracteres dinámicamente redefinibles (JCDR) F: jeu de caractères dynamiquement redéfinissables (JCDR)
disparity S: disparidad F: disparité	double current transmission S: transmisión a doble polaridad; transmisión por corriente doble F: transmission par double courant	dynamics S: dinámica F: dynamique
display area S: zona de visualización F: zone de visualisation	double-ended synchronization S: sincronización biterminal F: synchronisation locale et distante	
display area format S: formato de la zona de visualización F: format de zone de visualisation	double phantom circuit S: circuito superfantasma F: circuit superfantôme	ear reference point (ERP) S: punto de referencia oído (PRO) F: point de référence oreille (PRO)
display area size S: tamaño de la zona de visualización; dimensiones de la zona de visualización F: dimensions de la zone de visualisation	double, triple,... error S: error doble, triple ... F: erreur double, triple ...	earcap reference plane S: plano de referencia auricular F: plan de référence écouteur
display memory S: memoria de visualización F: mémoire d'affichage	down state; internal disabled state S: estado de indisponibilidad; estado de incapacidad interna F: état d'indisponibilité; état d'incapacité interne	earcap reference point (ECRP) S: punto de referencia auricular F: point de référence écouteur (PRE)
display memory recall functions S: funciones para recordar la memoria de visualización F: fonctions de rappel de la mémoire d'affichage	down time S: tiempo de indisponibilidad F: temps d'indisponibilité	earlier transmitted bits S: bits precedentes transmitidos F: bits transmis précédemment
distributed frame alignment signal S: señal de alineación de trama distribuida F: signal de verrouillage de trame réparti	drawing convention S: convenio de dibujo F: convention de tracé	early failure period S: periodo de fallos inicial F: période initiale de défaillance
	drift compensation S: compensación de deriva F: compensation de dérive	earphone coupling loss S: pérdida de acoplamiento del auricular F: affaiblissement de couplage de l'écouteur (L _E)
	DTE busy S: ETD ocupado F: ETDD occupé	

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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 F: point de référence écouteur (PRE)
earlier transmitted bits S: bits precedentes transmitidos F: bits transmis précédemment
early failure period S: periodo de fallos inicial F: période initiale de défaillance
earphone coupling loss S: pérdida de acoplamiento del auricular 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	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)	encoder S: codificador F: codeur
earth-return phantom circuit S: circuito fantasma con vuelta por tierra F: circuit approprié; circuit télégraphique fantôme avec retour par la terre		encoding S: codificación F: codage
echo S: eco F: écho	eight kHz integrity S: integridad a 8 kHz F: intégrité de 8 kHz	encoding law S: ley de codificación F: loi de quantification; loi de codage
echo canceler S: compensador de eco; cancelador de eco F: annuleurs d'écho	electrical artificial voice S: voz artificial eléctrica F: voix artificielle électrique	end-of-block signal S: señal de término de bloque F: signal de fin de bloc
echo corrected reference equivalent S: equivalente de referencia corregido para el eco F: équivalent de référence corrigé pour l'écho	electrical speech level meter S: volúmetro F: volumètre	end of dialogue S: fin de diálogo F: fin de dialogue
echo curve S: curva de eco F: courbe d'écho	element error rate S: tasa de errores en los elementos F: taux d'erreur sur les éléments	end of output S: fin de salida F: fin de sortie
echo loss (A_{ECHO}) S: atenuación del eco (A _{ECHO}) F: affaiblissement d'écho (A _{ECHO})	element synchronism S: sincronismo de los elementos F: synchronisme élémentaire	end-of-pulsing (ST) signal S: señal de fin de numeración (SFN) F: signal de fin de numérotation
echo suppressor S: supresor de eco F: supprimeur d'écho	element synchronization S: sincronización de los elementos F: synchronisation élémentaire	end-of-pulsing signal (sent in the forward direction) S: señal de fin de numeración (transmitida hacia adelante); código 15 (sistema de señalización N.º 4) F: signal de numérotation code 15 (système n.º 4) (émis dans le sens «en avant»)
echo suppressor indicator S: indicador de supresor de eco F: indicateur de supprimeur d'écho	elementary cable section S: sección elemental de cable F: section élémentaire de câble	end-of-pulsing signal (sent in the forward direction) S: señal de fin de numeración (transmitida hacia adelante); señal ST (sistema de señalización N.º 5) F: signal de fin de numérotation (émis dans le sens «en avant») signal ST système n.º 5
echometric measurement S: medición echométrica F: mesure échométrique	elementary echo S: eco elemental F: écho élémentaire	end-of-pulsing signal (Signalling System R2) S: señal de fin de numeración (sistema de señalización R2) F: signal de fin de numérotation (système de signalisation R2)
echoplex mode S: modo ecoplex F: mode échoplex	elementary maintenance activity S: acción elemental de mantenimiento F: opération élémentaire de maintenance	end of selection S: fin de selección F: fin de sélection
EDIT S: EDITAR F: ÉDITION	elementary regenerated section S: sección elemental con regeneración F: section élémentaire régénérée	end-of-selection signal S: señal de fin de selección F: signal de fin de sélection
edit S: editar F: éditer	elementary regenerator section S: sección elemental de regeneración F: section élémentaire régénérée	end statement S: sentencia de fin F: instruction de fin
editing S: edición F: édition	elementary repeater section S: sección elemental de repetidor F: section élémentaire amplifiée	end-to-end signalling S: señalización de extremo a extremo F: signalisation de bout en bout
effective character rate S: velocidad efectiva de caracteres F: cadence utile de transfert	elementary repeatered section S: sección elemental con amplificación F: section élémentaire amplifiée	endurance test S: prueba de resistencia F: essai d'endurance
effective data transfer rate S: velocidad real de transferencia de datos F: débit effectif du transfert des données	emergency call service S: servicio de llamadas de emergencia F: service d'appels d'urgence	engaged; busy signal S: señal de ocupado; señal de ocupación F: signal d'occupation
effective duration of a call S: duración efectiva de una llamada F: durée d'une communication	emergency changeover S: paso de emergencia a enlace de reserva F: passage d'urgence sur canal sémaphore de secours	engaged test; busy test S: prueba de ocupación F: test d'occupation
effective margin (of a given apparatus) S: margen efectivo (de un aparato dado) F: marge effective (d'un appareil donné)	emergency-load-transfer signal S: señal de transferencia de tráfico de emergencia F: signal de transfert d'urgence de la charge	enquiry (in a transaction) S: averiguación (en una transacción) F: demande (dans une transaction)
effective traffic S: tráfico eficaz F: trafic efficace	emergency restart S: rearranque de emergencia F: remise en fonctionnement d'urgence	envelope S: envoltente F: enveloppe
effectively transmitted signals in sound-programme transmission S: señales efectivamente transmitidas en las transmisiones radiofónicas F: signaux effectivement transmis dans les transmissions radiophoniques	emergency routes S: rutas de emergencia F: voies de secours	envelope S: sobre F: enveloppe
effectiveness (performance) S: efectividad F: efficacité	emergency routing S: encaminamiento de emergencia F: acheminement de secours	enveloping data S: datos auxiliares F: données auxiliares
efficiency factor in time S: factor de eficacia en el tiempo F: facteur d'efficacité dans le temps	en-bloc signalling S: señalización en bloque F: signalisation «en bloc»	environment S: entorno F: représentation à n éléments
efficiency factor in time (of a transmission with automatic repetition for the correction of errors) S: factor de eficacia en el tiempo (de una	enabling condition S: condición habilitante F: condition de validation	
	enabling condition symbol S: símbolo de condición habilitante F: symbole de condition de validation	
	encoded information type S: tipo de información codificada F: type de codage	

enveloping data S: datos auxiliares F: données auxiliares	error-correcting code S: código corrector de errores F: code correcteur d'erreurs	establishment of connection S: establecimiento de conexión F: établissement de la connexion
environment S: entorno F: représentation à <i>n</i> éléments	error correcting system S: sistema corrector de errores F: système de correction d'erreurs	estimate S: estimación F: estimation
environment of a system S: entorno de un sistema F: environnement d'un système; environnement	error correction S: corrección de errores F: correction d'erreur	estimated ... S: ... estimado F: ...estimé
environment symbol S: símbolo de entorno F: symbole d'environnement	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)	estimation S: estimación (de parámetros) F: estimation (de paramètres)
equal-length code S: código de igual longitud F: code à moments	error-detecting code S: código detector de errores F: code détecteur d'erreurs	estimator S: estimador F: estimateur
equipment S: equipo F: équipement	error-detecting system S: sistema detector de errores sin repetición F: système détecteur d'erreurs sans répétition	even parity check (odd parity check) S: control de paridad par; control de paridad impar F: contrôle de parité (ou d'imparité)
equivalent binary content S: contenido binario equivalente F: contenu binaire équivalent	error free seconds (EFS) S: segundos sin error (SSE) F: secondes sans erreur (SSE)	exchange S: central F: commutateur
equivalent bit rate S: velocidad binaria equivalente F: débit binaire équivalent	error indication S: indicación de error F: indication d'erreur	exchange S: central F: central
equivalent functional behaviour S: comportamiento funcional equivalente F: comportement fonctionnel équivalent; comportement équivalent, fonctionnement équivalent	error multiplication S: multiplicación de errores F: multiplication d'erreurs	exchange call-release delay S: tiempo de liberación de la comunicación por una central F: temps de libération de la communication par le central
equivalent lip position S: posición equivalente de los labios F: position équivalente des lèvres	error multiplication factor S: factor de multiplicación de errores F: facteurs de multiplication d'erreurs	exchange call set-up delay S: tiempo de establecimiento de la comunicación por una central F: délai d'établissement de la communication (par le central)
equivalent random circuit group S: haz de circuitos aleatorios equivalente F: faisceau équivalent	error of the first kind S: error de primera clase F: erreur de première espèce	exchange call set-up delay S: tiempo de establecimiento de la comunicación por una central F: durée de sélection d'un commutateur
equivalent random traffic intensity S: intensidad de tráfico aleatorio equivalente F: intensité de trafic équivalent	error of the second kind S: error de segunda clase F: erreur de seconde espèce	exchange call set-up delay S: tiempo de establecimiento de la comunicación por una central F: temps d'établissement de la communication dans le central
equivalent resistance error S: error de resistencia equivalente F: écart équivalent	error performance parameters S: parámetros de característica de error F: paramètres relatifs à la performance d'erreur	exchange concentrator S: concentrador de central F: concentrateur de central
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	error rate monitor S: monitor de la tasa de errores F: appareil de surveillance du taux d'erreur	exchange connection S: conexión de central F: connexion de commutateur
Erlang S: erlang F: erlang	error rate of a telegraph communication S: tasa de errores de una comunicación telegráfica F: taux d'erreur d'une communication télégraphique	exchange control system S: sistema de control de la central F: système de commande du central
erroneous bit S: bit erróneo F: bit (binon) erroné	error ratio S: tasa de errores F: taux d'erreur	exchange input and output S: entrada y salida de la central F: entrée et sortie du commutateur
erroneous block S: bloque erróneo F: bloc erroné	error spread S: dispersión de errores F: étalement d'erreurs; répartition des erreurs	exchange; switching exchange; switching centre S: central; central de conmutación; centro de conmutación F: centre; central; centre de commutation; central de commutation
error S: error; error digital F: erreur; erreur numérique	escape indication S: indicación de escape F: indication d'échappement	exchange test points S: puntos de prueba de la central F: extrémités d'essai du commutateur
error burst S: ráfaga de errores F: paquet d'erreurs	escape sequence S: secuencia de escape F: séquence d'échappement	execution character S: carácter de ejecución F: caractère d'exécution
error control S: control de errores; protección contra errores F: contrôle des erreurs	essential information (of internal automatic observations) S: información esencial (de las observaciones automáticas internas) F: informations indispensables (des observations automatiques internes)	execution error; generated error S: error de ejecución F: erreur d'exécution
error control loop S: bucle de protección contra errores F: boucle de protection contre les erreurs	establishment of communication S: establecimiento de comunicación F: établissement de la communication	executive program; supervisory program; supervisor S: programa ejecutivo; programa supervisor; supervisor F: (programme) superviseur
error correcting code S: código corrector de errores F: code de correction des erreurs		

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 (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); unité de données exprès (N)

EXPORT
S: EXPORT
F: EXPORT

export operation
S: operación de exportación
F: opération d'exportation; export

EXPORTED
S: EXPORTADO
F: EXPORTED

exporter
S: exportador
F: exportateur

exposure
S: exposición
F: exposition

expression
S: expresión
F: expression

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 information provider
S: proveedor externo de información
F: fournisseur d'information externe

external Videotex host computer
S: ordenador principal videotex externo
F: ordinateur principal externe videotex

extra user information delivery probability
S: probabilidad de entrega de información de usuario adicional
F: probabilité de remise d'une information d'utilisateur excédentaire

extract!
S: extracto
F: extract!

extrapolated ...
S: ... extrapolado
F: ... extrapolé

F

facility request
S: petición de facilidad
F: demande de service complémentaire

facility request separator
S: separador de petición de facilidad
F: séparateur de demandes de service complémentaire

facsimile
S: facsimil
F: télécopie

facsimile on private networks
S: facsimil por redes privadas
F: télécopie sur réseaux privés

facsimile service
S: servicio facsimil
F: service de télécopie

facsimile terminal (facsimile machine)
S: terminal facsimil; aparato facsimil
F: terminal de télécopie; télécopieur

fail safe
S: prevención de fallos
F: protégé contre défaillances (critique); à sûreté intégrée

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 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

fault
S: avería
F: panne; dérangement

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 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 time; fault location time (deprecated)
S: tiempo de localización de avería
F: temps de localisation (de panne)

fault masking
S: enmascaramiento de avería
F: masquage de panne

fault mode; failure mode (deprecated)
S: modo de avería; modo de fallo (desaconsejado)
F: mode de panne; mode de défaillance (terme déconseillé)

fault modes and effects analysis (FMEA)
S: análisis de modos de avería y de sus efectos
F: analyse des modes de panne et de leurs effets (AMDE)

fault modes, effects and criticality analysis (FMECA)
S: análisis de los modos de avería, sus efectos y su criticidad
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 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; en avería
F: en panne

faulty link information
S: información de enlace averiado
F: information de liaison défaillante

FAX 4
S: FAX 4
F: FAX 4

field
S: campo
F: zone

field
S: campo
F: champ; domaine

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 kHz audio
S: audio a 15 kHz
F: audiofréquence de 15 kHz

fifteen supergroup assembly
S: agregado de 15 grupos secundarios
F: assemblage de 15 groupes secondaires

fifteen supergroup assembly link
S: enlace en agregado de 15 grupos secundarios
F: liaison en assemblage de 15 groupes secondaires

fifteen supergroup assembly section
S: sección de agregado de 15 grupos secundarios
F: section d'assemblage de 15 groupes secondaires

file
S: fichero
F: fichier

fill-in signal unit
S: unidad de señalización de relleno
F: trame sémaphore de remplissage

filter
S: filtro
F: 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 data multiplexer
S: primer multiplexor de datos
F: multiplexeur de données du premier ordre

fixed destination call services
S: servicio de llamada de línea directa
F: service d'appels à destination fixe

flag
S: bandera
F: fanion

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

flow line (in MML)
S: línea de flujo (en LHM)
F: ligne de liaison (en LHM)

flow line (in SDL)
S: línea de flujo (en LED)
F: ligne de liaison (en LDS)

follow current
S: corriente residual
F: courant résiduel

forced rerouting
S: reencaminamiento forzado
F: passage sous contrainte sur route de secours

form
S: formulario
F: formulaire

form filling
S: cumplimentación de un formulario
F: remplissage de formulaire

form identity
S: identidad del formulario
F: identité de formulaire

form output
S: salida de formulario
F: sortie de formulaire

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: caractère de mise en page

fortuitous distortion
S: distorsión fortuita
F: distorsion fortuite

forward channel
S: canal de ida
F: voie d'aller

forward echo
S: eco hacia adelante
F: écho vers l'aval; trainage

forward indicator bit
S: bit indicador directo
F: bit indicateur vers l'avant

forward sequence number
S: número secuencial directo
F: numéro de séquence vers l'avant

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 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»)

forward-transfer signal (Signalling System R2)
S: señal de intervención (sistema de señalización R2)
F: signal d'intervention (système de signalisation R2)

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
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

frame
S: trama
F: cadre

frame
S: casilla
F: 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 alignment time slot
S: intervalo de tiempo de alineación de trama
F: intervalle de temps de verrouillage de trame

frame resynchronization
S: resincronización de trama
F: resynchronisation de trame

framing bit
S: bit de alineación de trama
F: bit de verrouillage de trame

free circuit condition
S: estado de circuito libre
F: état de disponibilité

freephone service
S: servicio de llamadas gratuitas para el que efectúa la llamada
F: service «libre-appel»

frequency departure (normalized)
S: desviación de frecuencia (normalizada)
 $\Delta f/f$
F: erreur de fréquence (normalisée) $\Delta f/f$

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	functional block (in SDL) S: bloque funcional (en LED) F: bloc fonctionnel (en LDS)	generic address S: dirección genérica F: adresse générique
full break-in operate time S: tiempo de funcionamiento para la intervención total F: temps de fonctionnement pour l'intervention totale	functional description (FD) (in SDL) S: descripción funcional (DF) (en LED) F: description fonctionnelle (DF) (en LDS)	geographically distributed exchange S: central geográficamente distribuida F: centre géographiquement dispersé
full echo suppressor S: supresor de eco completo F: suppresneur d'écho complet	functional group S: grupo funcional F: groupe fonctionnel	geometric element S: elemento geométrico F: élément géométrique
full refund S: reembolso total F: remboursement complet	functional groups S: grupos funcionales F: groupements fonctionnels	global title S: título global F: appellation globale
fully automatic operation S: explotación automática; operación automática F: fonctionnement entièrement automatique	functional mode S: modo de funcionamiento F: mode de fonctionnement	glow current S: corriente de efluviu F: courant d'effluve
fully dissociated mode of operation S: modo de explotación enteramente disociado F: mode d'exploitation «entièrement dissocié»	functional specification (FS) (in SDL) S: especificación funcional (EF) (en LED) F: spécification fonctionnelle (SF) (en LDS)	glow-to-arc transition current S: corriente de transición de efluviu a arco F: courant de passage de régime d'effluve au régime d'arc
fully dissociated signalling S: señalización enteramente disociada F: signalisation entièrement dissociée	functional test S: prueba de funcionamiento F: essai de fonctionnement	glow voltage S: tensión de efluviu F: tension d'effluve
fully provided circuit group S: haz de circuitos totalmente provisto F: faisceau totalement fourni	functional unit S: unidad funcional F: unité fonctionnelle	government telex calls S: comunicaciones télex de Estado F: communications télex d'Etat
function S: función F: fonction	G	grade of service S: grado de servicio F: qualité d'écoulement du trafic
function (in MML) S: función (en LHM) F: fonction (en LHM)		gradual failure; degradation failure; drift failure S: fallo gradual; fallo por degradación; fallo por deriva F: défaillance progressive; dégradation; défaillance par dérive
function-affecting maintenance S: mantenimiento que afecta a la función F: maintenance affectant les fonctions	gas discharge tube S: descargador de gas F: parafoudre à gaz	graphic character S: carácter gráfico F: caractère graphique
function check-out S: verificación de funcionamiento F: vérification (de fonctionnement)	gated RQ S: punteado de RQ F: pointage de RQ	graphic code extension S: extensión del código gráfico F: extension de code graphique
function code S: código de función F: code de fonction	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	graphic element S: elemento gráfico; carácter gráfico F: caractère graphique; symbole
function-degrading maintenance S: mantenimiento con degradación de funciones F: maintenance avec dégradation; maintenance dégradant les fonctions	gateway public land mobile network (PLMN) S: red del servicio móvil terrestre público (RMTP) de cabecera F: réseau mobile terrestre public tête de ligne; RMTP tête de ligne	graphic element (of text) S: elemento gráfico (de texto) F: élément graphique (de texte)
function identification S: identificación de función F: identification de fonction	general negative recorded announcement S: anuncio grabado general negativo F: annonce enregistrée générale négative	graphic terminals S: terminales gráficos F: terminaux graphiques
function key S: tecla de función F: touche de fonction	general option S: opción general F: option générale	group S: grupo primario F: groupe primaire
function model S: modelo funcional F: modèle de fonction	general parameters (in SDL) S: parámetros generales (en LED) F: caractéristiques générales (en LDS)	group 2 S: grupo 2 F: groupe 2:
function-permitting maintenance S: mantenimiento sin discontinuidad de funciones F: maintenance en fonctionnement; maintenance en exploitation	general positive recorded announcement S: anuncio grabado general positivo F: annonce enregistrée générale positive	group 3 S: grupo 3 F: groupe 3:
function-preventing maintenance S: mantenimiento con discontinuidad de funciones F: maintenance-arrêt; maintenance empêchant l'accomplissement des fonctions	general recorded announcement S: anuncio grabado general F: annonce enregistrée générale	group 4 S: grupo 4 F: groupe 4:
functional area (or sub-area) S: zona funcional; subzona F: domaine fonctionnel; sous-domaine	general telecommunications information service S: servicio de información general sobre telecomunicaciones F: service de renseignements généraux sur les télécommunications	group (of facsimile terminals) S: grupo (de terminales facsimil) F: groupe (de télécopieurs)
functional block S: bloque funcional F: bloc fonctionnel	generator S: generador F: générateur	group 4 facsimile apparatus S: aparato facsimil del grupo 4 F: télécopieur du groupe 4
	generic S: genérico F: générique	group calls S: llamadas a grupos (de barcos) F: appels destinés à des groupes de navires
		group delay S: retardo de grupo F: temps de propagation de groupe

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 d'instruction

guidelines
S: línea directriz; línea maestra
F: instructions

H

H'
S: H'
F: H'

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

Hamming distance
S: distancia Hamming
F: distance de Hamming

hand-off
S: transferencia
F: passage sur une autre liaison

hands free (telephone) set
S: aparato telefónico de manos libres; teléfono de manos libres
F: poste (téléphonique) mains libres

hang-up signal (Signalling System R1)
S: señal de colgar (sistema de señalización R1)
F: signal de raccrochage [du demandé] (système de signalisation R1)

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

head-on collision
S: colisión frontal
F: double prise (sur circuit mixte); collision frontale

header
S: encabezamiento
F: en-tête

heading
S: encabezamiento
F: en-tête

headset; operator telephone set
S: casco telefónico; aparato telefónico de operadora
F: casque; appareil téléphonique d'opératrice

help output
S: salida de ayuda
F: sortie d'assistance

heterochronous
S: heterócrono
F: hétérochrone

heterogeneous multiplex
S: multiplex heterogéneo
F: multiplex hétérogène

hexadecimal numeral
S: numeral hexadecimal
F: nombre hexadécimal

hierarchic mutually synchronized network
S: red jerárquica mutuamente sincronizada
F: réseau hiérarchisé à synchronisation mutuelle

hierarchic network
S: red jerárquica; red con sincronización jerárquica
F: réseau hiérarchisé; réseau à synchronisation hiérarchisée

hierarchical transmultiplexer
S: transmultiplexor jerárquico
F: transmultiplexeur hiérarchique

high level language (HLL)
S: lenguaje de alto nivel
F: langage évolué

high usage circuit group
S: haz de circuitos de gran utilización
F: faisceau débordant

higher layer functions
S: funciones de capa superior
F: fonctions des couches supérieures

highlighting
S: resaltación
F: renforcement

highway
S: arteria; bus
F: bus; jonction multiplex interne

(time division) highway (in switching); bus
S: canal principal (por división en el tiempo) (en conmutación)
F: canal (à multiplexage dans le temps)

holding time; completion 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

home mobile service switching centre (MSC)
S: centro de conmutación de servicio móvil (CCM) de domicilio
F: centre de commutation pour les services mobiles de rattachement; CCM de rattachement

home position
S: posición inicial
F: position initiale

home public land mobile network (PLMN)
S: red del servicio móvil terrestre público (RMTP) de domicilio
F: réseau mobile terrestre public de rattachement; RMTP de rattachement

homochronous
S: homócrono
F: homochrone

homogeneous multiplex
S: multiplex homogéneo
F: multiplex homogène

homogeneous section
S: sección homogénea
F: section homogène

homogeneous structure
S: estructura homogénea
F: structure homogène

housekeeping information
S: información de servicio
F: information de service

hypothetical reference circuit
S: circuito ficticio de referencia
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 circuit; nominal maximum circuit
S: circuito ficticio de referencia
F: circuit fictif de référence

hypothetical reference connection (in telegraphy)
S: conexión ficticia de referencia (en telegrafía)
F: communication fictive de référence (en télégraphie)

I

ideal instant
S: instante ideal
F: instants idéals

identification invitation
S: invitación a identificación
F: invitation à identification

identification procedure
S: procedimiento de identificación
F: procédure d'identification

identifier
S: identificador
F: identificateur

identifier (in MML)
S: identificador (en LHM)
F: identificateur (en LHM)

idle character
S: carácter no significativo
F: caractère blanc

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 S: imagen F: image	incorrect access probability S: probabilidad de acceso incorrecto F: probabilit�� d'acc��s incorrect	information structure (diagram) S: diagrama de estructura de informaci��n F: structure d'information (diagramme)
image area S: zona de imagen F: zone d'image	incorrect charging or accounting probability S: probabilidad de tarificaci��n o de contabilizaci��n incorrectas F: probabilit�� de taxation erron��e	information transfer S: transferencia de informaci��n F: transfert d'information
implicit transition S: transici��n impl��cita F: transition implicite	incorrect signal S: se��al incorrecta F: signal incorrect	information transfer capability S: capacidad de transferencia de informaci��n F: possibilit�� de transfert d'information
IMPORT S: IMPORT F: IMPORT	indenture level (for maintenance) S: nivel de intervenci��n (para el mantenimiento) F: niveau d'intervention (pour la maintenance)	information transfer mode S: modo de transferencia de informaci��n F: mode de transfert d'information
import operation S: operaci��n de importaci��n F: op��ration d'importation; import	indeterminate fault S: aver��a indeterminada F: panne ind��termin��e	information transfer rate S: velocidad de transferencia de informaci��n F: d��bit de transfert d'information
IMPORTED S: IMPORTADO F: IMPORTED	indication S: indicaci��n F: indication	information unit S: unidad de informaci��n F: unit�� d'information
imported value S: valor importado F: valeur import��e	indication (primitive) S: indicaci��n (primitiva) F: indication (primitive)	inherent distortion (of a transmission channel) S: distorsi��n propia (de un canal de transmisi��n) F: distorsion propre
importer S: importador F: importateur	indicator S: indicador F: indicateur	inhibit S: inhibir F: interdire
impulse spark-over voltage/time curve S: curva de tensi��n de cebado por choque/tiempo F: courbe de tension d'amor��age au choc en fonction du temps	indirect address S: direcci��n indirecta F: adresse indirecte	initial address message (IAM) S: mensaje inicial de direcci��n (MID) F: message initial d'adresse (MIA)
impulse waveform S: forma de onda de un impulso de choque F: forme d'onde de choc	infix operator S: operador de infijo F: op��rateur infix��	initial address message (IAM) S: mensaje inicial de direcci��n (MID) F: message d'adresse initial (IAM)
IN S: DENTRO F: IN	information S: informaci��n F: information	initial alignment S: alineaci��n inicial F: alignement initial
inaccessible field S: campo inaccesible; campo de salida F: champ inaccessible	information bearer channel S: canal soporte de informaci��n F: voie porteuse de l'information	initial signal unit (ISU) S: unidad inicial de se��nalizaci��n (UIS) F: unit�� de signalisation initiale (ISU)
inactive character S: car��cter inactivo F: caract��re inactif	information bits S: bits de informaci��n F: bits (binons) d'information	initial signal unit alignment S: alineaci��n inicial de unidades de se��nalizaci��n F: alignement initial des trames s��maphores
inactive signalling link S: enlace de se��nalizaci��n inactivo F: canal s��maphore (�� l'��tat) inactif	information channel S: canal de transferencia de informaci��n F: voie de transfert des informations	initialize S: inicializar F: initialiser
in-band signalling S: se��nalizaci��n dentro de banda F: signalisation dans la bande	information entity S: entidad de informaci��n F: entit�� d'information	initiator S: iniciadora F: entit�� appelante
in-call S: en comunicaci��n F: communication en cours	information entry S: introducci��n de informaci��n F: introduction d'information	initiator S: iniciadora F: SPM appelante
in-call rearrangement S: reestructuraci��n en comunicaci��n F: remaniement des liaisons pendant la communication	information entry through form filling S: introducci��n de informaci��n mediante cumplimentaci��n de formulario F: introduction d'information par remplissage de formulaire	inlet S: entrada (en conmutaci��n); acceso de entrada F: acc��s d'arriv��e
incoming call barring service S: servicio de prohibici��n de llamadas entrantes F: service de limitation des appels d'arriv��e	information entry through menu-item selection S: introducci��n de informaci��n mediante selecci��n del elemento del men�� F: introduction d'information par s��lection en mode menu	inlet S: acceso de entrada F: acc��s entrant
incoming channel S: canal entrante F: canal d'arriv��e	information (inquiry) facility S: facilidad (de petici��n) de informaci��n F: service compl��mentaire des renseignements (enqu��tes)	IN/OUT S: DENTRO/FUERA F: IN/OUT
incoming response delay S: duraci��n de la preselecci��n F: d��lai de r��ponse �� l'arriv��e	information feedback system S: sistema corrector de errores con retorno de la informaci��n F: syst��me correcteur d'erreurs par retour de l'information	INPUT S: INTRODUCIR F: ENTR��E
incoming response delay S: duraci��n de la preselecci��n F: dur��e de pr��s��lection	information field S: campo de informaci��n F: champ d'information	input S: entrada F: entr��e
incoming response delay S: duraci��n de la preselecci��n F: temps de r��ponse �� la prise d'un circuit d'arriv��e	information rate S: velocidad de informaci��n F: d��bit d'information	input (in MML) S: entrada (en LHM) F: entr��e (en LHM)
incoming traffic S: tr��fico entrante F: trafic entrant	information security S: seguridad de la informaci��n F: s��curit�� de l'information	input (in SDL) S: entrada (en LED) F: entr��e (en LDS)
in-connector S: conector de entrada F: connecteur d'entr��e		

input acknowledgement S: acuse de entrada F: accusé de réception d'entrée	Integer S: entero F: entier	intercontinental connection S: conexión intercontinental F: communication intercontinentale
input action S: acción de entrada F: action d'entrée; entrée	integrated digital network S: red digital integrada F: réseau numérique intégré	intercontinental transit circuit S: circuito intercontinental de tránsito F: circuit intercontinental de transit
input error S: error de entrada F: erreur d'entrée	integrated digital transmission and switching S: transmisión y conmutación digitales integradas F: transmission et commutation numériques intégrées	intercontinental transit exchange S: central intercontinental de tránsito F: centre intercontinental de transit
input error information S: información de error de entrada F: information d'erreur d'entrée	integrated services digital network (ISDN) S: red digital de servicios integrados (RDSI) F: réseau numérique avec intégration des services (RNIS)	interface S: interfaz F: jonction; interface
input message acknowledgement (IMA) S: acuse de recibo de mensaje introducido (IMA) F: accusé de dépôt (IMA)	integrated services exchange S: central de servicios integrados F: central avec intégration des services	interface adaptor S: adaptador de interfaces F: adaptateur de jonctions
input node S: nodo de entrada F: nœud d'entrée	integrated services network S: red de servicios integrados F: réseau avec intégration des services	interface control functions S: funciones de control del interfaz F: fonctions de commande d'interface
input port S: puerto de entrada F: port d'entrée	intelligible crosstalk components S: componentes de diafonía inteligible F: composantes de diaphonie intelligible	interface rate S: velocidad de interfaz F: débit à l'interface
input signal S: señal de entrada F: signal d'entrée	inter-telex SFU messages (IM) S: mensajes entre UAR télex (MEU) F: messages entre UER télex (IM)	interface specification S: especificación de interfaz F: spécification d'interface
input symbol S: símbolo de entrada F: symbole d'entrée	interaction error (man-machine) S: error de interacción (hombre-máquina) F: erreur d'interaction (homme-machine)	interface structure; ISDN user-network interface structure S: estructura de interfaz; estructura de interfaz usuario-red; estructura de interfaz usuario-red de la RDSI F: structure d'interface; structure d'interface usager-réseau; structure d'interface RNIS usager-réseau
insert! S: insertar! F: insert!	interaction management S: gestión de interacción F: gestion de l'interaction	intermediate character S: carácter intermedio F: caractère intermédiaire
in-slot signalling S: señalización dentro del intervalo F: signalisation dans le créneau temporel	interaction request output S: salida de petición de interacción F: sortie de demande interactive	intermediate distribution frame S: repartidor intermedio F: répartiteur intermédiaire
instance S: instancia F: instance	interactive mode S: modo interactivo F: mode interactif	intermediate equipment S: equipo intermedio F: équipement intermédiaire
instant of time S: instante de tiempo F: instant	interactive operating sequence S: secuencia de funcionamiento interactivo F: séquence d'exploitation interactive	intermittent fault; volatile fault; transient fault S: avería intermitente; avería transitoria F: panne intermittente; panne temporaire
instantaneous availability A(t) S: disponibilidad instantánea A(t) F: disponibilité (instantanée) [A(t)]	interband telegraphy S: telegrafía interbanda F: télégraphie interbandes	internal blocking S: bloqueo interno F: blocage interne
instantaneous availability of a leased circuit S: disponibilidad instantánea de un circuito arrendado F: disponibilité instantanée d'un circuit loué	interception of calls service S: servicio de interceptación de llamadas F: service d'interception d'appels	internal information provider S: proveedor interno de información F: fournisseur d'information interne
instantaneous exchange unaccessibility S: inaccesibilidad instantánea de una central F: inaccessibilité instantanée du central	interchange S: intercambio F: échange	internal loss probability S: probabilidad de pérdida interna F: probabilité de perte interne
(instantaneous) failure intensity z(t) S: intensidad (instantánea) de fallos z(t) F: intensité (instantanée) de défaillance [z(t)]	interchange format S: formato de intercambio F: format d'échange	internal traffic S: tráfico interno F: trafic interne
(instantaneous) failure rate λ(t) S: tasa (instantánea) de fallos λ(t) F: densité (temporelle) (instantanée) de défaillance; taux (instantané) de défaillance [λ(t)]	inter-character rest condition S: condición de reposo entre caracteres F: condition de repos intercalaire entre les caractères	international alphabet No. 5 (IA5) S: alfabeto internacional N.º 5 (AI N.º 5) F: alphabet international n° 5 (AI n° 5)
instantaneous ... S: ... instantáneo F: ...instantané	interconnected store and forward S: almacenamiento y retransmisión con interconexión F: enregistrement et retransmission avec interconnexion	international automatic circuit S: circuito automático internacional F: circuit automatique international
(instantaneous) repair rate μ(t) S: tasa (instantánea) de reparaciones μ(t) F: densité (temporelle) (instantanée) de réparation, [μ(t)]	interconnected transit store and forward S: almacenamiento y retransmisión en tránsito con interconexión F: enregistrement et retransmission en transit avec interconnexion	international chain S: cadena internacional F: chaîne internationale
instantaneous unavailability U(t) S: indisponibilidad instantánea U(t) F: indisponibilité (instantanée) [U(t)]	intercontinental circuit S: circuito intercontinental F: circuit intercontinental	international circuit S: circuito internacional F: circuit international
instantiation S: instanciación F: instantiation		international connection S: conexión internacional F: communication internationale

international exchange S: central internacional F: centre international	International network management S: gestión de la red internacional F: gestion du réseau international	international television centre (ITC) S: centro internacional de televisión (CIT) F: centre télévisuel international (CTI)
international leased circuit S: circuito internacional arrendado F: circuit international loué	international number S: número internacional F: numéro international	international television circuit S: circuito internacional de televisión F: circuit télévisuel international
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 number of mobile station S: número internacional de estación móvil F: numéro international de station mobile	international television connection S: conexión internacional de televisión F: communication télévisuelle internationale
international line S: línea internacional F: ligne internationale	international prefix S: prefijo internacional F: préfixe international	international television link S: enlace internacional de televisión F: liaison télévisuelle internationale
international link S: enlace internacional F: liaison internationale	international public facsimile service S: servicio facsimil público internacional F: service public international de télécopie	international television programme centre (ITPC) S: centro internacional de televisión (CIT) F: centre télévisuel international (CTI)
international main section S: sección principal internacional F: section internationale principale	international section S: sección internacional F: section internationale	international television transmission S: transmisión internacional de televisión F: transmission télévisuelle internationale
international mobile station identity (IMSI) S: identidad de estación móvil internacional (IEMI) F: identité internationale de la station mobile (IISM)	international selection sequence S: secuencia de selección internacional F: numéro de batterie	international telex position S: posición télex internacional F: position télex internationale
international multiple destination sound-programme circuit S: circuito radiofónico internacional con destinos múltiples F: circuit radiophonique international à destinations multiples	international sound programme centre (ISPC) S: centro radiofónico internacional (CRI) F: centre radiophonique international (CRI)	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 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 sound-programme centre (ISPC) S: centro radiofónico internacional (CRI) F: centre radiophonique international (CRI)	international transferred account telegraph service S: servicio internacional de cuentas telegráficas transferidas F: service international de comptes télégraphiques transférés
international multiple destination sound-programme connection S: conexión radiofónica internacional con destinos múltiples F: communication radiophonique internationale à destinations multiples	international sound-programme circuit S: circuito radiofónico internacional F: circuit radiophonique international	international transit exchange S: central de tránsito internacional F: centre de transit international
international multiple destination sound-programme link S: enlace radiofónico internacional F: liaison radiophonique internationale	international sound-programme connection S: conexión radiofónica internacional F: communication radiophonique internationale	international transit store and forward S: almacenamiento y retransmisión internacional en tránsito F: enregistrement et retransmission en transit au niveau international
international multiple destination television circuit S: circuito internacional de televisión con destinos múltiples F: circuit télévisuel international à destinations multiples	international sound-programme transmission S: transmisión radiofónica internacional F: transmission radiophonique internationale	international two-stage selection S: selección internacional de dos etapas F: numérotation internationale en deux temps
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 store and forward S: almacenamiento y retransmisión internacional F: enregistrement et retransmission au niveau international	international user class of service S: clase de servicio de usuario internacional F: catégorie d'usagers du service international
international multiple destination television connection S: conexión internacional de televisión con destinos múltiples F: communication télévisuelle internationale à destinations multiples	international telegraph alphabet No. 1 (ITA1) S: alfabeto telegráfico internacional N.º 1 (ATI N.º 1) F: alphabet télégraphique international n° 1 (ATI n° 1)	interpersonal messaging (IPM) S: mensajería interpersonal (MIP) F: messagerie de personne à personne (IPM)
international multiple destination television link S: enlace internacional de televisión con destinos múltiples F: liaison télévisuelle internationale à destinations multiples	international telegraph alphabet No. 2 (ITA2) S: alfabeto telegráfico internacional N.º 2 (ATI N.º 2) F: alphabet télégraphique international n° 2 (ATI n° 2)	interpersonal messaging service S: servicio de mensajería interpersonal F: service de messagerie de personne à personne
	international telegraph alphabet No. 3 (ITA3) S: alfabeto telegráfico internacional N.º 3 (ATI N.º 3) F: alphabet télégraphique international n° 3 (ATI n° 3)	interpersonal messaging system (IPMS) S: sistema de mensajería interpersonal (SMIP) F: système de messagerie de personne à personne (IPMS)
	international telegraph alphabet No. 4 (ITA4) S: alfabeto telegráfico internacional N.º 4 (ATI N.º 4) F: alphabet télégraphique international n° 4 (ATI n° 4)	interrogate S: interrogar F: interroger
	international telephone connection S: conexión telefónica internacional F: communication téléphonique internationale	interrupt; 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

interworking
S: interfuncionamiento
F: interfonctionnement

interworking between networks
S: interfuncionamiento entre redes
F: interfonctionnement entre réseaux

interworking between Teletex and other services
S: interfuncionamiento del servicio teletex con otros servicios
F: interfonctionnement entre le service télétext et d'autres services

interworking between user classes of services
S: interfuncionamiento entre clases de servicio de usuario
F: interfonctionnement entre catégories d'utilisateurs du service

interworking in the Teletex service between different networks
S: interfuncionamiento de redes diferentes en el servicio teletex
F: interfonctionnement, dans le service télétext, entre des réseaux différents

interworking with other Telematic services
S: interfuncionamiento con otros servicios de telemática
F: interfonctionnement avec d'autres services télématiques

intra-concha (receiver to ear) coupler
S: acoplador intraconcha (receptor a oído)
F: coupleur (récepteur-oreille) intra-conque

intra-concha receiver
S: receptor intraconcha
F: récepteur intra-conque

intradband transmission
S: telegrafía intrabanda
F: télégraphie intrabande

intrinsic ... ; inherent ...
S: ... intrínseco; ... inherente
F: ... intrinsèque; ... inhérent

intrusion tone
S: tono de intervención
F: tonalité d'intrusion

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

to invoke
S: invocar
F: appeler

I/O devices
S: dispositivos de entrada/salida
F: dispositif d'entrée/sortie

IP-message
S: mensaje IP
F: message IP

IPM-status-report
S: informe de estado de MIP
F: rapport d'état d'IPM

irregularity reflection coefficient
S: coeficiente de reflexión de las irregularidades
F: facteur de réflexion sur les irrégularités

ISDN connection
S: conexión de RDSI
F: connexion RNIS

isochronous
S: isócrono
F: isochrone

isochronous transmission
S: transmisión isócrona
F: transmission isochrone

item description
S: descripción del elemento
F: description de rubrique

item ; entity
S: elemento; entidad
F: entité; individu

item selection procedure
S: procedimiento de selección de un elemento
F: procédure de sélection de rubrique

iteration
S: iteración
F: itération

J

jitter
S: fluctuación de fase
F: gigue

job
S: trabajo
F: tâche

job area
S: zona de trabajo
F: domaine de tâches

junction (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

justifying digit
S: dígito de justificación
F: élément numérique de justification

K

key ; tag ; label
S: clave; etiqueta
F: clé; étiquette; label

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

KP signal (Signalling System R1)
S: señal KP (sistema de señalización R1)
F: signal KP [«Key Pulsing» = début de numérotation] (système de signalisation R1)

L

label
S: etiqueta
F: étiquette

laboratory test
S: prueba de laboratorio
F: essai en laboratoire

land station charge
S: tasa terrestre
F: taxe terrestre

landline charge
S: tasa de línea
F: taxe de ligne

language or discriminating digit (Signalling System R2)
S: cifra de idioma o de discriminación (sistema de señalización R2)
F: chiffre de langue ou de discrimination (système de signalisation R2)

last choice circuit group
S: haz de circuitos de última elección
F: faisceau de dernier choix

latent fault
S: avería latente
F: panne latente

layer
S: capa
F: couche; niveau

layer interface
S: interfaz de capa
F: interface de couche

layer interface
S: interfaz de capa
F: 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	line-out-of-service signal S: señal de línea fuera de servicio F: signal de ligne hors service	local number S: número local F: numéro local
layout directive S: directriz de disposición F: directive de présentation	line signalling S: señalización de línea F: signalisation de ligne	local reference S: referencia local F: référence locale
layout object S: objeto de disposición F: objet de présentation	line-up period S: periodo de ajuste F: période de réglage	local (telephone) system; local (telephone) circuit S: sistema (telefónico local) F: système (téléphonique) local (STL); circuit (téléphonique) local
layout option S: opción de estructuración; opción de disposición F: option de présentation	linear analogue control S: control analógico lineal F: synchronisation analogique linéaire	local telex number S: número de télex local F: numéro télex local
layout structure S: estructura de disposición F: structure de présentation	link S: enlace F: liaison	local-title S: título local F: appellation locale
leak time S: tiempo de fuga F: temps de fuite	link (in the crossbar system) S: enlace; conexión interna (en el sistema de barras cruzadas) F: maillon (dans le système automatique crossbar)	local variable S: variable local F: variable locale
learning process S: aprendizaje F: apprentissage	link (in programming) S: enlace (en programación) F: lien (en programmation)	localization of faults S: localización de averías F: localisation des dérangements
lease S: arriendo F: location	link; transmission link S: enlace; enlace de transmisión F: liaison; liaison de transmission	location area S: zona de posición F: zone de localisation
leased circuit data transmission service S: servicio de transmisión de datos por circuitos arrendados F: service de location de circuits pour transmission de données	to link (in programming) S: enlazar (en programación) F: relier (en programmation)	location information S: información de posición F: information de position
lecture call service S: servicio de conferencia múltiple unidireccional F: service de communication conférence unilatérale	link access protocol (LAP) S: protocolo de acceso al enlace F: protocole d'accès à la liaison (PAL)	location register S: registrador de posición F: enregistreur de position
length field S: campo de longitud F: champ de longueur	link-by-link signalling S: señalización enlace por enlace F: signalisation section par section	logical channel S: canal lógico F: voie logique
length indicator S: indicador de longitud F: indicateur de longueur	link status signal unit S: unidad de señalización del estado del enlace F: trame sémaphore d'état du canal sémaphore	logical object S: objeto lógico F: objet logique
length, length indicator S: longitud; indicador de longitud F: longueur; indicateur de longueur	literal S: literal F: littéral	logical structure S: estructura lógica F: structure logique
letter S: letra F: lettre	load capacity S: capacidad de carga F: capacité de charge	logistic delay S: retardo logístico F: délai logistique
level of abstraction S: nivel de abstracción F: niveau d'abstraction; niveau	load-sharing (general) S: compartición de carga F: partage de la charge (en général)	lone signal unit (LSU) S: unidad aislada de señalización (UAS) F: unité de signalisation solitaire (LSU)
level of maintenance S: nivel de mantenimiento F: niveau de maintenance	load transfer S: transferencia de tráfico F: transfert de la charge	long-term bit error rate S: tasa de errores en los bits a largo plazo F: taux d'erreur à long terme sur les bits
limit test S: prueba en los límites F: essai aux limites	load transfer acknowledgment signal S: señal de acuse de recibo de transferencia de tráfico F: signal d'accusé de réception du transfert de la charge	loop/disconnect signalling S: señalización por interrupción del bucle F: signalisation par ouverture de boucle
line access points S: puntos de acceso a la línea F: points d'accès à la ligne	load transfer signal S: señal de transferencia de tráfico F: signal de transfert de la charge	loss mode of operation S: modo de operación con pérdida de llamadas F: mode d'exploitation avec perte
line code S: código de línea; código en línea F: code en ligne	local end (with its termination) S: conjunto terminal F: ensemble terminal	loss of frame alignment detector S: detector de pérdida de alineación de trama F: détecteur de perte de verrouillage de trame
line concentrator; stand alone concentrator S: concentrador de líneas; concentrador independiente F: concentrateur de lignes; concentrateur autonome	local exchange S: central local F: central urbain	lost call S: llamada perdida F: appel perdu
line digit rate S: velocidad digital de línea F: débit numérique en ligne	local line network S: red local de líneas (telefónicas) F: réseau local de lignes (téléphoniques)	lost traffic S: tráfico perdido F: trafic perdu
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.)	local matter S: asunto local F: initiative locale	loudness rating S: índice de sonoridad F: équivalent pour la sonie
	local mode S: modo local F: mode local	loudspeaking (telephone) set S: aparato telefónico con altavoz; teléfono de altavoz F: poste (téléphonique) à haut-parleur; téléphone à haut-parleur

low level language
S: lenguaje de bajo nivel
F: langage lié au calculateur

lower layer functions
S: funciones de capa inferior
F: fonctions des couches inférieures

lower window edge
S: borde inferior de ventana
F: limite inférieure de fenêtre

M

macro
S: macro
F: macro

macro definition
S: definición de macro
F: définition de macro

macro symbol
S: símbolo de macro
F: symbole de macro

macroinstruction ; macro (instruction)
S: macroinstrucción
F: macro-instruction

main distribution frame
S: repartidor principal
F: répartiteur d'entrée

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 (performance)
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 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 echelon ; line of maintenance
S: escalón de mantenimiento; línea de mantenimiento
F: échelon de maintenance

maintenance entity
S: célula de mantenimiento
F: cellule de maintenance

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 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
S: defectuoso mayor
F: défectueux majeur

major fault
S: avería mayor
F: panne majeure

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

management domain (MD)
S: dominio de gestión (DG)
F: domaine de gestion (MD)

management inhibit
S: inhabilitación en gestión de tráfico de señalización
F: inhibition par la gestion

management signals
S: señales de gestión
F: signaux de gestion

manual answering
S: respuesta manual
F: réponse manuelle

manual calling
S: llamada manual
F: appel manuel

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

to map (over)
S: aplicar; correlacionar
F: appliquer

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 centre
S: centro marítimo; estación terrena costera
F: centre maritime; station terrienne côtière

maritime local circuit
S: circuito marítimo local
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 data switching exchange (MSDSE)
S: central de conmutación de datos del servicio marítimo por satélite (CCDMS)
F: centre de commutation de données maritime par satellite (CCDMS)

maritime satellite data transmission system
S: sistema de transmisión de datos marítimo por satélite
F: système de transmission de données maritime par satellite

maritime satellite system
S: sistema marítimo por satélite
F: système maritime à satellites

maritime terminal S: terminal marítimo F: terminal maritime	mean ...; average ... (deprecated) S: ... medio (adjetivo); promedio (desaconsejado) F: ... moyen	mesochronous S: mesócrono F: mésochrome
maritime terrestrial circuit S: circuito marítimo terrenal F: circuit terrestre du système maritime	mean repair rate, $\bar{\mu}(t_1, t_2)$ S: tasa media de reparaciones $\bar{\mu}(t_1, t_2)$ F: densité (temporelle) moyenne de réparation $[\bar{\mu}(t_1, t_2)]$	message S: mensaje F: message
maritime terrestrial circuit S: circuito marítimo terrenal F: circuit maritime terrestre	mean repair time (MRT) S: tiempo medio de reparación F: durée moyenne de réparation	message block S: bloque de mensaje F: bloc message
maritime test terminal (MTT) S: terminal marítimo de pruebas (TMP) F: terminal d'essai maritime (TEM)	mean service access delay S: retardo medio de acceso a un servicio F: durée moyenne d'accès	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/remise du texte
mark condition (in Morse code only) S: trabajo (en código Morse) F: travail (en code Morse)	mean service provisioning time S: tiempo medio de espera (para la prestación de un servicio) F: délai moyen pour la fourniture d'un service	message feedback S: control con retorno de la información F: contrôle par retour de l'information
mark; space; marking; spacing S: trabajo; reposo F: travail; repos	mean time between failures (MTBF) S: tiempo medio entre fallos (MTBF) F: moyenne des temps entre défaillances (MTBF)	message handling address S: dirección del tratamiento de mensajes F: adresse de messagerie
master clock S: reloj maestro F: horloge maîtresse	mean time between interruptions S: tiempo medio entre interrupciones F: durée moyenne entre interruptions	message handling system (MHS) S: sistema de tratamiento de mensajes (STM) F: système de messagerie (MHS)
mastergroup S: grupo terciario F: groupe tertiaire	mean time to failure (MTTF) S: tiempo medio hasta el fallo (MTTF) F: durée moyenne de fonctionnement avant défaillance (MTTF)	message-refusal signal S: señal de mensaje rechazado F: signal de refus de message
mastergroup link S: enlace en grupo terciario F: liaison en groupe tertiaire	mean time to first failure (MTTFF) S: tiempo medio hasta el primer fallo F: durée moyenne de fonctionnement avant la première défaillance	message relay service S: servicio de retransmisión de mensajes; servicio de mensaje diferido F: service de transmission de messages
mastergroup section S: sección de grupo terciario F: section de groupe tertiaire	mean time to restoration; mean time to recovery (MTTR); 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)	message signal unit S: unidad de señalización de mensaje F: trame sémaphore de message
maximum justification rate S: velocidad máxima de justificación F: débit maximal de justification	mean unavailability $\bar{U}(t_1, t_2)$ S: indisponibilidad media $\bar{U}(t_1, t_2)$ F: indisponibilité moyenne, $\bar{U}(t_1, t_2)$	message suffix S: sufijo de mensaje F: suffixe de message
maximum theoretical numerical aperture S: apertura numérica teórica máxima F: ouverture numérique théorique maximale	mean up time (MUT) S: tiempo medio de disponibilidad (TMD) F: temps moyen de disponibilité (TMD); durée moyenne de disponibilité	message switching S: conmutación de mensajes F: commutation de messages
mean access delay S: retardo medio de acceso F: durée moyenne d'accès	measure (as applied in the field of reliability and related areas) S: medida (aplicada en relación con la fiabilidad y aspectos conexos) F: caractéristique (probabilité); mesure (en fiabilité et domaines connexes)	message switching exchange; switch (message) S: centro de conmutación de mensajes; conmutador (de mensajes) F: commutateur de messages
mean accumulated down time (MADT) S: tiempo medio acumulado de indisponibilidad (TMAI) F: durée cumulée moyenne d'indisponibilité	measurement S: medida; medición F: mesure	message switching; store and forward switching S: conmutación de mensajes; conmutación en el servicio de almacenamiento y retransmisión F: commutation de messages; messagerie
mean active repair time (MART) S: tiempo medio de reparación activa F: durée moyenne de réparation active	medium-term bit error rate S: tasa de errores en los bits a plazo medio F: taux d'erreur à moyen terme sur les bits	message transfer agent (MTA) S: agente de transferencia de mensajes (ATM) F: agent de transfert de messages (MTA)
mean administrative delay (MAD) S: retardo medio administrativo F: durée moyenne du délai administratif	menu S: menú F: menu	message transfer agent entity (MTAE) S: entidad de agente de transferencia de mensajes (EATM) F: entité d'agent de transfert de message (MTAE)
mean availability $\bar{A}(t_1, t_2)$ S: disponibilidad media $\bar{A}(t_1, t_2)$ F: disponibilité moyenne $[\bar{A}(t_1, t_2)]$	menu identity S: identidad de menú F: identité de menu	message transfer layer (MTL) S: capa de transferencia de mensajes (CTM) F: couche transfert de messages (MTL)
mean down time (MDT) S: tiempo medio de indisponibilidad (TMI) F: temps moyen d'indisponibilité (TMI); durée moyenne d'indisponibilité	menu item S: elemento de menú F: rubrique de menu	Message Transfer Part S: parte de transferencia de mensajes F: Sous-système Transport de Messages
mean failure intensity $\bar{z}(t_1, t_2)$ S: intensidad media de fallos $\bar{z}(t_1, t_2)$ F: intensité moyenne de défaillance, $[\bar{z}(t_1, t_2)]$ (symbole)	menu-item selection S: selección de un elemento del menú F: sélection en mode menu	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}
mean failure rate $\bar{\lambda}(t_1, t_2)$ S: tasa media de fallos $\bar{\lambda}(t_1, t_2)$ F: taux moyen de défaillance $\bar{\lambda}(t_1, t_2)$; densité (temporelle) moyenne de défaillance	menu output S: salida en modo menú F: sortie de menu	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}
mean holding time per seizure S: tiempo medio de ocupación por toma F: durée d'occupation moyenne par prise	message sequencing S: secuenciación de mensajes F: mise en séquence des messages	message transfer protocol (P1) S: protocolo de transferencia de mensajes (P1) F: protocole de transfert de messages (P1)
mean interruption duration S: duración media de una interrupción F: durée moyenne d'une interruption		
mean logistic delay (MLD) S: retardo medio logístico F: durée moyenne du délai logistique		
mean maintenance man-hours S: duración media equivalente de mantenimiento F: durée moyenne équivalente de maintenance		

message transfer service S: servicio de transferencia de mensajes F: service de transfert de messages	mixed mode S: modo mixto F: mode mixte	modification (of an item) S: modificación (de un elemento) F: modification (d'une entité)
message transfer system (MTS) S: sistema de transferencia de mensajes (STRM) F: système de transfert de messages (MTS)	mixed mode of operation S: modo mixto de explotación F: mode d'exploitation mixte	modified alternate mark inversion code S: código de inversión de marcas alternada modificado F: code bipolaire alternant modifié
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 sémaphore, T_{cs}	MML function decomposition S: descomposición de las funciones de LHM F: subdivision de fonction LHM	modulation coherence S: coherencia de una modulación (o de un sematema) F: cohérence d'une modulation (ou d'un sématème)
message transfer unit (MXU) S: unidad de transferencia de mensajes (UTM) F: unité de transfert de messages (UTM)	MML function semantics S: semántica de las funciones de LHM F: sémantique de fonction LHM	modulation converter S: convertidor de modulación F: translation convertisseuse de modulation
message waiting indication S: indicación de mensaje en espera F: indication de message en instance	MML syntax and dialogue procedures meta-language S: metalenguaje de sintaxis y de los procedimientos de diálogo del LHM F: syntaxe et métalangage de procédure de dialogue LHM	modulation rate S: velocidad de modulación F: rapidité de modulation
meta-language S: metalenguaje F: métalangage	mnemonic abbreviation S: abreviatura nemotécnica F: abréviation mnémonique	modulation with a fixed reference S: modulación con referencia fija F: modulation avec référence fixe
meta-language (in MML) S: metalenguaje (en LHM) F: métalangage (en LHM)	mobile country code (MCC) S: indicativo de país para el servicio móvil (IPM) F: indicatif de pays de la station mobile (IPSM)	monarchic network S: red despótica; red con sincronización despótica F: réseau despotique; réseau à synchronisation despotique
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)	mobile network code (MNC) S: indicativo de red para el servicio móvil (IRM) F: code de réseau mobile (CRM)	monitor S: monitor F: moniteur
metre air path S: trayecto de un metro en el aire F: trajet d'un mètre à l'air libre	mobile service switching centre (MSC) area S: zona de centro de conmutación de servicio móvil; zona de CCM F: zone du centre de commutation pour les services mobiles (zone CCM)	monologue output S: salida de monólogo F: sortie de monologue
microinstruction S: microinstrucción F: micro-instruction	mobile services switching centre (MSC) S: centro de conmutación de los servicios móviles (CCM) F: centre de commutation pour les services mobiles (CCM)	Morse code S: código Morse F: code Morse
microprogram S: microprograma F: microprogramme	mobile station charge S: tasa de estación móvil F: taxe de station mobile	mouth reference point (MRP) S: punto de referencia boca (PRB) F: point de référence bouche (PRB)
minimum acceptable interval S: intervalo mínimo aceptable F: intervalle minimum acceptable	mobile station identification number (MSIN) S: número de identificación de estación móvil (NIEM) F: numéro d'identification de la station mobile (NISM)	muldex ; muldem S: mǔldex; mǔldem F: muldex; muldem
minimum interval S: intervalo mínimo F: intervalle minimum	modal distance S: distancia modal F: distance modale	multi-f/multi-f S: señalización en código multifrecuencia; señalización CMF F: signalisation multifréquences; (signalisation MF)
minor defect ; imperfection S: defecto menor; imperfección F: défaut mineur; imperfection	modal gauge S: calibre modal F: jauge modale	multi-address calling S: llamada a direcciones múltiples F: adresses multiples
minor defective S: defectuoso menor F: défectueux mineur	modal position S: posición modal F: position modale	multi-block S: multibloque F: multibloc
minor fault S: avería menor F: panne mineure	mode filter S: filtro de modo F: filtre de mode	multi-block acknowledgement signal S: señal de acuse de recibo de multibloque F: signal d'accusé de réception des multiblocs
mishandling failure S: fallo por manejo incorrecto F: défaillance par fausse manœuvre	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	multi-block monitoring signal S: señal de supervisión de multibloque F: signal de surveillance des multiblocs
mishandling fault S: avería por manejo incorrecto F: panne par fausse manœuvre	mode scrambler ; mode mixer S: mezclador de modos F: brasseur de modes; mélangeur de modes	multi-block synchronization signal unit (MBS) S: unidad de señalización de sincronización de multibloque (SMB) F: unité de signalisation de synchronisation des multiblocs (MBS)
misrouting probability S: probabilidad de encaminamiento erróneo F: probabilité d'acheminement erroné	modem S: modem F: modem	multi-channel voice-frequency telegraphy (MCVFT) S: telegrafía armónica multicanal (TAMC) F: télégraphie harmonique
mistake ; error (deprecated in this sense) S: equivocación; error (desaconsejado en este sentido) F: erreur (humaine); faute		multi-connection-endpoint-identifier S: identificador de punto extremo múltiple de conexión F: identificateur d'extrémité de connexion multipoint
misuse failure S: fallo por uso incorrecto F: défaillance par mauvaise utilisation		multi-endpoint-connection S: conexión de puntos extremos múltiples F: connexion multipoint
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		

multiframe S: multitrama F: multitrame	(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)-protocol S: protocolo (N) F: protocole (N)
multiple S: múltiple F: multiplage	n-ary digital group S: grupo digital n-ario F: groupe numérique n-aire	(N)-protocol-connection-identifier S: identificador de conexión de protocolo (N) F: identificateur de connexion pour le protocole (N)
multiple channel S: multicanal F: multivoie	n-ary digital signal S: señal digital n-aria F: signal numérique n-aire	(N)-protocol-control-information S: información de control de protocolo (N) F: informations de contrôle du protocole (N)
multiple-destination transmissions S: transmisiones a destinos múltiples F: transmissions à destinations multiples	(N)-connection S: conexión (N) F: connexion (N)	(N)-protocol-data-unit S: unidad de datos de protocolo (N) F: unité de données de protocole (N)
multiple lines at the same address S: líneas múltiples para una misma dirección F: lignes multiples pour une même adresse	(N)-connection-endpoint S: punto extremo de conexión (N) F: extrémité de connexion (N)	(N)-protocol-identifier S: identificador de protocolo (N) F: identificateur du protocole (N)
multiplex S: múltiplex F: multiplex	(N)-connection-endpoint-identifier S: identificador de punto extremo de conexión (N) F: identificateur d'extrémité de connexion (N)	(N)-provider-optional-service S: servicio opcional de proveedor (N) F: service optionnel pour le fournisseur (N)
multiplex aggregate bit rate S: velocidad binaria total de multiplexaje F: débit binaire cumulé d'un multiplex	(N)-connection-endpoint-suffix S: sufijo de punto extremo de conexión (N) F: suffixe d'extrémité de connexion (N)	(N)-relay S: retransmisión (N) F: relais (N)
multiplex interface S: interfaz múltiplex F: interface multiplex	(N)-data-communication S: comunicación de datos (N) F: communication de données (N)	(N)-service S: servicio (N) F: service (N)
multiplex link S: enlace multiplexado F: liaison multiplex	(N)-data-sink S: sumidero de datos (N) F: collecteur de données (N)	(N)-service-access-point S: punto de acceso al servicio (N) F: point d'accès à des services (N)
multiplexer S: multiplexor F: multiplexeur	(N)-data-source S: fuente de datos (N) F: source de données (N)	(N)-service-connection-identifier S: identificador de conexión del servicio (N) F: identificateur de connexion pour le service (N)
multiplexing S: multiplexación; multiplexión F: multiplexage	(N)-data-transmission S: transmisión de datos (N) F: transmission de données (N)	(N)-service-data-unit S: unidad de datos del servicio (N) F: unité de données de service (N)
multiport access S: acceso multipunto F: accès multipoint	(N)-directory S: guía de direcciones (N) F: répertoire (N)	(N)-simplex-transmission S: transmisión simplex (N) F: transmission simplex (N)
multiport communication S: comunicación multipunto F: communication multipoint	(N)-duplex-transmission S: transmisión dúplex (N) F: transmission duplex (N)	(N)-subsystem S: subsistema (N) F: sous-système (N)
multiport connection S: conexión multipunto F: connexion multipoint	(N) entity S: entidad (N) F: entité (N)	(N)-suffix S: sufijo (N) F: suffixe (N)
multislot connection S: conexión multiintervalo F: connexion à intervalles de temps multiples	(N)-entity S: entidad (N) F: entité (N)	(N)-two-way alternate communication S: comunicación bidireccional alternada (N) F: communication bilatérale à l'alternat (N)
multi-station Teletex terminal installation S: instalación terminal teletex multiestación F: installation terminale télétex à postes multiples	(N)-facility S: facilidad (N) F: facilité (N)	(N)-two-way-simultaneous-communication S: comunicación bidireccional simultánea (N) F: communication bilatérale simultanée (N)
multiterminal service circuit S: circuito de servicio multiterminal F: circuit de service multiterminal	(N)-function S: función (N) F: fonction (N)	n-unit code S: código de n unidades; código de n elementos unitarios F: code à n moments; code à n éléments (unitaires)
multi-unit message (MUM) S: mensaje múltiple (MMU) F: message multiple (MUM)	(N)-half-duplex-transmission S: transmisión semidúplex (N) F: transmission semi-duplex (N)	n-unit code alphabet S: alfabeto de código de n unidades F: alphabet d'un code à n moments
mutilation S: mutilación F: mutilation	(N)-interface-control-information S: información de control de interfaz (N) F: informations de contrôle de l'interface (N)	(N)-user-data S: datos de usuario (N) F: données utilisateur (N)
mutually synchronized network S: red mutuamente sincronizada F: réseau à synchronisation mutuelle	(N)-interface-data S: datos de interfaz (N) F: données de l'interface (N)	(N)-user-optional-service S: servicio opcional de usuario (N) F: service optionnel pour l'utilisateur (N)
	(N)-interface-data-unit S: unidad de datos de interfaz (N) F: unité de données de l'interface (N)	nth order harmonic distortion S: distorsión armónica de orden n F: affaiblissement de distorsion harmonique d'ordre n
	(N)-layer S: capa (N) F: couche (N)	name-defined parameter S: parámetro definido por su nombre F: paramètre défini par nom
	(N)-mandatory-service S: servicio obligatorio (N) F: service obligatoire (N)	name part S: parte nombre F: partie nom; nom
(N)-address-mapping S: relación de correspondencia de dirección (N) F: mise en correspondance d'adresse (N)	(N)-one-way communication S: comunicación unidireccional (N) F: communication unilatérale (N)	

national circuit S: circuito nacional F: circuit national	net margin S: margen neto F: marge nette	no sidetone line impedance (Z_{sn}) S: impedancia de línea de efecto local nulo F: impédance de ligne à effet local nul
national destination code (NDC) S: indicativo nacional de destino (IND) F: indicatif national de destination (IND)	network; telecommunication network S: red; red de telecomunicación F: réseau; réseau de télécommunications	no tone probability S: probabilidad de ausencia de tono F: probabilité de non tonalité
national exchange S: central nacional F: centre national	network analysis point S: punto de análisis de la red F: centre d'analyse du réseau	node; switching node S: nodo; nodo de conmutación F: nœud; nœud de commutation
national extension S: prolongación nacional F: prolongement national	network architecture functional model S: modelo funcional de arquitectura de la red F: modèle fonctionnel d'architecture de réseau	nominal alternating discharge current S: corriente alterna nominal de descarga F: courant alternatif de décharge nominal
national indicator S: indicador nacional F: indicateur national	network clear indication delay (NCID) S: retardo de indicación de liberación por la red (RILR) F: temps d'indication de libération dans le réseau	nominal corrected reference equivalents (CREs) or loudness ratings (LRs) of the national systems S: equivalentes de referencia corregidos (ERC) e índices de sonoridad (IS) nominales de los sistemas nacionales F: équivalents de référence corrigés (ERC) et équivalents pour la sonie (ES) nominaux des systèmes nationaux
national line S: línea nacional F: ligne nationale	network cluster S: agrupación de haces F: faisceau de faisceaux	nominal d.c. spark-over voltage S: tensión continua nominal de cebado F: tension continue nominale d'amorçage
national main section S: sección principal nacional F: section nationale principale	network control phase S: fase de control de red F: phase de commande du réseau	nominal impulse discharge current S: corriente nominal de choque de descarga F: courant nominal de choc de décharge
national mobile station identity (NMSI) S: identidad de estación móvil nacional (IEMN) F: identité nationale de la station mobile (INSM)	network coordination station (NCS) S: estación de coordinación de la red (ECR) F: station de coordination du réseau (SCR)	nominal justification rate S: velocidad nominal de justificación F: débit nominal de justification
national-network-congestion signal S: señal de congestión en la red nacional F: signal d'encombrement sur le réseau national	network failure S: fallo de red; avería en la red F: défaillance du réseau	nominal justification ratio S: relación nominal de justificación F: taux nominal de justification
national section S: sección nacional F: section nationale	network-maintenance signals S: señales de mantenimiento de red F: signaux de maintenance du réseau	nominal margin (of a type of apparatus) S: margen nominal (de un tipo de aparato) F: marge nominale (d'un type d'appareil)
national (significant) number S: número nacional (significativo) F: numéro national (significatif)	network management boundary S: frontera de gestión de la red F: limite de la zone de gestion du réseau	nominal transmission loss S: pérdida de transmisión nominal F: affaiblissement de transmission nominal
national (significant) mobile number S: número móvil nacional (significativo) F: numéro national (significatif) de la station mobile nationale (significative)	network-management signals S: señales de gestión de red F: signaux de gestion du réseau	nominal reserved circuit S: circuito de reserva especializado F: circuit de secours (pour la télégraphie harmonique)
national sound-programme centre (NSPC) S: centro radiofónico nacional (CRN) F: centre radiophonique national (CRN)	network parameter S: parámetro de red F: caractéristique du réseau	non-associated mode (of signalling) S: modo (de señalización) no asociado F: mode (de signalisation) non associé
national subscriber's telex number S: número télex nacional de abonado F: numéro télex national d'abonné	network selection signals S: señales de selección de la red F: signaux de sélection du réseau	non-associated mode of operation S: modo de explotación no asociado F: modes d'exploitation «non associés»
national systems S: sistemas nacionales F: systèmes nationaux	network service provider S: proveedor del servicio de red F: fournisseur du service de réseau	non-associated signalling S: señalización no asociada F: signalisation non associée
national telephone system S: sistema telefónico nacional F: systèmes téléphoniques nationaux	network termination S: terminación de red F: terminaison de réseau	non-circularity of core (cladding surface) 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
national television centre (NTC) S: centro nacional de televisión (CNT) F: centre télévisuel national (CTN)	network transfer delay S: tiempo de transferencia de la red F: temps de propagation sur le réseau	non-critical defect S: defecto no crítico F: défaut non critique
Natural S: natural F: nombre naturel	network utility S: servicio interredes F: service inter-réseaux	non-critical failure S: fallo no crítico F: défaillance non critique
nature of circuit indicator S: indicador de la naturaleza del circuito F: indicateur de la nature du circuit	network utility field S: campo de servicios interredes F: champ des services inter-réseaux	non-critical fault S: avería no crítica F: panne non critique
nature of circuit indicators (Signalling System R2) S: indicadores de la naturaleza del circuito (sistema de señalización R2) F: indicateurs de nature du circuit (système de signalisation R2)	newtype S: neotipo F: nouveau type (new type)	non-decimal numeral S: numeral no decimal F: numéral non décimal
negative indication tone S: tono de indicación negativo F: tonalité d'indication négative	next transmitted bit S: bit siguiente transmitido F: bit suivant transmis	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)
negative justification S: justificación negativa F: justification négative	No. 7 exchange S: central N.º 7 F: commutateur n° 7	
negotiation S: negociación F: négociation	No. 7 exchange – first S: central N.º 7 – primera F: premier commutateur n° 7	
	No. 7 exchange – last S: central N.º 7 – última F: dernier commutateur n° 7	

non-delivery notification (NDN)
S: notificación de no entrega (NNE)
F: notification de non-remise (NNR)

non-designation method
S: método sin designación
F: méthode sans désignation

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-relevant failure
S: fallo no pertinente; fallo a no considerar
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-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 commutée; 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 uniform
S: no uniforme
F: non uniforme

non-uniform encoding
S: codificación no uniforme
F: codage non uniforme

non-uniform quantizing
S: cuantificación no uniforme
F: quantification non uniforme

nonlinear processing loss (A_{NLP})
S: atenuación por procesamiento (o 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)

nonsynchronized network
S: red no sincronizada
F: réseau non synchronisé

normal routing (of signalling)
S: encaminamiento normal (de señalización)
F: acheminement normal (de signalisation)

normal (traffic) routing
S: encaminamiento normal (de tráfico)
F: acheminement normal

not ready
S: no preparado
F: non prêt

note
S: nota
F: note

notification
S: notificación
F: notification

null hypothesis H_0
S: hipótesis nula H_0
F: hypothèse nulle (H_0)

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
S: numeración
F: numérotage

numbering system
S: sistema de numeración
F: système de numération

numeral
S: numeral
F: numéral

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

O'

S: O'
F: O'

object
S: objeto
F: objet

object language; target language
S: lenguaje objeto; lenguaje resultante
F: langage résultant; langage-objet

observed data
S: datos observados
F: valeur observée; donnée observée

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

octal numeral
S: número octal
F: nombre octal

octet
S: octeto
F: octet

octet alignment
S: alineación de octeto
F: alignement d'octet

octet sequence integrity
S: integridad de la secuencia de octetos
F: intégrité de la suite des octets

octet timing signal
S: señal de temporización de octetos
F: signal d'horloge des octets

off-site maintenance
S: mantenimiento no local
F: maintenance déportée

office document architecture (ODA)
S: arquitectura de documento de oficina
F: architecture de document de bureau (ODA)

OFFSPRING
S: DESCENDIENTE; VÁSTAGO
F: DESCENDANT (OFFSPRING)

oligarchic network
S: red oligárquica; red con sincronización oligárquica
F: réseau oligarchique; réseau à synchronisation oligarchique

oligarchic (synchronized) network
S: red oligárquica (sincronizada)
F: 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 (ODA)

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-sided test
S: prueba unilateral
F: test unilatéral

one-stage/two-stage selection procedure for telex to Teletex direction of interworking
S: procedimientos con selección en una etapa o dos etapas para el interfuncionamiento de télex a teletex
F: procédure de numérotation en une étape ou en deux étapes pour l'interfonctionnement dans le sens télex vers télétex

one-unit message
S: mensaje simple
F: message simple

one way
S: en un solo sentido
F: à sens unique

one way communication (OWC)
S: comunicación unidireccional
F: échange unidirectionnel (OWC)

one-way interaction
S: interacción unidireccional
F: interaction unidirectionnelle

only route circuit group
S: haz de circuitos de una ruta única
F: faisceau d'acheminement unique

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 system
S: sistema abierto
F: système ouvert

open systems interconnection (OSI)
S: interconexión de sistemas abiertos (ISA)
F: interconnexion de systèmes ouverts (OSI)

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
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
F: exploitation

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 explotación 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

operational procedure
S: procedimiento operacional
F: procédure d'exploitation

operational ...
S: ... operacional
F: ...opérationnel

operator
S: operador
F: opérateur

operator typing
S: operador tipificación
F: typage d'opérateur

opinion score (in telephony)
S: nota de opinión (en telefonía)
F: note d'opinion (en téléphonie)

option
S: opción
F: option

option expression
S: expresión de opción
F: expression d'option

option symbol
S: símbolo de opción
F: symbole d'option

optional user facility
S: facilidad facultativa de usuario
F: service complémentaire facultatif offert aux usagers

O/R address
S: dirección O/D
F: adresse d'O/R

O/R name
S: nombre O/D
F: nom d'O/R

ordinary private telex calls
S: comunicaciones télex privadas ordinarias
F: communications télex privées ordinaires

origin country (or Administration)
S: país (o Administración) de origen
F: pays (ou Administration) d'origine

originating PDN
S: RPD de origen
F: RPD d'origine

originating point code
S: código del punto de origen
F: code du point d'origine

originating SFU
S: UAR de origen
F: UER d'origine

originating traffic
S: tráfico de origen
F: trafic de départ

originating UA
S: AU de origen
F: UA expéditeur

originator
S: originador
F: expéditeur

OSI resources
S: recursos ISA
F: ressources OSI

other information
S: otras informaciones
F: autre information

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-slot signalling
S: señalización fuera del intervalo
F: signalisation hors intervalle de temps

outgoing channel
S: canal de salida
F: canal de départ

outgoing traffic
S: tráfico saliente
F: trafic sortant

outlet
S: salida (de conmutación); acceso de salida
F: accès de départ

outlet
S: acceso de salida
F: accès sortant

OUTPUT
S: EXTRAER
F: SORTIE

output
S: salida
F: sortie

output (in MML)
S: salida (en LHM)
F: sortie (en LHM)

output (in SDL)
S: salida (en LED)
F: sortie (en LDS)

output action
S: acción de salida
F: action de sortie; sortie

output node
S: nodo de salida
F: nœud de sortie

output outside dialogue
S: salida fuera de diálogo
F: sortie hors dialogue

output parameters
S: parámetros de salida
F: paramètres de sortie

output symbol
S: símbolo de salida
F: symbole de sortie

overcharging probability
S: probabilidad de sobretarifación
F: probabilité de surtaxation

overflow (in telegraphy)
S: desbordamiento (en telegrafía)
F: débordement (en télégraphie)

overflow traffic
S: tráfico de desbordamiento
F: trafic de débordement

overhead bits
S: bits suplementarios
F: bits (binons) supplémentaires

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

overlay
S: superposición
F: recouvrement

overline service
S: servicio de líneas agrupadas
F: groupement de lignes

overload point
S: nivel de saturación
F: niveau de saturation

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
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
F: quantile-p du délai administratif

p-fractile logistic delay
S: cuantil-p del retardo logístico
F: quantile-p du délai logistique

p-fractile; p-quantile (of a probability distribution)
S: cuantil-p; cuantil de orden p (de una ley de distribución de probabilidad)
F: quantile d'ordre p; quantile-p (d'une loi de probabilité)

p-fractile repair time
S: cuantil-p del tiempo de reparación
F: quantile-p de la durée de réparation

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
F: tonalité interne de numérotation des commutateurs privés

to pack S: compactar F: condenser	parameter (in MML) S: parámetro (en LHM) F: paramètre (en LHM)	passive operator S: operador pasivo F: opérateur passif
packet S: paquete F: paquet	parameter argument S: argumento de parámetro F: argument de paramètre	password S: contraseña F: mot de passe
packet assembly/disassembly (PAD) S: empaquetado/desempaquetado de datos (EDD); ensamblado/desensamblado de paquetes F: assemblage-désassemblage de paquets (ADP)	parameter block entry sequence S: secuencia de introducción de bloque de parámetros F: séquence d'introduction d'un bloc de paramètres	to patch S: parchear F: rapiécer
packet disassembly S: desempaquetado F: désassemblage de paquets	parameter block request indication S: indicación de petición de bloque de parámetros F: indication de demande de bloc de paramètres	path; telecommunication path S: trayecto; trayecto de telecomunicación F: itinéraire; itinéraire de télécommunications
packet format S: formato de los paquetes F: format de paquet	parameter field S: campo de parámetro F: champ de paramètre	pay tone S: tono de pago F: tonalité de paiement
packet length selection S: selección de la longitud de los paquetes F: sélection de longueur des paquets	parameter group identifier (PGI) S: identificador de grupo de parámetros (IGP) F: identificateur de groupe de paramètres (IGP)	payphone recognition tone S: tono de identificación de teléfono de previo pago F: tonalité d'identification de publiphone
packet-mode operation S: funcionamiento según el modo paquetes F: commutation par paquets (service de paquets)	parameter identifier (PI) S: identificador de parámetro (IP) F: identificateur de paramètre	payphone service S: servicio telefónico de previo pago F: service publiphone
packet-mode terminal S: terminal en modo paquetes F: terminal en mode-paquet	parameter identity S: identidad de parámetro F: identité de paramètre	PBX line hunting services S: servicio de captura de línea; servicio de líneas de salto F: service de recherche de ligne libre dans un commutateur privé
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	parameter name S: nombre de parámetro F: nom de paramètre	PCM binary code S: código binario MIC F: code binaire MIC
page S: página F: page	parameter position S: posición del parámetro F: position de paramètre	PCM digital reference sequence (DRS) S: secuencia de referencia digital MIC (SRD) F: séquence numérique de référence MIC (SNR)
page set S: conjunto de páginas F: ensemble de pages	parameter value (PV) S: valor de parámetro (VP) F: valeur de paramètre (VP)	PCM multiplex equipment S: equipo múltiplex MIC F: équipement de multiplexage MIC
page teleprinter S: teleimpresor en página F: téléimprimeur à (impression sur) page	parameter value input field S: campo de entrada del valor de un parámetro F: champ d'entrée de valeur de paramètre	peak amplitude of an elementary echo S: amplitud de cresta de un eco elemental F: amplitude de crête d'un écho élémentaire
page wait S: espera de página F: page en attente	PARENT S: ASCENDIENTE F: ASCENDANT (PARENT)	peak busy hour; bouncing busy hour; post selected busy hour S: hora punta F: heure de pointe
pair of complementary channels S: par de canales complementarios F: paire de voies complémentaires	parity digit S: cifra de paridad F: élément de parité	peak limiting S: limitación de cresta (en cuantificación) F: écrêtage
paired-disparity code S: código con disparidad compensada; código alternado; código alternante F: code à disparité compensée	parity function S: función de paridad F: fonction de parité	peaked traffic S: tráfico con distribución en pico F: trafic survariant
parallel automatic calling S: llamada automática paralelo; llamada automática en modo paralelo F: appel automatique en mode parallèle	partial break-in S: intervención parcial F: intervention partielle	peakedness factor S: factor de irregularidad F: facteur d'irrégularité
parallel connection S: conexión en paralelo F: connexion parallèle	partial break-in echo suppressor S: supresor de eco con intervención parcial F: supprimeur d'écho à intervention partielle	peer entities S: entidades pares F: entités homologues
parallel to serial converter; serializer S: convertidor paralelo/serie F: convertisseur parallèle/série	partial break-in operate time S: tiempo de funcionamiento para la intervención parcial F: temps de fonctionnement pour l'intervention partielle	peer protocol S: protocolo para entidades pares F: protocole homologue
parallel transmission S: transmisión paralelo F: transmission parallèle	partial fault S: avería parcial F: panne partielle	pel path S: trayecto de los elementos de imagen; trayecto de los pels F: trajet des éléments d'image
parallel transmission S: transmisión en paralelo F: transmission parallèle (par éléments)	partial refund S: reembolso parcial F: remboursement partiel	per word tariff system S: sistema de tarificación por palabra F: système de tarification par mot
parameter S: parámetro F: paramètre	partitioning S: partición F: subdivision	percentage overflow (% OFL) S: porcentaje de desbordamiento (% DBM) F: pourcentage de débordement (% DBM)

perfect signal S: señal perfecta F: signal parfait	pictorial element (PE) S: elemento pictográfico (EP) F: élément graphique (EG)	power of the test S: potencia de la prueba F: puissance du test
perforated-tape retransmitter S: retransmisor de cinta perforada F: réémetteur à bande perforée	Pld S: Pld F: Pld	power off condition S: falta de alimentación F: alimentation hors service
periodicity pattern S: esquema de periodicidad F: schéma de périodicité	pilot S: piloto F: onde pilote	Powerset S: conjuntista F: mode ensembliste
permanent (communication) S: permanente (comunicación) F: permanente (communication)	planning equivalent S: equivalente de planificación F: équivalent de planification	pre-selection delay S: tiempo de preselección F: temps de présélection
permanent (connection) S: permanente (conexión) F: permanente (connexion)	plesiochronous S: plesiócrono F: plésiochrone	pre-signal S: preseñal F: présignal
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	point-to-multipoint ISDN connection S: conexión de RDSI punto a multipunto F: connexion RNIS point-multipoints	precorrection S: precorrección F: précorrection
permanent virtual circuit S: circuito virtual permanente F: circuit virtuel permanent	point-to-point communication S: comunicación punto a punto F: communication point-à-point	predefined data type S: tipo de datos predefinido F: type de données prédéfini
permanently locked envelope S: envolventes con alineación permanente F: enveloppes verrouillées en permanence	point-to-point connection S: conexión punto a punto F: connexion point-à-point	predicted ... S: ... previsto; ... predicho F: ...prédit;...prévu
persistent fault; permanent fault; solid fault S: avería permanente F: panne permanente	point-to-point ISDN connection S: conexión de RDSI punto a punto F: connexion RNIS point-à-point	prediction S: previsión; predicción F: prévision; prédiction
PGI unit S: unidad de IGP F: unité de PGI	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	predictor S: predictor F: prédicteur
phantom circuit S: circuito fantasma F: circuit fantôme	poisson traffic S: tráfico poissoniano F: trafic poissonnien	preferred class S: clase preferida F: classe préférée
phase S: fase F: phase	position S: posición F: position	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
phase-inversion modulation S: modulación por inversión de fase F: modulation par inversion de phase	position A, position Z S: posición A; posición Z F: position A; position Z	prefix giving access to the intercontinental telex network S: prefijo de acceso a la red télex intercontinental F: préfixe d'accès à l'intercontinental
phase modulation S: modulación de fase F: modulation de phase	position-defined parameter S: parámetro definido por la posición F: paramètre défini par position	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
phase shift keying (PSK); phase shift modulation S: modulación por desplazamiento de fase F: modulation par déplacement de phase (MDP)	positive indication tone S: tono de indicación positivo F: tonalité d'indication positive	prefix giving access to the international telex network S: prefijo de acceso a la red télex internacional F: préfixe d'accès à l'international
photographic coded text S: texto con codificación fotográfica F: texte utilisant un codage photographique	positive justification S: justificación positiva F: justification positive	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
photographic element S: elemento fotográfico F: élément photographique	positive/zero/negative justification S: justificación positiva/nula/negativa F: justification positive/nulle/négative	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
physical interface S: interfaz físico F: interface physique	possible crosstalk components S: componentes posibles de diafonía F: composantes possibles de diaphonie	premature release probability; cut-off call probability S: probabilidad de liberación prematura; probabilidad de corte de una llamada F: probabilité de libération prématurée
physical interface specification (physical interface) S: especificación de interfaz físico; interfaz físico F: spécification d'interface physique	post-dialling delay S: periodo de espera después de marcar F: attente après numérotation	preparation operating S: explotación con preparación F: exploitation avec préparation
PI unit S: unidad de IP F: unité d'identification de paramètre; unité de PI	post-selection time S: periodo de espera después de marcar F: temps de sélection	preparatory period S: periodo preparatorio F: période préparatoire
pick-up facility service S: servicio de facilidad de telecaptura F: service de prise d'une communication établie	post-signal S: postseñal F: postsignal	
pictorial character S: carácter pictográfico F: caractère graphique mosaïque	postal Administration S: Administración postal F: Administration postale	
	power feeding (repeater) station S: estación de telealimentación; estación de alimentación; estación de repetidores de telealimentación; estación de repetidores de alimentación F: station d'alimentation (de répéteurs)	

presentation S: presentación F: présentation	probability density function S: función densidad de probabilidad F: densité de probabilité	process definition S: definición de proceso F: définition de processus
presentation control functions S: funciones de control de la presentación F: fonctions de commande pour la présentation	probability of acceptance S: probabilidad de aceptación F: probabilité d'acceptation	process diagram S: diagrama de proceso F: diagramme de processus
presentation medium S: medio de presentación F: support de présentation	probability of rejection S: probabilidad de rechazo F: probabilité de rejet	process graph S: gráfico de proceso F: graphe de processus
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	probability of successful service completion S: probabilidad de prestación satisfactoria de un servicio F: probabilité d'exécution correcte du service	process instance S: instancia de proceso F: instance de processus
preventive maintenance S: mantenimiento preventivo F: maintenance préventive; entretien	procedure S: procedimiento F: procédure	process substructure S: subestructura de proceso F: sous-structure de processus
preventive maintenance time S: tiempo de mantenimiento preventivo F: temps de maintenance préventive	procedure body S: cuerpo del procedimiento F: corps de procédure	process substructure definition S: definición de subestructura de proceso F: définition de sous-structure de processus
primary block; digroup S: bloque primario F: bloc primaire	procedure call S: llamada de procedimiento F: appel de procédure	process symbol S: símbolo de proceso F: symbole de processus
primary digital group S: grupo digital primario F: groupe numérique primaire	procedure call node S: nodo de llamada de procedimiento F: nœud d'appel de procédure; nœud d'appel	process tree diagram S: diagrama de árbol de proceso F: diagramme d'arbre de processus
primary failure S: fallo primario F: défaillance primaire	procedure call symbol S: símbolo de llamada de procedimiento F: symbole d'appel de procédure; symbole d'appel	processing S: procesamiento F: traitement
primary PCM group S: grupo primario MIC F: groupe primaire MIC	procedure definition S: definición de procedimiento F: définition de procédure	processor S: procesador; unidad de proceso F: processeur
primary routes S: rutas primarias F: voies primaires	procedure description S: descripción de procedimiento F: description de procédure	processor outage S: interrupción del procesador F: processeur hors service
primitive name S: nombre primitivo F: nom primitif	procedure diagram S: diagrama de procedimiento F: diagramme de procédure	producer's risk (point) S: (punto de) riesgo del proveedor F: (point du) risque du fournisseur
printable area S: zona imprimible F: zone imprimable	procedure epilogue S: epilogo de procedimiento F: épilogue de procédure	programme booking centre (PBC) S: centro de reserva de programas (CRP) F: service centralisateur
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	procedure graph S: gráfico de procedimiento F: graphe de procédure	programme-sensitive fault S: avería dependiente del programa F: panne mise en évidence par le programme
printing perforator S: perforador impresor F: perforateur imprimeur	procedure prologue S: prólogo de procedimiento F: prologue de procédure	programming system S: sistema de programación F: système de programmation
printing reperforator S: reperforador impresor F: récepteur-perforateur imprimeur	procedure start node S: nodo de arranque de procedimiento F: nœud de départ de procédure	prompting S: sugerencia F: guidage
priority facility S: prioridad F: priorité	procedure start symbol S: símbolo de arranque de procedimiento F: symbole de départ de procédure	prompting output S: salida de sugerencia F: sortie de guidage
priority service S: servicio de prioridad F: service de priorité	proceed-to-select S: invitación a marcar F: invitation à numéroter	propagated error S: error propagado F: erreur propagée
private data network S: red privada de datos F: réseau privé pour données	proceed-to-select signal S: señal de invitación a marcar F: signal d'invitation à numéroter	propagation performance S: características de propagación F: caractéristiques de propagation
private management domain (PRMD) S: dominio de gestión privado (DGPR) F: domaine de gestion privée (PRMD)	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»)	proposed class S: clase propuesta F: classe proposée
private number ringing signal S: servicio de señal de llamada individualizada F: service de signal d'appel d'un numéro particulier	process S: proceso F: processus	proposed parameter S: parámetro propuesto F: paramètre proposé
private (telephone) installation S: instalación telefónica privada F: installation (téléphonique) intérieure	process (in a data processing system) S: proceso (en un sistema de proceso de datos) F: processus (dans un traitement de l'information)	protection switching S: conmutación de protección F: commutation sur liaison de réserve
probability S: probabilidad F: probabilité	process (in SDL) S: proceso (en LED) F: processus (en LDS)	protocol S: protocolo F: protocole

provider-initiated-service
S: servicio iniciado por el proveedor
F: service engendré par le fournisseur

proximity microphone
S: micrófono de proximidad
F: microphone de proximité

pseudo n-ary signal
S: señal pseudo-n-aria
F: signal pseudo n-aire

psophometric power
S: potencia sofométrica
F: puissance psophométrique

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 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 land mobile network (PLMN)
S: red del servicio móvil terrestre público (RMTP)
F: réseau mobile terrestre public (RMTP)

public recorded information service
S: servicio de información pública grabada
F: service public d'information enregistrée

public telefax station
S: estación telefax pública
F: poste téléfax public

public telegram service
S: servicio público de telegramas
F: service public des télégrammes

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 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

pure chance traffic
S: tráfico puramente al azar
F: trafic de pur hasard

put-back
S: reanudación de transmisión
F: reprise de transmission

Q

qualifying part
S: parte calificadora
F: partie qualificatif; qualificatif

quality of service
S: calidad de servicio
F: 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 signalling)
S: modo (de señalización) cuasiasociado
F: mode (de signalisation) quasi associé

quasi-associated mode of operation
S: modo de explotación cuasiasociado
F: mode d'exploitation «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

R

R25 equivalent
S: equivalente R25
F: équivalent R25

radio control path
S: radiotrayecto de control
F: trajet radioélectrique de commande

radio paging service
S: servicio móvil de aviso a personas; servicio de radiobúsqueda
F: service radioélectrique d'appel unidirectionnel

radio speech path
S: radiotrayecto de conversación
F: trajet radioélectrique de conversation

radiomarine telex letter
S: carta télex radiomarítima
F: télex postal radiomaritime

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

ratio of compression
S: relación de compresión
F: taux de compression

ratio of expansion
S: relación de expansión
F: taux d'extension

re-routing
S: reencaminamiento
F: réacheminement

re-run
S: repetición de transmisión
F: répétition de transmission

ready
S: preparado
F: prêt

ready for data
S: preparado para datos
F: prêt pour la transmission de données

ready indication
S: indicación de preparado
F: indication «prêt»

ready indicator
S: indicador de preparado
F: indicateur prêt

Real
S: real
F: réel

real open system
S: sistema real abierto
F: système ouvert réel

real system
S: sistema real
F: système réel

real time (adjective)
S: en tiempo real (adjetivo)
F: 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

reanswer signals
S: señales de repetición de respuesta
F: signaux de nouvelle réponse

reasonableness check
S: prueba de razonabilidad; prueba 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

receive channel
S: canal de recepción
F: voie de réception

receive loss
S: atenuación en la recepción
F: affaiblissement à la réception

receiving a TS user
S: usuario ST receptor
F: utilisateur du service de transport destinataire

receiving SPM
S: MPS receptora
F: SPM destinataire

receiving SS-user
S: usuario SS receptor
F: utilisateur du service de session destinataire

receiving transport entity
S: entidad de transporte receptora
F: entité de transport destinataire

reception congestion
S: congestión en la recepción
F: encombrement de réception

recipient S: destinatario F: destinataire	reference point S: punto de referencia; punto de referencia de RDSI F: point de référence; point de référence du RNIS	relative amplitude of an elementary echo S: amplitud relativa de un eco elemental F: amplitude relative d'un écho élémentaire
recipient UA S: AU destinatario F: UA destinataire	reference surface S: superficie de referencia F: surface de référence	relative equivalent S: equivalente relativo F: équivalent relatif
recombining S: recombinación F: recombinaison	reference test method S: método de prueba de referencia F: méthode de mesure de référence	relative frequency S: frecuencia relativa F: fréquence (statistique)
reconstructed sample S: muestra reconstruida F: échantillon reconstitué	(refractive) index profile S: perfil del índice (de refracción) F: profil de l'indice (de réfraction)	relative (power) level S: nivel relativo (de potencia) F: niveau relatif de puissance
record S: registro F: enregistrement	reframing time S: tiempo de recuperación F: temps de reprise	relative time interval error S: error de intervalo de tiempo relativo F: dérive temporelle relative
record tone S: tono de grabación F: tonalité d'enregistrement	regeneration S: regeneración F: régénération	relaying S: remisión F: relais
recorded announcement S: anuncio grabado F: annonce enregistrée	regenerative repeater S: repetidor regenerativo F: répéteur régénérateur	relaying envelope S: sobre de remisión F: enveloppe de relais
recording S: registro F: enregistrement	regenerator S: regenerador F: régénérateur	release S: liberación F: libération (fin, relâchement)
recording day S: día de registro F: jour d'enregistrement	register S: registrador F: enregistreur	release failure probability S: probabilidad de fallo de liberación F: probabilité de non-libération
recording period S: periodo de registro F: période d'enregistrement	register function S: función de registrador F: fonction d'enregistreur	release-guard signal S: señal de liberación de guarda F: signal de libération de garde
redundancy S: redundancia F: redondance	register function S: función de registrador F: fonction d'enregistreur	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»)
redundant code S: código redundante F: code redondant	register signalling (Signalling System R1) S: señalización entre registradores (sistema de señalización R1) F: signalisation entre enregistreurs (système de signalisation R1)	release-guard signal (Signalling System R2) S: señal de liberación de guarda (sistema de señalización R2) F: signal de libération de garde (système de signalisation R2)
redundant code S: código de redundancia F: code redondant	registration of incoming calls service S: servicio de registro de llamadas entrantes F: service d'enregistrement de communications d'arrivée	relevant failure S: fallo pertinente; fallo a considerar F: défaillance pertinente; défaillance à prendre en compte
redundant digital signal S: señal digital redundante F: signal numérique redondant	regular signalling link S: enlace de señalización regular F: canal sémaphore normal; liaison de signalisation régulière	reliability (performance) S: fiabilidad F: fiabilité
redundant line code S: código de línea redundante F: code en ligne redondant	regular transmissions S: transmisiones regulares F: transmissions périodiques	reliability block diagram S: diagrama de fiabilidad F: diagramme de fiabilité
redundant n-ary signal S: señal n-aria redundante F: signal n-aire redondant	regularity loss S: pérdida de retorno por irregularidades F: affaiblissement de l'onde réfléchie sur les irrégularités	reliability growth S: crecimiento de la fiabilidad F: croissance de la fiabilité
reentrant program; reentrant routine; reentrant subroutine; reenterable program; reenterable routine; reenterable subroutine S: programa reentrante; programa reintroducible; rutina reentrante; rutina reintroducible; subrutina reentrante; subrutina reintroducible F: programme rentrant; routine rentrante; sous-programme rentrant	regulated line section (symmetric pairs, coaxial pairs or radio relay links) 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)	reliability improvement S: mejora de la fiabilidad F: amélioration de fiabilité
reentrant trunking S: enlace reentrante F: jonction réentrante	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.)	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
reference clock S: reloj de referencia F: horloge de référence	rejection output S: salida de rechazo F: sortie de rejet	reliability model S: modelo de fiabilidad F: modèle de fiabilité
reference configuration S: configuración de referencia; configuración de referencia de RDSI F: configuration de référence; configuration de référence du RNIS	relation (international public telegram service) S: relación (servicio público internacional de telegramas) F: relation (service télégraphique public international)	reliability R S: fiabilidad, R F: fiabilité (R)
reference configurations S: configuraciones de referencia F: configurations de référence		relocatable address S: dirección reubicable F: adresse translatable
reference data S: datos de referencia; valores de referencia F: valeur de référence; données de référence		to relocate S: reubicar F: translater
reference equivalent S: equivalente de referencia F: équivalent de référence (ER)		

remote call forwarding service S: servicio de teletransferencia de llamadas F: service de réacheminement des appels	request S: petición F: demander	residual error rate S: proporción de errores residuales F: taux d'erreurs résiduelles
remote exchange concentrator S: concentrador de central distante F: concentrateur de central distant	request (primitive) S: petición (primitiva) F: demande (primitive)	resource S: órgano F: ressource
remote maintenance S: mantenimiento remoto; telemantenimiento F: télémaintenance	request data transfer S: petición de transferencia de datos F: demande de transfert de données	(network) resource(s) S: recursos (de la red); órgano de la red F: ressource(s) (du réseau)
remote switching stage S: etapa de conmutación distante F: étage de commutation distant	request output S: salida de petición F: sortie de demande	responder S: contestadora F: entité appelée
remotely controlled exchange S: central controlada a distancia; central telecontrolada F: centre télécommandé	request repeat system S: sistema detector de errores con pedido de repetición F: système détecteur d'erreurs avec demande de répétition	responder S: contestadora F: SPM appelée
REMOVE S: RETIRAR F: RETRAIT	requestor; requesting SS-user S: peticionario; usuario SS peticionante F: demandeur; utilisateur du service de session demandeur	response S: respuesta F: réponse
remove S: retirar; suprimir F: retirer	required function S: función requerida F: fonction requise	response (in a transaction) S: respuesta (en una transacción) F: réponse (dans une transaction)
remuneration for exclusive use of circuits S: remuneración por utilización exclusiva de los circuitos F: rémunération pour utilisation exclusive des circuits	required time S: periodo requerido F: période requise	response (primitive) S: respuesta (primitiva) F: réponse (primitive)
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	rerouting S: reencaminamiento F: réacheminement	response output S: salida de respuesta F: sortie de réponse
rendition S: reproducción F: mise en valeur	reselection S: reelección F: resélection	restitution S: restitución F: restitution
rental S: alquiler F: redevance	reserve signalling link S: enlace de señalización de reserva F: canal sémaphore de secours; liaison de signalisation de réserve	restitution delay S: retardo de restitución; retardo en la restitución F: délai de restitution
repair coverage S: cobertura de reparaciones F: couverture des réparations	reserved (communication) S: reservada (comunicación) F: réservée (communication)	restoration control point (RCP) S: punto de control del restablecimiento (PCR) F: centre de commande de rétablissement du service (CCR)
repair time; corrective maintenance time S: tiempo de reparación; tiempo de mantenimiento correctivo F: temps de réparation; temps de maintenance corrective	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	restoration; recovery S: restablecimiento F: rétablissement
repaired item S: elemento reparado F: entité réparée	reserved switching path PE S: elemento pictográfico de trayecto de conmutación reservado F: élément graphique de chemin de commutation réservé	RESTORE S: RESTABLECER F: RÉTABLISSEMENT
repeat (RPT) S: repetición (RPT) F: répétition (RPT)	reset S: reiniciación F: réinitialisation	restore S: restablecer F: rétablir
repeated call attempt; reattempt S: tentativa de llamada repetida F: tentative d'appel répétée	RESET S: RESET F: RESET	restriction in the outgoing direction service S: servicio de restricción de llamadas salientes F: service de limitation des communications de départ
repeater S: repetidor F: répéteurs	reset-band-acknowledgement signal S: señal de acuse de recibo de reiniciación de banda F: signal d'accusé de réception de réinitialisation de bande	results accumulation period S: periodo de acumulación de resultados F: période d'accumulation des résultats
reperforator; receiving perforator S: reperforador; receptor-perforador F: récepteur-perforateur	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 réinitialisation de bande, tous circuits au repos	results output routing S: encaminamiento de salida de resultados F: acheminement de sortie des résultats
reperforator switching S: conmutación con retransmisión por cinta perforada F: commutation avec retransmission par bande perforée	reset-band signal S: señal de reiniciación de banda F: signal de réinitialisation de bande	results output schedule S: calendario de salida de resultados F: calendrier de sortie des résultats
repetition cycle S: ciclo de repetición F: cycle de répétition	reset-circuit signal S: señal de reiniciación de circuito F: signal de réinitialisation du circuit	retainability of an established connection S: retenibilidad de una conexión establecida F: continuité d'une communication établie
to represent S: representar F: représenter	residual echo level (L_{RES}) S: nivel de eco residual (N _{RES}) F: niveau d'écho résiduel (N _{RES})	retained signal S: señal retenida F: signal retenu
request S: petición F: demande		retained TPDU S: UDPT retenida F: TPDU retenue
		retiming S: reajuste de la temporización F: réajustement du rythme

retransmission buffer
S: memoria tampón de retransmisión
F: tampon de retransmission

retrieval
S: extracción; recuperación
F: récupération

return
S: retorno
F: retour

return node
S: nodo de retorno
F: nœud de retour

return switching signal
S: señal de conmutación hacia atrás
F: signal (de commutation) vers l'arrière

return symbol
S: símbolo de retorno
F: symbole de retour

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; rutina reutilizable
F: programme réutilisable; routine réutilisable

reveal attribute
S: atributo revelar
F: attribut d'apparition

ring-forward signal (Signalling System R1)
S: señal de intervención (sistema de señalización R1)
F: signal de rappel [intervention] (système de signalisation R1)

ringing tone; ringback tone
S: tono de llamada
F: tonalité de retour d'appel

route
S: ruta
F: voie d'acheminement

route
S: ruta
F: route

ROUTE
S: ENCAMINAR
F: ACHÉMINEMENT

route
S: encaminamiento
F: 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

routing
S: encaminamiento
F: acheminement

routing
S: encaminamiento
F: 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

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

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

save
S: conservación
F: mise en réserve

save (in SDL)
S: conservación (en LED)
F: mise en réserve (en LDS)

save-signal-set
S: conjunto de señales de conservación
F: ensemble de signaux de mise en réserve

save symbol
S: símbolo de conservación
F: symbole de mise en réserve

scheduled maintenance
S: mantenimiento programado
F: maintenance programmée; entretien systématique

scrambler
S: aleatorizador
F: embrouilleur

screening test
S: prueba de selección
F: essai de sélection

scrolling; windowing
S: desplazamiento vertical; encuadre de la ventana
F: défilement; déplacement de fenêtre

SDL/GR
S: LED/GR
F: LDS/GR (graphique)

SDL/PE
S: LED/EP
F: LDS/PE (illustration)

SDL/PR
S: LED/PR
F: LDS/PR (programmation)

second data multiplexer
S: segundo multiplexor de datos
F: multiplexeur de données du deuxième ordre

second dial tone
S: segundo tono de invitación a marcar
F: seconde tonalité de numérotation

secondary failure
S: fallo secundario
F: défaillance secondaire

secondary routes
S: rutas secundarias
F: voies secondaires

section termination
S: extremo de sección
F: extrémité de section

security arrangements
S: disposiciones de seguridad
F: sécurité de fonctionnement

segment
S: segmento
F: segment

segmented encoding law
S: ley de codificación por segmentos
F: loi de quantification à segments; loi de codage à segments

segmenting
S: segmentación
F: segmentation

seizing-acknowledgement signal (Signalling System R2)
S: señal de acuse de recibo de toma (sistema de señalización R2)
F: signal d'accusé de réception de prise (système de signalisation R2)

seizing signal (sent in the forward direction)
S: señal de toma (transmitida hacia adelante)
F: signal de prise (émis dans le sens «en avant»)

seizing signal (Signalling System R2)
S: señal de toma (sistema de señalización R2)
F: signal de prise (système de signalisation R2)

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 class
S: clase seleccionada
F: classe adoptée

selected parameter
S: parámetro seleccionado
F: paramètre adopté

selection
S: selección
F: sélection

selection identity
S: identidad de selección
F: identité de sélection

selection signals
S: señales de selección
F: séquence de sélection

selection signals
S: señales de selección
F: signaux 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

selective accounting service
S: servicio de contabilidad selectiva
F: service de comptabilité sélective

SELF
S: SELF
F: SELF

semantics
S: semántica
F: sémantique

semateme (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	service attribute; telecommunication service attribute S: atributo de servicio; atributo de servicio de telecomunicación F: attribut de service; attribut de service de télécommunications	service time S: tiempo de servicio F: temps de service
send reference station S: estación de referencia para la emisión F: station de référence à l'émission	service availability S: disponibilidad del servicio F: disponibilité du service	service-user S: usuario del servicio F: utilisateur de service
send-special-information tone signal S: señal de envío de tono de información especial F: signal «envoyez la tonalité spéciale d'information»	service bits S: bits de servicio F: bits (binons) 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)
SENDER S: EMISOR F: SENDER (émetteur)	service code S: código de servicio F: code de service	service user mistake probability S: probabilidad de error de un usuario F: probabilité d'erreur d'un usager
sending SPM S: MPS emisora F: SPM expéditrice	service code prefix S: prefijo de código de servicio F: préfixe de code de service	service, telecommunication service S: servicio; servicio de telecomunicación F: service; service de télécommunications
sending SS-user S: usuario SS emisor F: utilisateur du service de session expéditeur	service data unit integrity S: integridad de unidad de datos del servicio F: intégrité de l'unité de données de service	session S: sesión F: session
sending transport entity S: entidad de transporte remitente F: entité de transport expéditrice	service digits S: dígitos de servicio F: éléments numériques de service	session-connection synchronization S: sincronización de conexión de sesión F: synchronisation de connexion de session
sending TS user S: usuario ST emisor F: utilisateur du service de transport expéditeur	service identification S: identificación de servicio F: identification de service	session protocol machine (SPM) S: máquina de protocolo de sesión (MPS) F: machine protocole de session (SPM)
separation S: separación F: séparation	service indicator S: indicador de servicio F: indicateur de service	session service user; SS-user S: usuario de servicio de sesión; usuario SS F: utilisateur du service de session
separator (in MML) S: separador (en LHM) F: séparateur (en LHM)	service information (octet) S: información de servicio (octeto de) F: octet de service	session status S: estado de la sesión F: état de session
sequence S: secuencia F: séquence	service integrity S: integridad del servicio F: intégrité de service	set S: poner F: positionnement
sequence number S: número secuencial F: numéro de séquence	service interworking S: interfuncionamiento de servicios F: interfonctionnement de service	SET S: SET F: SET
sequencing S: establecimiento de secuencia F: maintien en séquence	service message transfer unit (SMXU) S: unidad de transferencia de mensajes de servicio (UTMS) F: unité de transfert de messages de service (UTMS)	SETED S: SETED F: SETED
sequential S: secuencial F: séquentielle	service observation S: observación de la calidad de servicio F: observation de la qualité de service	setting-up time S: tiempo de establecimiento F: durée d'établissement
serial automatic calling S: llamada automática serie; llamada automática en modo serie F: appel automatique en mode série	service operability performance S: facilidad de utilización (de un servicio) F: facilité d'utilisation (d'un service)	seven kHz audio S: audio a 7 kHz F: audiofréquence de 7 kHz
serial to parallel converter; deserializer S: convertidor serie/paralelo F: convertisseur série/parallèle	service outage duration S: duración de una interrupción del servicio F: durée d'interruption du service	SFERT speech level meter S: indicador de volumen del SFERT F: indicateur du volume du SFERT
serial transmission S: transmisión serie F: transmission série	service-primitive; primitive S: primitiva del servicio; primitiva F: primitive de service; primitive	shannon S: shannon F: shannon
serveability performance S: servibilidad (de un servicio) F: servibilité (d'un service)	service-provider S: proveedor del servicio F: fournisseur de service	shared value S: valor compartido F: valeur partagée
service S: servicio F: service	service retainability S: retenibilidad (de un servicio) F: continuité (d'un service)	shift register S: registro de desplazamiento F: enregistreur à décalage
service accessibility performance S: accesibilidad (de un servicio) F: accessibilité (d'un service)	service retainability performance S: retenibilidad (de un servicio) F: continuité (d'un service)	ship earth station (SES) S: estación terrena de barco (ETB) F: station terrienne de navire (STN)
service accessibility; service access probability S: accesibilidad de un servicio; probabilidad de acceso a un servicio F: accessibilité (d'un service)	service signal S: señal de servicio F: signal de service	ship station identity S: identidad de estación de barco F: identité de la station de navire
service advices S: avisos de servicio F: avis de service	service support performance S: logística del servicio F: logistique de service	ship station number S: número de estación de barco F: numéro de station de navire
service area S: zona de servicio F: zone de service	service telegrams S: telegramas de servicio F: télégrammes de service	sidetone balance network S: red equilibradora del efecto local F: réseau d'équilibrage d'effet local
	service telex calls S: comunicaciones télex de servicio F: communications télex de service	sidetone loudness rating (STLR) S: índice de sonoridad para el efecto local (ISEL) F: affaiblissement pour la sonie de l'effet local (ASEL)

sidetone masking rating (STMR) S: índice de enmascaramiento para el efecto local (IEEL) F: affaiblissement d'effet local par la méthode de masquage (AELM)	signal unit (SU) S: unidad de señalización (US) F: unité de signalisation (SU)	signalling link set S: conjunto de enlaces de señalización F: faisceau de canaux sémaphores; faisceau de liaisons de signalisation
sidetone path loss S: atenuación del trayecto de efecto local F: affaiblissement du trajet d'effet local	signal unit alignment S: alineación de unidades de señalización F: alignement des trames sémaphores	signalling link unblocking S: desbloqueo de un enlace de señalización F: déblocage d'un canal sémaphore
sidetone power rating (STPR) S: atenuación del efecto local por suma de potencias (AELP) F: affaiblissement d'effet local par addition de puissances (AELP)	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	signalling message S: mensaje de señalización F: message de signalisation
signal S: señal F: signal	signalling S: señalización F: signalisation	(signalling) message discrimination S: discriminación de mensajes (de señalización) F: discrimination des messages (de signalisation)
SIGNAL S: SEÑAL F: SIGNAL	signalling channel S: canal de señalización F: voie de signalisation	(signalling) message distribution S: distribución de mensajes (de señalización) F: distribution des messages (de signalisation)
signal (general sense) S: señal (sentido general) F: signal (sens général)	signalling channel (Signalling System No. 6) S: canal de señalización (sistema de señalización N.º 6) F: voie de signalisation (système de signalisation n° 6)	signalling message handling functions S: funciones de tratamiento de mensajes de señalización F: fonctions d'orientation des messages de signalisation
signal (in signalling applications) S: señal (en aplicaciones de señalización) F: signal (applications concernant la signalisation)	signalling data link S: enlace de datos de señalización F: liaison sémaphore de données; liaison de données de signalisation	(signalling) message route S: ruta de mensajes (de señalización) F: route de message (de signalisation)
signal (in SDL) S: señal (en LED) F: signal (en LDS)	signalling data link S: enlace de datos para la señalización F: liaison de données de signalisation	(signalling) message routing S: encaminamiento de mensajes (de señalización) F: acheminement des messages (de signalisation)
signal-conversion equipment S: equipo de conversión de señales F: équipement de conversion de signaux	(signalling) destination point S: punto de destino (de la señalización) F: point (sémaphore) de destination	signalling network S: red de señalización F: réseau sémaphore
signal definition S: definición de señal F: définition de signal	signalling information S: información de señalización F: information de signalisation	signalling network functions S: funciones de la red de señalización F: fonctions du réseau sémaphore
signal element S: elemento de señal F: élément de signal	signalling information (field) S: información de señalización (campo de) F: information de signalisation (domaine d')	signalling network management functions S: funciones de gestión de la red de señalización F: fonctions de gestion du réseau sémaphore
signal imitation (in VF signalling) S: imitación de señal (en señalización FV) F: imitation de signaux (dans un système de signalisation à fréquences vocales)	signalling interworking S: interfuncionamiento de la señalización F: interfonctionnement de la signalisation	signalling network management signals S: señales de gestión de la red de señalización F: signaux de gestion du réseau de signalisation
signal instance S: instancia de señal F: instance de signal; signal	signalling link S: enlace de señalización F: canal sémaphore; liaison de signalisation	(signalling) originating point S: punto de origen (de la señalización) F: point (sémaphore) d'origine
signal list S: lista de señales F: liste de signaux	signalling link blocking S: bloqueo de un enlace de señalización F: blocage d'un canal sémaphore	signalling point S: punto de señalización F: point sémaphore
signal list symbol S: símbolo de lista de señales F: symbole de liste de signaux	signalling link code S: código de enlace de señalización F: code de canal sémaphore	signalling point code S: código de punto de señalización F: code d'un point sémaphore
(signal) message S: mensaje (de señalización) F: message (de signalisation)	signalling link error monitoring S: monitor de errores en el enlace de señalización F: surveillance des erreurs sur un canal sémaphore	signalling receiver PE S: elemento pictográfico de receptor de señalización F: élément graphique de récepteur de signalisation
signal repetition S: señal de repetición F: signal de répétition	signalling link failure S: avería del enlace de señalización; fallo del enlace de señalización F: défaillance d'un canal sémaphore	signalling relation S: relación de señalización F: relation sémaphore
signal route symbol S: símbolo de ruta de señal F: symbole d'acheminement des signaux	signalling link group S: grupo de enlaces de señalización F: groupe de canaux sémaphores	signalling route S: ruta de señalización F: route sémaphore
signal spill-over (in VF signalling) S: rebasamiento de señal (en señalización FV) F: partie débordante d'un signal (dans un système de signalisation à fréquences vocales)	signalling link management functions S: funciones de gestión de enlaces de señalización F: fonctions de gestion des canaux sémaphores	signalling route management functions S: funciones de gestión de rutas de señalización F: fonctions de gestion des routes sémaphores
signal transfer point S: punto de transferencia de la señalización F: point de transfert sémaphore	signalling link restoration S: restablecimiento de enlaces de señalización F: rétablissement d'un canal sémaphore	signalling route set S: conjunto de rutas de señalización F: faisceau de routes sémaphores
signal transfer point S: punto de transferencia de las señales F: point de transfert des signaux	signalling link selection field S: campo de selección de enlace de señalización F: domaine de sélection du canal sémaphore	
signal unit S: unidad de señalización F: trame sémaphore		

signalling route-set-test procedure S: procedimiento de prueba de conjunto de rutas de señalización F: procédure de test de faisceau de routes sémaphores	sine-squared pulse S: impulso en seno cuadrado F: impulsion en sinus carré	spark-over voltage S: tensión de cebado F: tension d'amorçage
signalling routing S: encaminhamiento de señalización F: acheminement de la signalisation	single channel voice-frequency telegraphy (SCVFT) S: telegrafía armónica monocanal F: télégraphie harmonique à une voie	spark-over voltage, a.c. S: tensión alterna de cebado F: tension alternative d'amorçage
signalling sender PE S: elemento pictográfico de emisor de señalización F: élément graphique d'émetteur de signalisation	single current transmission S: transmisión a simple polaridad; transmisión por corriente simple F: transmission par simple courant	spark-over voltage, d.c. S: tensión continua de cebado F: tension continue d'amorçage
signalling system S: sistema de señalización F: système de signalisation	single-ended synchronization S: sincronización uniterminal F: synchronisation locale	spark-over voltage, impulse S: tensión de cebado por choque F: tension d'amorçage au choc
signalling time slot S: intervalo de tiempo de señalización F: créneau temporel de signalisation; intervalle de temps de signalisation	single error S: error simple F: erreur simple	SPDU identifier (SI) S: identificador de UDPS (IU) F: identificateur de SPDU (SI)
signalling time slot S: intervalo de tiempo de señalización F: intervalle de temps de signalisation	single-stage selection (special prefix, or national destination code method) S: marcación en una sola etapa; método del prefijo especial; método del indicativo nacional de destino F: numérotation en un temps (méthode par préfixe spécial, ou par indicatif national de destination)	special dial tone S: tono especial de invitación a marcar F: tonalité spéciale de numérotation
(signalling) traffic flow control S: control del flujo del tráfico (de señalización) F: contrôle de flux de trafic (sémaphore)	smooth traffic S: tráfico con distribución uniforme F: trafic régularisé	special information tone S: tono especial de información F: tonalité spéciale d'information
signalling traffic management functions S: funciones de gestión del tráfico de señalización F: fonctions de gestion du trafic sémaphore	software S: soporte lógico F: logiciel	special ringing tone S: tono especial de llamada F: tonalité spéciale de retour d'appel
signalling transfer point S: punto de transferencia de señalización F: point de transfert sémaphore	sort S: clasificar F: trier	specific S: específico F: spécifique
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 (symbole)	sound- and television-programme connections S: conexiones radiofónicas y de televisión F: liaisons radiophoniques et télévisuelles	specific negative recorded announcement without supplementary information S: anuncio grabado específico negativo sin información suplementaria F: annonce enregistrée spécifique négative sans information supplémentaire
significant condition S: estado significativo; condición significativa F: état significatif	sound-programme circuit S: circuito radiofónico F: circuit radiophonique	specific positive recorded announcement with supplementary information S: anuncio grabado específico positivo con información suplementaria F: annonce enregistrée spécifique positive avec information supplémentaire
significant condition of a modulation S: estado significativo de una modulación (telegráfica) F: état significatif d'une modulation (télégraphique)	sound-programme circuit section S: sección de circuito radiofónico F: section de circuit radiophonique	specific positive recorded announcement without supplementary information S: anuncio grabado específico positivo sin información suplementaria F: annonce enregistrée spécifique positive sans information supplémentaire
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	source identifier S: identificador de fuente F: identificateur d'origine	specific recorded announcement S: anuncio grabado específico F: annonce enregistrée spécifique
significant interval S: intervalo significativo F: intervalle significatif	source language S: lenguaje fuente F: langage d'origine; langage-source	specification (in SDL) S: especificación F: spécification
simple connection S: conexión simple F: connexion simple	source/sink relationship S: relación fuente/aceptor; relación fuente/sumidero F: relation source/collecteur	Specification and Description Language (SDL) S: lenguaje de especificación y descripción (LED) F: langage de description et de spécification (LDS)
simple multipoint circuit S: circuito multipunto simple F: circuit multipoint simple	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)	speech S: conversación F: signaux de parole
simple parameter argument S: argumento de parámetro simple F: argument de paramètre simple	space condition (in Morse code only) S: reposo (en código Morse) F: repos (en code Morse)	speech digit signalling S: señalización por dígitos de conversación F: signalisation par éléments numériques vocaux
simple transmissions S: transmisiones simples F: transmissions simples	space division S: división en el espacio F: répartition dans l'espace; répartition spatiale	speech plus duplex (S + D) equipment S: equipo telefonía más dúplex; equipo T + D F: équipement bivocal
simplex; half duplex (deprecated) S: simplex F: simplex; à l'alternat	space division switching S: conmutación por división en el espacio; conmutación espacial F: commutation par répartition dans l'espace (commutation spatiale)	speech plus simplex (S + S) equipment S: equipo telefonía más simplex; equipo T + S F: équipement univocal
	spark-over S: cebado F: amorçage	speech volume penalty S: penalización en volumen sonoro F: pénalisation en volume sonore

speed conversion S: conversión de velocidad F: conversion de rapidité	start-of-pulsing signal (sent in the forward direction) S: señal de comienzo de numeración (transmitida hacia adelante); señal KP (sistema de señalización N.º 5) F: signal de début de numérotation, (émis dans le sens «en avant») signal KP (système n° 5)	stop S: parada F: arrêt
speed converter concentrator S: concentrador convertidor de velocidad F: concentrateur-diffuseur	start signal S: señal de arranque F: signal de départ	stop date S: fecha de parada F: date d'arrêt
splitting S: división F: éclatement	start-stop apparatus S: aparato aritmico F: appareil arhythmique	stop element S: elemento de parada F: élément d'arrêt
splitting (in VF signalling) S: desprendimiento (en señalización FV) F: coupure (dans un système de signalisation à fréquences vocales)	start-stop telegraph signal S: señal telegráfica aritmica F: signal télégraphique arhythmique	stop node S: nodo de parada F: nœud d'arrêt
spontaneous menu S: menú espontáneo F: menu spontané	start-stop transmission S: transmisión aritmica F: transmission arhythmique	stop signal S: señal de parada F: signal d'arrêt
spontaneous output S: salida espontánea F: sortie spontanée	start symbol S: símbolo de arranque F: symbole de départ	stop symbol S: símbolo de parada F: symbole d'arrêt
ST (end-of-pulsing) signal (Signalling System R1) S: señal ST (sistema de señalización R1) F: signal ST [«Sending Terminated» = fin de numérotation] (système de signalisation R1)	start time S: hora de arranque F: heure de début	stop time S: hora de parada F: heure d'arrêt
standard deviation δ S: desviación típica, δ F: écart-type, δ	starting signal S: señal de comienzo F: signal de démarrage	storage keyboard S: teclado con almacenamiento F: clavier à enregistreur
standard receive side S: lado recepción estándar F: équipement de réception normalisé	start/stop date S: fecha de arranque/parada F: date de début/d'arrêt	storage register S: memoria F: mémoire
standard send side S: lado emisión estándar F: équipement d'émission normalisé	start/stop time S: tiempo (hora) de arranque/parada F: moment de début/d'arrêt	storage within the network S: almacenamiento dentro de la red F: stockage dans le réseau
standardized option S: opción normalizada F: option normalisée	state (in SDL) S: estado F: état	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)
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	state node S: nodo de estado F: nœud d'état	store and forward unit (SFU) S: unidad de almacenamiento y retransmisión (UAR) F: unité d'enregistrement et retransmission (UER)
standby-ready signal S: señal de enlace de reserva preparado F: signal de liaison de réserve prête	state picture S: pictograma de estado F: illustration d'état	stored program control (SPC) system S: control por programa almacenado (CPA) F: système de commande par programme enregistré (SPC)
standby redundancy S: redundancia pasiva; redundancia de reserva F: redondance en attente; redondance passive; redondance en secours	state symbol S: símbolo de estado F: symbole d'état	stored program control (SPC) S: control por programa almacenado (CPA) F: commande par programme enregistré
standby state S: estado de espera F: état d'attente	state-transition diagram S: diagrama de transición de estados F: diagramme de transition	stress analysis S: análisis de esfuerzos F: analyse de contraintes
standby time S: tiempo de espera (de reserva) F: période d'attente	statistic S: estadístico F: statistique	stress model S: modelo de esfuerzos F: modele de contraintes
start action S: acción de arranque F: action de départ	statistical test S: prueba estadística F: test (statistique)	String S: cadena F: chaîne
start date S: fecha de arranque F: date de début	statistical tolerance interval S: intervalo estadístico de tolerancia F: intervalle statistique de dispersion	Struct S: struct F: struct
start-dialling signal (Signalling System R1) S: señal de invitación a marcar (sistema de señalización R1) F: signal d'invitation à transmettre (système de signalisation R1)	status channel S: canal de estado F: voie d'état	structure S: estructura F: structure
start element S: elemento de arranque F: élément de départ	status field S: campo de estado F: domaine d'état	stuffing character S: carácter de relleno F: caractère de bourrage
start node S: nodo de arranque F: nœud de départ	status report (SRPT) S: informe de estado (IE) F: rapport d'état (RE)	sub-address (network address extension) S: subdirección (ampliación de la dirección de red) F: sous-adresse (extension de l'adresse du réseau)
start-of-block signal S: señal de principio de bloque F: signal de début de bloc	status request (SRQ) S: petición de estado (PE) F: demande de renseignements d'état (DRE)	sub-addressing S: subdireccionamiento F: sous-adressage
	step stress test S: prueba de esfuerzo escalonado F: essai sous contrainte échelonnée	

sub-block S: sub-bloque F: sous-bloc	subscriber line busy (Signalling System R2) S: línea de abonado ocupado (sistema de señalización R2) F: signal d'abonné occupé (système de signalisation R2)	successive phases of a call S: fases sucesivas de una comunicación F: phases successives d'une communication
sub-block definition S: definición de sub-bloque F: définition de sous-bloc	subscriber line free, charge (Signalling System R2) S: abonado libre, con tasación (sistema de señalización R2) F: signal d'abonné libre, avec taxation (système de signalisation R2)	sudden failure S: fallo repentino F: défaillance soudaine
sub-block symbol S: símbolo de sub-bloque F: symbole de sous-bloc	subscriber line free, no charge (Signalling System R2) S: abonado libre, sin tasación (sistema de señalización R2) F: signal d'abonné libre, sans taxation (système de signalisation R2)	super-telephone telegraphy S: telegrafía suprateléfonica; telegrafía supraacústica F: télégraphie supra-téléphonique
sub-centre S: subcentro F: sous-centre	subscriber line out of order (Signalling System R2) S: línea de abonado fuera de servicio (sistema de señalización R2) F: signal de ligne d'abonné en dérangement	supergroup S: grupo secundario F: groupe secondaire
sub-channel S: subcanal F: sous-voie	subscriber number S: número de abonado F: numéro d'abonné	supergroup link S: enlace en grupo secundario F: liaison en groupe secondaire
sub-channel S: subcanal F: sous-canal	subscriber serving exchange S: central de servicio de abonados F: commutateur de rattachement	supergroup section S: sección de grupo secundario F: section de groupe secondaire
sub-control station S: estación subdirectora F: station sous-directrice	subscriber system (in transmission planning) S: sistema de abonado F: système d'abonné	supermastergroup S: grupo cuaternario F: groupe quaternaire
sub-process S: subproceso F: sous-processus	subscriber traffic rate S: intensidad de tráfico de un abonado F: trafic d'un abonné	supermastergroup link S: enlace en grupo cuaternario F: liaison en groupe quaternaire
sub-system number S: número de subsistema F: numéro de sous-système	subscriber's alpha-numerical display S: servicio de visualización alfanumérica en el aparato telefónico F: service d'affichage alphanumérique de renseignements relatifs aux abonnés	supermastergroup section S: sección de grupo cuaternario F: section de groupe quaternaire
subdivision S: división; subdivisión F: subdivision	subscriber's facsimile station S: estación facsímil de abonado F: poste d'abonné de télécopie	supervision S: supervisión F: surveillance; supervision
subframe S: subtrama F: sous-trame; secteur de trame	subscriber's installation S: instalación de abonado F: installation d'abonné	supplementary information S: información suplementaria F: information supplémentaire
sublayer S: subcapa F: sous-couche	subscriber's line S: línea de abonado F: ligne d'abonné	supplementary information (of internal automatic observations) S: información suplementaria (de las observaciones automáticas internas) F: informations supplémentaires (des observations automatiques internes)
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	subscriber's (telephone) line; subscriber loop (in telephony) S: línea (telefónica) de abonado; bucle de abonado (entelofonia) F: ligne (téléphonique) d'abonné; ligne (de) réseau	supplementary services provided S: servicios suplementarios proporcionados F: services supplémentaires assurés
submission S: depósito F: dépôt	subscriber's national telex number S: número télex nacional de un abonado F: numéro télex national d'un abonné	supplementary telephone service S: servicio telefónico suplementario F: service téléphonique supplémentaire
submission and delivery entity (SDE) S: entidad de depósito y entrega (EDE) F: entité de dépôt et de remise (SDE)	subsequent address message (SAM) S: mensaje subsiguiente de dirección (MSD) F: message subséquent d'adresse (MSA)	suppression hangover time S: tiempo de bloqueo para la supresión F: temps de maintien pour le blocage
submission and delivery protocol (P3) S: protocolo de depósito y entrega (P3) F: protocole de dépôt et de remise (P3)	subsequent address message (SAM) S: mensaje subsiguiente de dirección (MSD) F: message d'adresse subséquent (SAM)	suppression loss S: atenuación para la supresión F: affaiblissement de blocage
submission envelope S: sobre de depósito F: enveloppe de dépôt	subsequent signal unit (SSU) S: unidad subsiguiente de señalización (USS) F: unité de signalisation subséquente (SSU)	suppression operate time S: tiempo de funcionamiento para la supresión F: temps de fonctionnement pour le blocage
subnetwork S: subred F: sous-réseau	subtelephone telegraphy S: telegrafía infrateléfonica; telegrafía infraacústica F: télégraphie infra-téléphonique	switchboard PE S: elemento pictográfico de cuadro de conmutación F: élément graphique de panneau de commande
subnetwork-connection S: conexión de subred F: connexion de sous-réseau	successful call S: llamada fructuosa F: appel ayant abouti	switched connection S: conexión conmutada F: connexion commutée
subroutine S: subrutina F: sous-programme		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
subscriber-busy signal (electrical) S: señal (eléctrica) de abonado ocupado F: signal (électrique) d'abonné occupé		switched transit country S: país de tránsito con conmutación F: pays de transit en commutation
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		switching S: conmutación F: commutation
subscriber calling rate S: intensidad de llamadas de un abonado F: taux d'appel d'un abonné		
subscriber channel in a multiplexed DTE/DCE interface S: canal de abonado en un interfaz ETD/ETCD múltiplex F: voie d'abonné à une interface multiplex ETDD/ETCD		

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 module PE

S: elemento pictográfico de módulo de conmutación

F: élément graphique de module de commutation

switching network

S: red de conexión

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 stage

S: etapa de conmutación

F: étage de commutation

symbol

S: símbolo

F: symbole

symbol (in SDL)

S: símbolo (en LED)

F: symbole (en LDS)

symbolic name

S: nombre simbólico

F: nom symbolique

symmetrical binary code

S: código binario simétrico

F: code binaire symétrique

symmetrical channel

S: canal simétrico

F: voie symétrique

symmetry

S: simetría

F: symétrie

synchronization

S: sincronización

F: synchronisation

synchronization bit

S: bit de sincronización; bit de sincronismo

F: bit 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)

synchronized network

S: red sincronizada

F: réseau synchronisé

synchronous

S: sincrónico

F: synchrone

synchronous data network

S: red síncrona de datos

F: réseaux pour données synchrones

synchronous (start-stop) margin

S: margen de sincronismo (de un aparato aritmético)

F: marge au synchronisme (d'un appareil arithmique)

synchronous system

S: sistema sincrónico

F: télégraphie synchrone

synchronous transmission

S: transmisión síncrona

F: transmission synchrone

synonym definition

S: definición de sinónimo

F: définition de synonyme

syntax

S: sintaxis

F: syntaxe

syntax diagram

S: diagrama sintáctico; diagrama de sintaxis

F: diagramme de syntaxe

syntype

S: sintipo

F: syntype

system

S: sistema

F: système

system (in MML)

S: sistema (en LHM)

F: système (en LHM)

system area

S: zona de sistema

F: 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 boundary

S: frontera de sistema

F: frontière du système

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

F: station directrice (dans un système)

system control station

S: estación de control del sistema

F: centre directeur

system definition

S: definición de sistema

F: définition de système

system information

S: información del sistema

F: information du système

System No. 6 exchange

S: central del sistema N.º 6

F: centre n° 6

System No. 6 exchange, first

S: central del sistema N.º 6, primera

F: centre n° 6, premier

System No. 6 exchange, intermediate

S: central del sistema N.º 6, intermedia

F: centre n° 6, intermédiaire

System No. 6 exchange, last

S: central del sistema N.º 6, última

F: centre n° 6, dernier

system status window

S: ventana de estado del sistema; ventana de estado

F: fenêtre d'état du système

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**table**

S: tabla; cuadro

F: tableau

take-up factor

S: factor de cableado

F: facteur de câblage

talking resistance

S: resistencia de conversación

F: résistance de conversation

tandem connection

S: conexión en cascada

F: connexion en tandem

(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 program ; object program

S: programa resultante; programa objeto

F: programme résultant; programme-objet

task

S: tarea

F: tâche

task (in SDL)

S: tarea (en LED)

F: tâche (en LDS)

task node

S: nodo de tarea

F: nœud de tâche

task symbol

S: símbolo de tarea

F: symbole de tâche

technical delay

S: retardo técnico

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 network**
S: red de telecomunicación
F: réseau de télécommunications
- telecommunication security**
S: seguridad de las telecomunicaciones
F: sécurité des communications
- telecommunications traffic; teletraffic**
S: tráfico de telecomunicación; teletráfico
F: trafic de télécommunications (télétrafic)
- Telefax**
S: telefax
F: téléfax
- Telefax 2**
S: telefax 2
F: téléfax 2
- Telefax 3**
S: telefax 3
F: téléfax 3
- 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 modulation**
S: modulación telegráfica
F: modulation télégraphique
- 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)
- telegraph trunk circuit**
S: circuito telegráfico intercentrales
F: circuit télégraphique de jonction
- telematic services**
S: servicios de telemática; servicios telemáticos
F: services télématiques
- 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) relation**
S: relación (telefónica)
F: relation (téléphonique)
- 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**
S: parte de usuario de telefonía
F: Sous-système Utilisateur 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
- (teletypewriter) control unit**
S: unidad de control (de un teleimpresor)
F: coffret de commande (d'un téléimprimeur)
- teletypewriter; teletypewriter**
S: teleimpresor
F: téléimprimeur
- teleservice**
S: teleservicio
F: téléservice
- Teletex basic control function repertoire**
S: repertorio teletex básico de funciones de control
F: répertoire des fonctions de commande télételex de base
- Teletex basic graphic character repertoire**
S: repertorio teletex básico de caracteres gráficos
F: répertoire des caractères graphiques télételex de base
- Teletex call**
S: comunicación teletex
F: communication télételex
- Teletex character repertoire**
S: repertorio teletex de caracteres
F: répertoire des caractères télételex
- other Teletex character repertoires**
S: otros repertorios teletex de caracteres
F: autres répertoires de caractères télételex
- Teletex control function repertoire**
S: repertorio teletex de funciones de control
F: répertoire des fonctions de commande télételex
- Teletex document**
S: documento teletex
F: document télételex
- Teletex graphic character repertoire**
S: repertorio teletex de caracteres gráficos
F: répertoire des caractères graphiques télételex
- Teletex page**
S: página teletex
F: page télételex
- teletex service**
S: servicio teletex
F: service télételex
- Teletex terminal**
S: terminal teletex
F: équipement terminal télételex
- television circuit**
S: circuito de televisión
F: circuit télévisuel
- television circuit section**
S: sección de circuitos de televisión
F: section de circuit télévisuel
- telex destination code**
S: código télex de destino
F: code télex de destination
- telex network identification code**
S: código de identificación de la red télex
F: code d'identification de réseau télex
- (telex) relation**
S: relación (télex)
F: relation (télex)
- 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) terminal(e)
- terminal echo suppressor**
S: supresor de eco terminal
F: supprimeur d'écho terminal
- terminal equipment**
S: equipo terminal
F: équipement terminal
- terminal equipment PE**
S: elemento pictográfico de equipo terminal
F: élément graphique d'équipement terminal
- terminal installation for data transmission**
S: instalación terminal para transmisión de datos
F: installation terminale pour transmission de données

terminal international centre S: centro terminal internacional F: centre terminal international	text area S: zona de texto F: zone de texte	through-supergroup connection point S: punto de transferencia de grupo secundario F: point de transfert de groupe secondaire
terminal international exchange S: central internacional terminal F: centre international terminal	text block S: bloque de texto F: bloc de texte	through-supermastergroup connection point S: punto de transferencia de grupo cuaternario F: point de transfert de groupe quaternaire
terminal national centre S: centro terminal nacional F: centre terminal national	text extension symbol S: símbolo de ampliación de texto F: symbole d'extension de texte	Time S: tiempo F: time
terminal national section S: sección terminal nacional F: section nationale terminale	text image format (TIF) S: formato de imagen de texto F: format d'image de texte (TIF)	time acceleration factor S: factor de aceleración temporal F: facteur d'accélération temporelle
terminal operating mode S: modo de funcionamiento del terminal F: mode de fonctionnement du terminal	text processable format (TPF) S: formato procesable de texto F: format de texte traitable (TPF)	time between failures S: tiempo entre fallos F: temps entre défaillances
terminal share S: parte alicuota terminal F: quote-part terminale	text string S: cadena de texto F: chaîne de texte	time between interruptions S: tiempo entre interrupciones F: temps entre interruptions
terminal symbol S: símbolo de terminal F: symbole terminal	text transfer (TT) S: transferencia de texto (TT) F: transfert de texte (TT)	time congestion S: congestión temporal F: congestion temporelle
terminating traffic S: tráfico de destino F: trafic d'arrivée	text unit S: unidad de texto F: unité de texte	time consistent busy hour; mean busy hour S: hora cargada media repetitiva; hora cargada media sistemática F: heure chargée moyenne
terminology harmonization S: armonización de la terminología F: harmonisation de la terminologie	theoretical duration of a significant interval S: duración teórica de un intervalo significativo F: durée théorique d'un intervalle significatif	time division S: división en el tiempo F: répartition dans le temps; répartition temporelle
test S: prueba F: Essai	theoretical margin S: margen teórico F: marge théorique	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
test call indicator (Signalling System R2) S: indicador de llamada de prueba (sistema de señalización R2) F: indicateur d'appel d'essai (système de signalisation R2)	three party services S: servicio tripartito F: service comportant un troisième correspondant	time division switching S: conmutación por división en el tiempo; conmutación temporal F: commutation par répartition dans le temps (commutation temporelle)
test data S: datos de prueba F: données d'essai	three point one kHz audio S: audio a 3,1 kHz F: audiofréquence de 3,1 kHz	time interval S: intervalo de tiempo F: intervalle de temps
test levels at analogue interfaces S: niveles de prueba en interfaces analógicos F: niveaux de mesure aux interfaces analogiques	threshold amplifier S: amplificador de umbral F: amplificateur à seuil	time interval error S: error de intervalo de tiempo F: dérive temporelle
test loop S: bucle de prueba F: boucle d'essai	through-connection delay S: tiempo de transferencia de la central F: durée d'établissement d'un commutateur	time interval error (TIE) S: error de intervalo de tiempo (EIT) F: erreur sur la durée (TIE)
test section S: sección de pruebas F: section d'essais	through-connection delay S: tiempo de transferencia de la central F: temps de transfert	time-out S: temporización F: temporisation
tested RQ S: control de RQ; prueba de RQ F: contrôle de RQ	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)	time quantized control S: control por cuantificación temporal F: synchronisation échantillonnée
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	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)	time sliced control S: control por cuantificación temporal F: mode à quantification temporelle
testing point (transmission) S: punto de pruebas de la transmisión F: centre pour les essais de la transmission	through-group connection point S: punto de transferencia de grupo primario F: point de transfert de groupe primaire	time sharing S: tiempo compartido F: partage de temps; temps partagé
testing point (line signalling) S: punto de pruebas de la señalización de línea F: centre pour les essais de la signalisation de ligne	through-mastergroup connection point S: punto de transferencia de grupo terciario F: point de transfert de groupe tertiaire	time slicing S: segmentación de tiempo F: découpage de temps
testing repetition cycle S: ciclo de repetición controlado F: cycle de répétition contrôlé	through-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	time slot S: intervalo de tiempo F: créneau temporel; intervalle de temps
test/measurement day S: día de la prueba/medición F: jour d'essai/de mesure		time slot interchange S: intercambio de intervalos de tiempo F: échange entre intervalles de temps
text S: texto F: texte		

time slot sequence integrity S: integridad de la secuencia de intervalos de tiempo F: intégrité de la séquence des intervalles de temps	traffic load imbalance S: desequilibrio de la carga de tráfico en las entradas F: déséquilibre de trafic	transfer restricted S: transferencia restringida; restricción de transferencia F: transfert restreint
time supervision of a process PE S: elemento pictográfico de supervisión de tiempo de un proceso F: supervision de temps d'un élément graphique de processus	traffic matrix S: matriz de tráfico F: matrice de trafic	transfer syntax S: sintaxis de transferencia F: syntaxe de transfert
time to failure S: tiempo hasta el fallo F: durée de fonctionnement avant défaillance	traffic offered S: tráfico ofrecido F: trafic offert	transfer time S: tiempo de transferencia F: temps de transfert
time to first failure S: tiempo hasta el primer fallo F: durée de fonctionnement avant la première défaillance	traffic relation; traffic stream; traffic item; parcel of traffic; point-to-point traffic S: relación de tráfico; corriente de tráfico; elemento de tráfico; lote de tráfico; tráfico de punto a punto F: flux de trafic (traffic point à point, courant de trafic)	transit country (or Administration) S: país (o Administración) de tránsito F: pays (ou Administration) de transit
time to restoration; time to recovery S: tiempo de avería F: temps de panne	traffic route S: ruta de tráfico F: voie d'acheminement de trafic	transit exchange S: central de tránsito F: centre de transit
Timer S: temporizador F: timer	traffic routing S: encaminamiento de tráfico F: acheminement de trafic	transit exchange S: centro de tránsito F: commutateur nodal télégraphique
timing information S: información de temporización F: information de rythme	traffic routing (in circuit switching) S: encaminamiento de tráfico (en conmutación de circuitos) F: acheminement (en commutation de circuits)	transit network identification S: identificación de la red de tránsito F: identification du réseau de transit
timing recovery; timing extraction S: recuperación de la temporización; extracción de la temporización F: récupération du rythme	traffic unit S: unidad de tráfico F: unité de trafic	transit share S: parte alícuota de tránsito F: quote-part de transit
timing signal S: señal de temporización F: signal de rythme	traffic-unit price procedure S: procedimiento de remuneración en función de las unidades de tráfico F: méthode de rémunération en fonction d'unités de trafic	transit traffic S: tráfico de tránsito F: trafic de transit
title S: título F: appellation	traffic volume S: volumen de tráfico F: volume de trafic	transition S: transición F: transition
title-domain S: dominio de título F: domaine de l'appellation	trafficability performance S: aptitud para cursar tráfico F: traficabilité; capacité d'écoulement du trafic	transition (in SDL) S: transición (en LED) F: transition (en LDS)
title-domain-name S: nombre de dominio de título F: nom de domaine d'appellation	transaction (in signalling applications) S: transacción (en aplicaciones de señalización) F: transaction (dans les applications de signalisation)	transition string S: cadena de transición F: chaîne de transition
token S: testigo F: jeton	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	translation S: traducción F: traduction (en commutation automatique)
tone S: tono F: tonalité	transfer-allowed (procedure) S: autorización de transferencia (procedimiento de) F: transfert autorisé (procédure de)	translator S: traductor F: traducteur
tone on hold S: tono de retención F: tonalité de garde	transfer-allowed signal S: señal de autorización de transferencia F: signal d'autorisation de transfert	transmission S: transmisión F: transmission
tool S: instrumento; herramienta F: outil	transfer channel S: canal de transferencia F: voie de transfert	transmission buffer S: memoria tampón de transmisión F: tampon d'émission
topology S: topología F: topologie	transfer controlled S: transferencia controlada; control de transferencia F: transfert sous contrôle	transmission code violation S: violación del código de transmisión F: violation du code de transmission en boucle
total call connection delay (TCCD) S: retardo total de conexión de la llamada (RTCL) F: temps total d'établissement de la communication	transfer link S: enlace de transferencia F: liaison de transfert	transmission delay (through a digital exchange) S: tiempo de transmisión (a través de una central digital) F: temps de transmission (dans un central numérique)
track S: pista F: piste	transfer-prohibited (procedure) S: prohibición de transferencia (procedimiento de) F: transfert interdit (procédure de)	transmission maintenance point (international line) (TMP-IL) S: centros de mantenimiento de la transmisión para la línea internacional (CMT-LI) F: centres de maintenance de la transmission pour la ligne internationale (CMT-LI)
traffic carried (intensity) S: tráfico cursado (intensidad) F: trafic écoulé (intensité)	transfer-prohibited signal S: señal de prohibición de transferencia F: signal d'interdiction de transfert	transmission of a verbal message service S: servicio de transmisión de un mensaje verbal F: service de transmission d'un message verbal
traffic-carrying device S: dispositivo de transmisión de tráfico F: organe de trafic		transmission performance S: calidad de transmisión F: qualité de transmission
traffic distribution imbalance S: desequilibrio de la distribución interna de tráfico F: déséquilibre interne de trafic		transmission reference point S: punto de referencia para la transmisión F: point de référence pour la transmission

transmit channel S: canal de emisión F: voie d'émission	two-way-alternate interaction S: interacción bidireccional alternada F: interaction à l'alternat	unidirectional S: unidireccional F: unilatéral
transmit flow control S: control del flujo de transmisión F: contrôle de flux de transmission	two way simultaneous (TWS) S: modo bidireccional simultáneo F: échange bidirectionnel simultané (TWS)	uniform S: uniforme F: uniforme
transmit window S: ventana de transmisión F: fenêtre de transmission	two-way-simultaneous interaction S: interacción bidireccional simultánea F: interaction bidirectionnelle simultanée	uniform encoding S: codificación uniforme F: codage uniforme
transmitter distortion S: distorsión en la emisión; distorsión en el emisor F: distorsion à l'émission	two-wire switching S: conmutación a dos hilos F: commutation à deux fils	uniform quantizing S: cuantificación uniforme F: quantification uniforme
transmitter distortion S: distorsión del transmisor F: distorsion à l'émission	type S: tipo F: type	uniformity S: uniformidad F: uniformité
transmultiplexer S: transmultiplexor F: transmultiplexeur	type definition S: definición de tipo F: définition de type; définition	unilateral control S: control unilateral F: synchronisation unilatérale
transmultiplexer channel S: canal de un transmultiplexor F: voie de transmultiplexeur	type I risk S: riesgo de tipo I F: risque de première espèce	unintelligible crosstalk components S: componentes de diafonía ininteligible F: composantes de diaphonie inintelligible
transparency S: transparencia; transparencia digital F: transparence; transparence numérique	type II risk S: riesgo de tipo II F: risque de seconde espèce	unit element S: elemento unitario F: élément unitaire
transparent (data) S: transparencia; datos transparentes F: données transparentes	type P transmultiplexer (TMUX-P) S: transmultiplexor de tipo P (TMUX-P) F: transmultiplexeur de type P (TMUX-P)	unit element error rate for isochronous modulation S: tasa de errores en los elementos unitarios F: taux d'erreur sur les éléments unitaires
transparent data transfer phase S: fase de transferencia transparente de datos F: phase de transfert transparent de données	type S transmultiplexer (TMUX-S) S: transmultiplexor de tipo S (TMUX-S) F: transmultiplexeur de type S (TMUX-S)	unit interval S: intervalo unitario; intervalo unidad F: intervalle unitaire
transport service provider; TS-provider S: proveedor de servicio de transporte; proveedor ST F: fournisseur du service de transport	types of sound-programme circuit S: tipos de circuitos radiofónicos F: types de circuits radiophoniques	universal access number service S: servicio de números universales F: service de numéros universels
transport service user S: usuario del servicio de transporte F: utilisateur du service de transport		unreasonable message S: mensaje irrazonable; mensaje irracional F: message inattendu
transverse voltage S: tensión transversal F: tension transversale	U	unrestricted digital information S: información digital sin limitaciones F: information numérique sans restriction
tributary channel S: canal afluente F: voie affluente	unacceptable transmission probability S: probabilidad de transmisión inaceptable F: probabilité d'une transmission inacceptable	unscheduled maintenance S: mantenimiento no programado F: maintenance non programmée
trombone (loop) connection S: conexión en bucle F: connexion en boucle	unaffected level S: nivel invariable F: niveau inchangé	unstructured S: no estructurado F: non structuré
true ... S: ... verdadero F: ... vrai	unallocated number (Signalling System R2) S: número no asignado (sistema de señalización R2) F: signal de numéro non utilisé (système de signalisation R2)	unsuccessful call S: llamada infructuosa F: appel infructueux
trunk circuit S: circuito (entre centrales) F: circuit	unallocated-number signal S: señal de número no asignado F: signal de numéro inutilisé	up state S: estado de disponibilidad F: état de disponibilité
trunk code S: indicativo interurbano F: indicatif interurbain	unassigned reference S: referencia no asignada F: référence non affectée	up time S: tiempo de disponibilidad F: temps de disponibilité; temps de bon fonctionnement
trunk PE S: elemento pictográfico de línea troncal F: élément graphique de circuit	unblocking-acknowledgement signal S: señal de acuse de recibo de desbloqueo F: signal d'accusé de réception de déblocage	upper window edge S: borde superior de ventana F: limite supérieure de fenêtre
trunk prefix S: prefijo interurbano F: préfixe interurbain	unblocking signal S: señal de desbloqueo F: signal de déblocage	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
two condition, three condition, four condition S: bivalente; trivalente; tetravalente; de dos estados, etc. F: bivalent (trivalent, etc.)	unconfirmed-service S: servicio no confirmado F: service non confirmé	upstream failure indication S: indicación de fallo detrás F: indication de défaillance en amont
two-sided test S: prueba bilateral F: test bilatéral	uncontrolled slip S: deslizamiento incontrolado F: glissement non commandé	useful life S: vida útil F: (durée de) vie utile
two-stage selection S: marcación en dos etapas F: numérotation en deux temps	undercharging probability S: probabilidad de subtarificación F: probabilité de sous-taxation	user; user of a telecommunication network S: usuario; usuario de una red de telecomunicación F: usager; usager d'un réseau de télécommunications
two way alternate (TWA) S: modo bidireccional alternado F: échange bidirectionnel à l'alternat (TWA)	undetected fault time S: tiempo de no detección de la avería F: temps de non-détection de panne	
	unidirectional S: unidireccional F: unidirectionnel	

user
S: usuario; hombre
F: usager

user (of the signalling system)
S: usuario (del sistema de señalización)
F: utilisateur du système de signalisation

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 (AU)
F: agent d'utilisateur (UA)

user agent entity (UAE)
S: entidad de agente de usuario (EAU)
F: entité d'agent d'utilisateur (UAE)

user agent layer (UAL)
S: capa de agente de usuario (CAU)
F: couche agent d'usager (couche UAL)

user assistance
S: asistencia al usuario
F: assistance à l'usager

user class of service
S: clase de servicio de usuario
F: catégorie d'usagers du service

user-element
S: elemento de usuario
F: élément utilisateur

user functions
S: funciones de usuario
F: fonctions utilisatrices

user handling time, T_{hu}
S: tiempo de tratamiento de usuario, T_{hu}
F: temps de traitement RNIS, T_{hu}

user handling time, T_{hu}
S: tiempo de tratamiento de la parte de usuario de telefonía, T_{hu}
F: temps de traitement par le Sous-système Utilisateur Téléphonie T_{hu}

user information error probability
S: probabilidad de error en la información de usuario
F: probabilité d'erreur dans l'information d'usager

user information loss probability
S: probabilidad de pérdida de la información de usuario
F: probabilité de perte de l'information d'usager

user information misdelivery probability
S: probabilidad de entrega indebida de la información de usuario
F: possibilité d'erreur dans la remise de l'information d'usager

user information transfer delay
S: retardo de transferencia de la información de usuario
F: temps de transfert de l'information d'usager

user information transfer denial probability
S: probabilidad de denegación de transferencia de la información de usuario
F: probabilité d'impossibilité de transfert de l'information d'usager

user information transfer rate
S: velocidad de transferencia de la información de usuario
F: débit 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 Part
S: parte de usuario
F: Sous-système Utilisateur

user service
S: servicio de usuario
F: service complémentaire offert aux usagers

user-user protocol
S: protocolo usuario-usuario
F: protocole d'usager à usager

user-user protocol
S: protocolo usuario-usuario
F: protocole usager-usager

V

valid input signal
S: señal de entrada válida
F: signal entrant valide

valid SPDU
S: UDPS válida
F: SPDU 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 definition
S: definición de variable
F: définition de 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)

video
S: video
F: vidéo

video attributes
S: atributos video
F: attributs vidéo

videography
S: videografía
F: vidéographie

Videotex frame
S: trama videotex
F: feuillet vidéotex

Videotex gateway
S: función de multiacceso videotex; puerta de acceso 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 message handling
S: tratamiento de mensajes videotex; manejo de mensajes videotex
F: traitement des messages 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 facilities
S: facilidad del servicio videotex
F: prestations du service vidéotex; service complémentaire 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 systems
S: sistema videotex
F: systèmes vidéotex

videotex terminal
S: terminal videotex
F: terminal vidéotex

Videotex terminal-to-terminal messaging
S: mensajería entre terminales videotex
F: service de messages entre terminaux vidéotex

Videotex transaction
S: transacción videotex
F: transactions vidéotex

videotex user
S: usuario videotex
F: usager du vidéotex

videotex, interactive videography
S: videotex; videografía interactiva
F: vidéographie interactive, vidéotex

view
S: visión
F: view (vue)

view definition
S: definición de visión
F: définition de visibilité

viewing expression
S: expresión de visión
F: expression de visibilité

virtual call; switched virtual connection
S: llamada virtual; conexión virtual conmutada
F: communication virtuelle; communication virtuelle commutée

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

visible display
S: presentación visible
F: zone visible

visited mobile service switching centre (MSC)

S: centro de conmutación de los servicios móviles (CCM) visitado

F: centre de commutation pour les services mobiles visité; CCM visité

visited public land mobile network (PLMN)

S: red del servicio móvil terrestre público (RMTP) visitada

F: réseau mobile terrestre public visité; RMTP visité

visual telephone service

S: servicio videotelefónico

F: service visiophonique

voice dialling service

S: servicio de marcación por la voz

F: service de numérotation par la voix

voice-frequency multiplex aggregate

S: haz de circuitos de telegrafía armónica

F: faisceau de télégraphie harmonique

voice-frequency (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

volume

S: volumen (de los sonidos vocales)

F: volume (des sons vocaux)

W**waiting time; queueing time**

S: tiempo de espera; tiempo de cola

F: temps de mise en attente

wander

S: fluctuación lenta de fase

F: dérapage

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: periodo de fallos por envejecimiento

F: période de défaillance par vieillissement; période de défaillance par usure

wide area telephone service

S: servicio telefónico concertado en grandes zonas

F: service téléphonique à l'intérieur d'une zone déterminée

window

S: ventana

F: fenêtre

window information

S: información de ventana

F: informations de contrôle de fenêtre

working range

S: gama de funcionamiento

F: plage de fonctionnement

Y**Y-ratio**

S: relación Y

F: rapport Y

yes or no test

S: prueba de viabilidad

F: essai par «tout ou rien»

PART IV

FIGURES AND TABLES

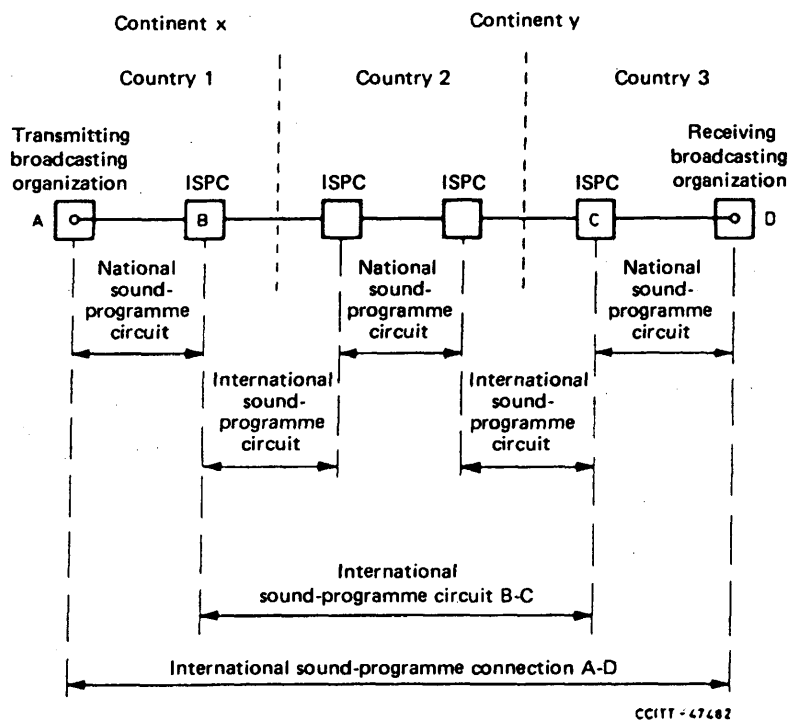


FIGURE 1/D.180

Example of an international sound-programme connection

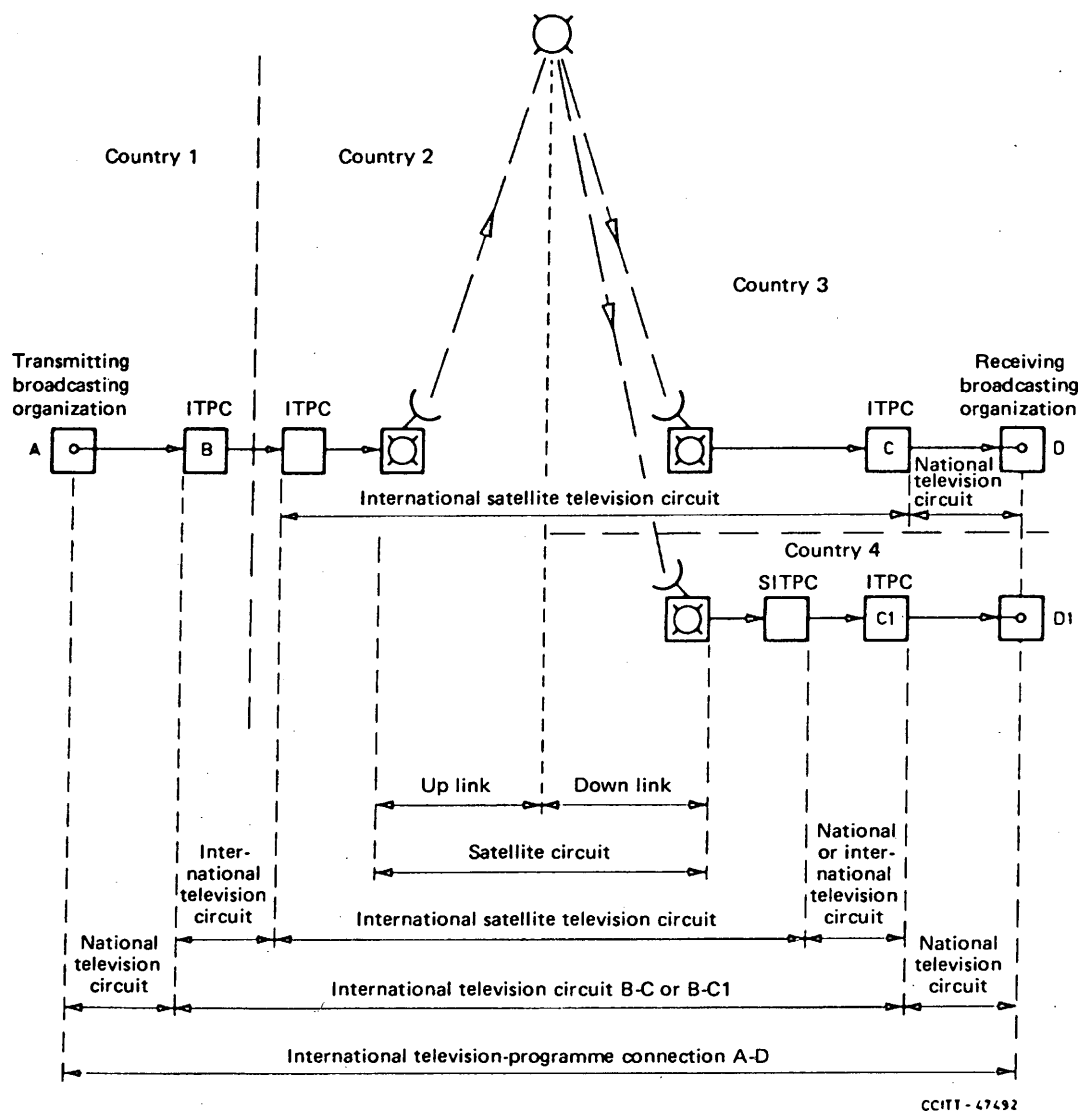


FIGURE 2/D.180

Example of an international television-programme connection involving a satellite circuit

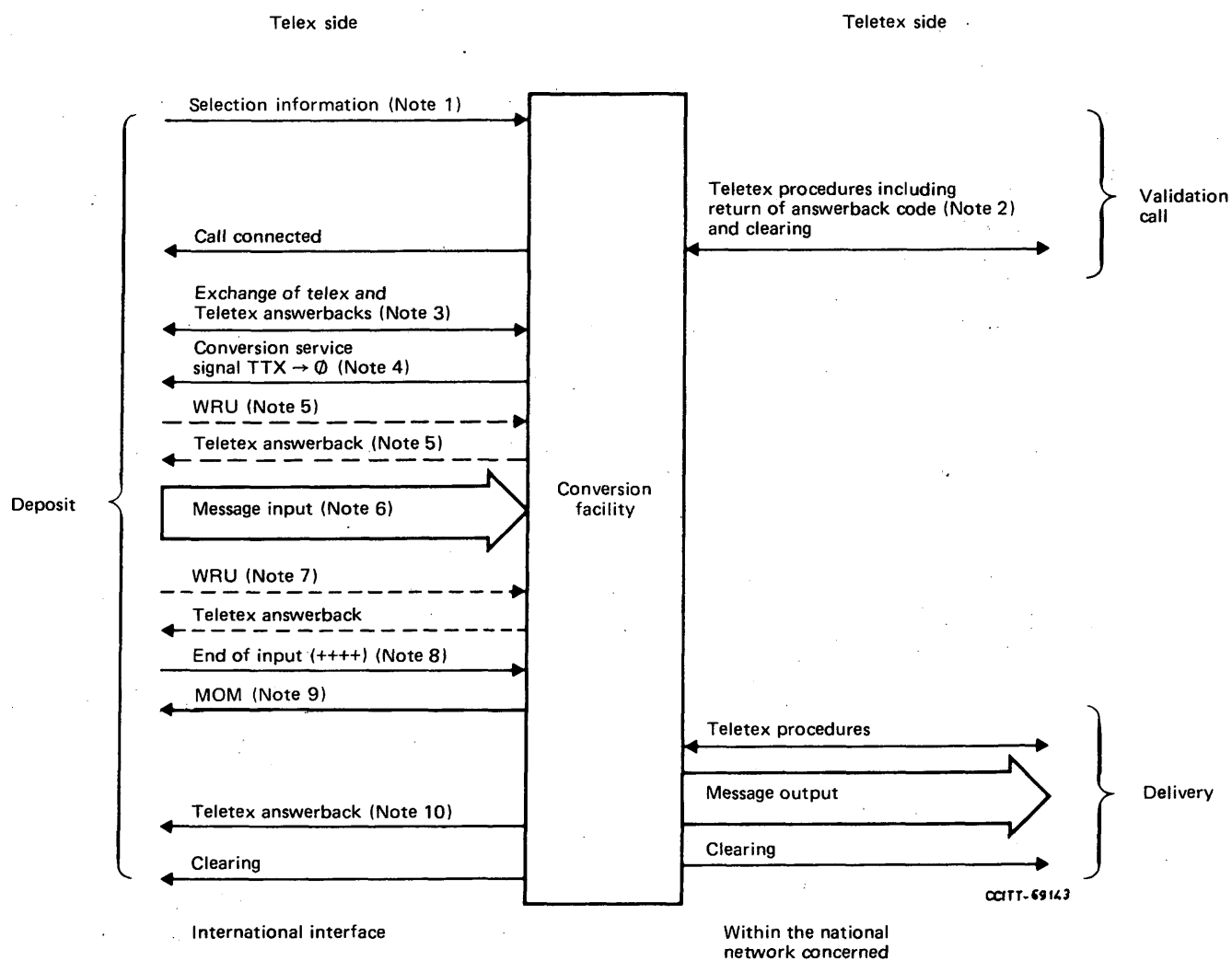


FIGURE 2/F.201

Interworking in the telex to Teletex direction
using one-stage selection procedure: (case of manual telex)

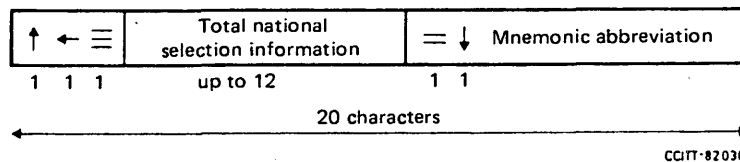
(Notes to Figure 2/F.201 on the following page)

Notes relative to Figure 2/F.201:

Note 1 — The total selection information of the Teletex subscriber should not be longer than 12 digits.

Note 2 — See Recommendations T.90 and U.70.

Note 3 — The Teletex answerback sent to the telex subscriber is a rearranged Teletex terminal identification, as follows:



where

↑ is a figure shift, ← is a carriage return, ≡ is a line feed, ↓ is a letter-shift and → is a space.

- i) The total national selection information contains the national access code to the CF (if necessary), the network identification as mentioned in Recommendation X.121 (if necessary) and the national Teletex subscriber number (Part 2 of the Teletex terminal identification), but shall not include the additional information (Part 3 of the Teletex terminal identification).

There should be no separators in the numeric part of the Teletex answerback.

- ii) If the length of the Teletex answerback above *exceeds* 20 characters, including control characters, the final part of the mnemonic abbreviation shall be omitted so as to reduce the total length to 20 characters.
- iii) If the length of the Teletex answerback is *less* than 20 characters, unused character positions shall be filled in accordance with Recommendation F.60.

Note 4 — i) There shall be an interval between the sending of the Teletex answerback and the sending of the conversion service signal. This interval is provisionally set to 800 ms. If information is sent by the telex subscriber within this period, no "TTX→Ø" service signal is returned by the CF and the CF will enter into the input mode.

- ii) TTX is the telex/Teletex conversion facility; Ø is the telex network identification code as provided in Recommendation F.69.

Note 5 — The CF shall accept the possible occurrence of an extra WRU at this stage. The answerback returned by the CF is the Teletex answerback obtained during the validation call. (See Note 3.)

Note 6 — The CF shall wait at least 15 seconds for the message input. See also Annex B for abnormal conditions during text input.

Note 7 — i) This procedure is recommended but not mandatory. See Recommendation F.60.

- ii) The answerback returned by the CF is the Teletex answerback obtained during the validation call. (See Note 3.)

Note 8 — i) The end of input (EOI) signal is the plus symbol (ITA No. 2 combination No. 26) repeated four times (+ + + +). This EOI signal need not be transferred to the Teletex side.

- ii) If the caller clears without the EOI signal, the network will endeavour to deliver the message as received. However, customers must be clearly warned that the network cannot guarantee delivery in these circumstances.

Note 9 — i) The CF shall wait 800 ms for WRU after EOI. If no WRU is received within this period, the terminal is considered as a manual one. A MOM signal is then sent by the CF at each call attempt. If a WRU is sent by the telex terminal within this period, the terminal is considered as a telex automatic emitting device.

- ii) When the EOI signal is received, the conversion facility shall immediately establish the second call to the Teletex terminal. For the case of unsuccessful calls on the PSPDN and CSPDN, the conversion facility shall make several attempts with five-second intervals measured from the end of one attempt to the beginning of the next. At each attempt, the MOM signal followed by service signals defined in Recommendation U.70, if appropriate, shall be sent to the waiting telex terminal. As a whole, the telex line is not to be held for a period exceeding 30 seconds. If all these attempts are unsuccessful, the conversion facility shall send the service message ITL→TTX→Ø (ITL = I'll transmit later) to the waiting telex terminal and clear down. It shall then be the responsibility of the Administration operating the conversion facility to effect delivery of the message by whatever means are available.

Note 10 — This answerback returned by the CF is the Teletex answerback obtained during the delivery call to the Teletex terminal and having the same format and content as described in Note 3. This answerback is an "on-line" delivery acknowledgement for the telex user.

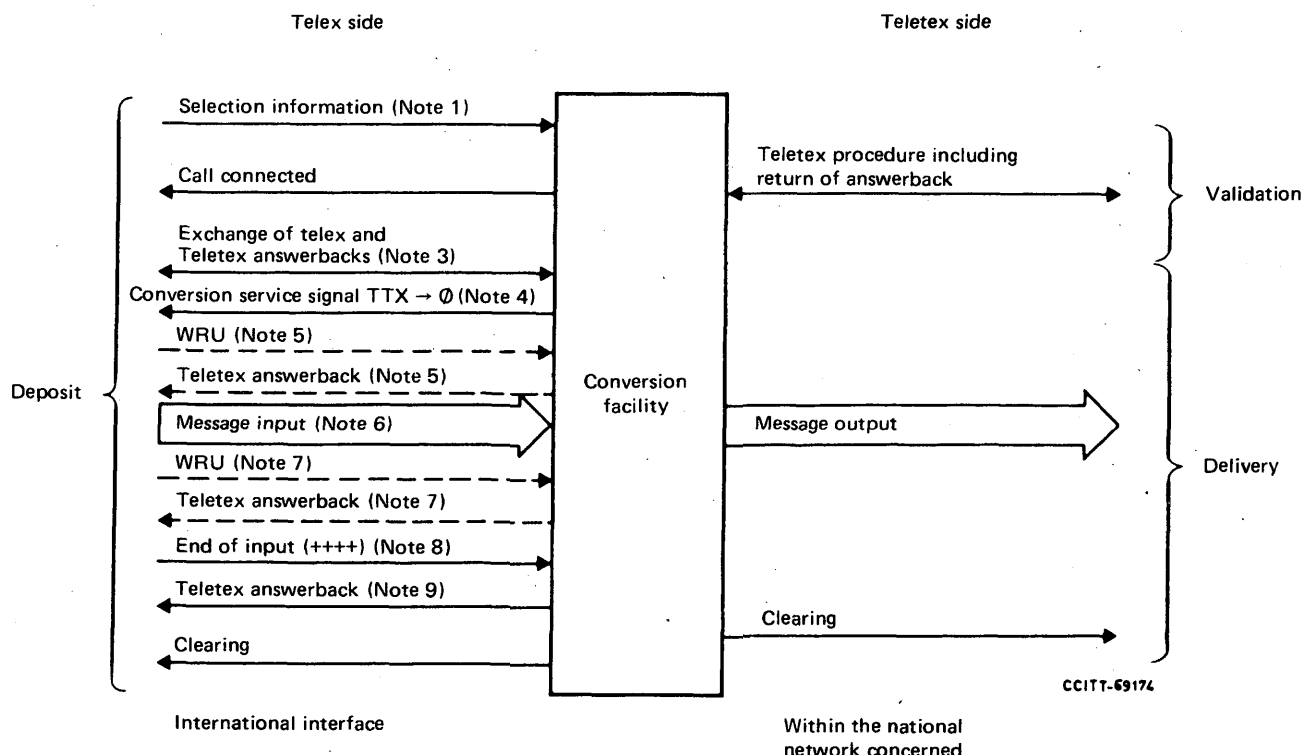


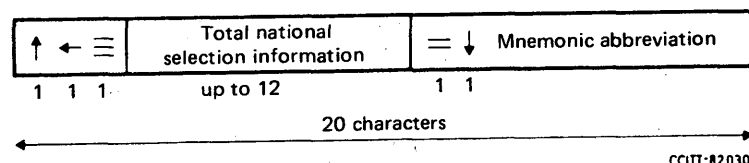
FIGURE 5/F.201

Interworking in the telex to Teletex direction
using a real-time conversion facility
(case of manual telex terminals)

Note 1 – The total selection information of the Teletex subscriber should not be longer than 12 digits.

Note 2 – See Recommendations T.91 and U.70.

Note 3 – The Teletex answerback sent to the telex subscriber is a rearranged Teletex terminal identification, as follows:



where

↑ is a figure shift, ← is a carriage return, ≡ is a line feed, ↓ is a letter shift and → is a space.

- i) The total national selection information contains the national access code to the CF (if necessary), the network identification as mentioned in Recommendation X.121 (if necessary) and the national Teletex subscriber number (Part 2 of the Teletex terminal identification), but should not include the additional information (Part 3 of the Teletex terminal identification).

There should be no separators in the numeric part of the Teletex answerback.

- ii) If the length of the Teletex answerback above exceeds 20 characters, including control characters, the final part of the mnemonic abbreviation shall be omitted so as to reduce the total length to 20 characters.
- iii) If the length of the Teletex answerback above is less than 20 characters, unused character positions shall be filled in accordance with Recommendation F.60.

Note 4 – i) There shall be an interval between the sending of the Teletex answerback and the sending of the conversion service signal. This interval is provisionally set to 800 ms. If information is sent by the telex subscriber within this period, no "TTX→Ø" service signal is sent by the CF and the CF will enter into the input mode.

- ii) TTX is the telex/Teletex conversion facility; Ø is the telex network identification code as provided in Recommendation F.69.

(Continuation of Notes on the following page)

Note 5 – The CF shall accept the possible occurrence of an extra WRU at this stage. The answerback returned by the CF is the Teletex answerback received during the call establishment. (See Note 3.)

Note 6 – The CF shall wait at least 15 seconds for the message input. See also Annex B for abnormal conditions during text input.

Note 7 – i) This procedure is recommended but not mandatory. See Recommendation F.60.
ii) The answerback returned by the CF is the Teletex answerback received during the call establishment (see Note 3).

Note 8 – i) This end of input (EOI) signal is the plus symbol (ITA2 combination No. 26 figure case) repeated four times (++++). This EOI signal needs not to be transferred to the Teletex side.

ii) If the caller clears without the EOI signal, the CF will endeavour to deliver the message as received. However, customers must be clearly warned that the CF cannot guarantee delivery in these circumstances.

Note 9 – The CF shall wait 800 ms for a WRU after EOI. If no WRU is received within this period, the terminal is considered as a manual one, and in this case, the return of the Teletex answerback, as described in Note 3, is an “on-line” delivery acknowledgement for the telex user. If WRU is received within this period, the terminal is considered as a telex automatic emitting device. (See Figure 6/F.201.)

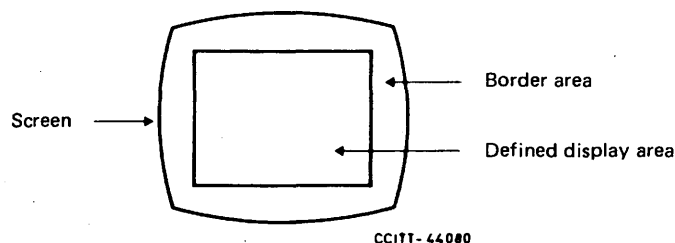


FIGURE 1/F.300

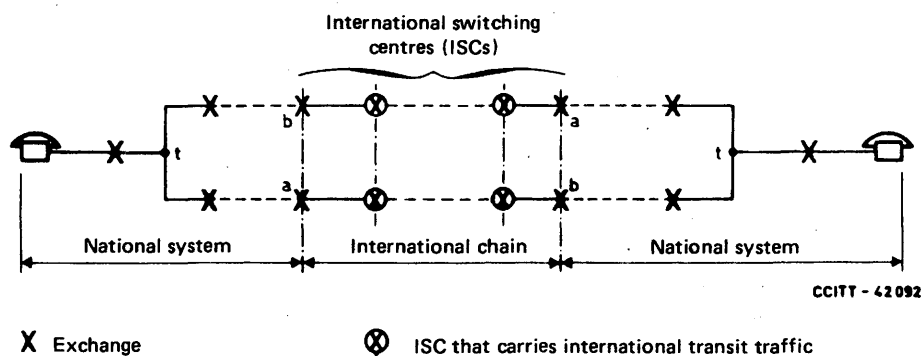
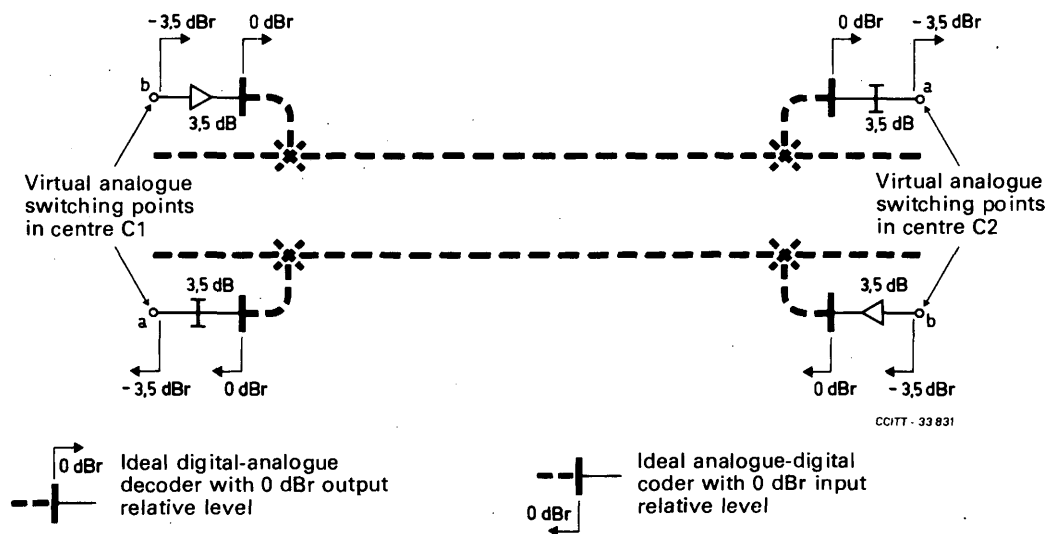


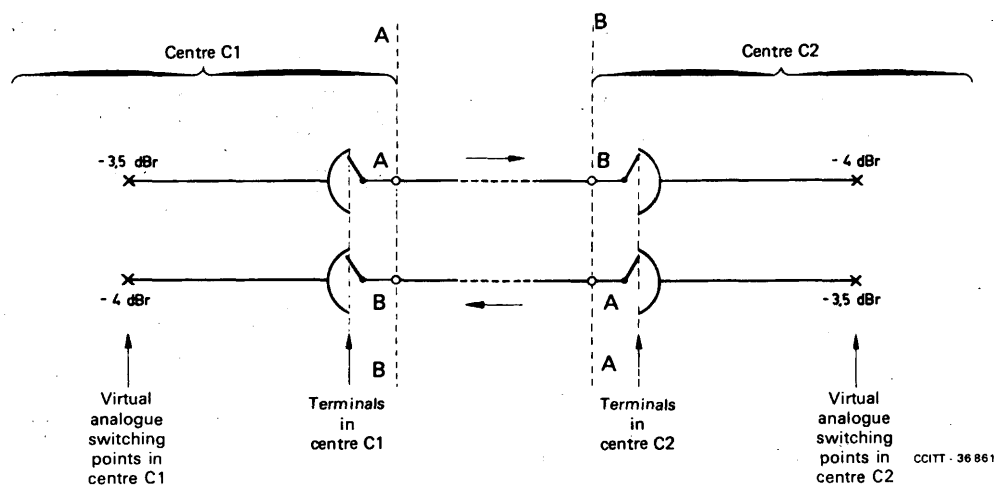
FIGURE 1/G.101

Definition of the constituent parts of an international connection



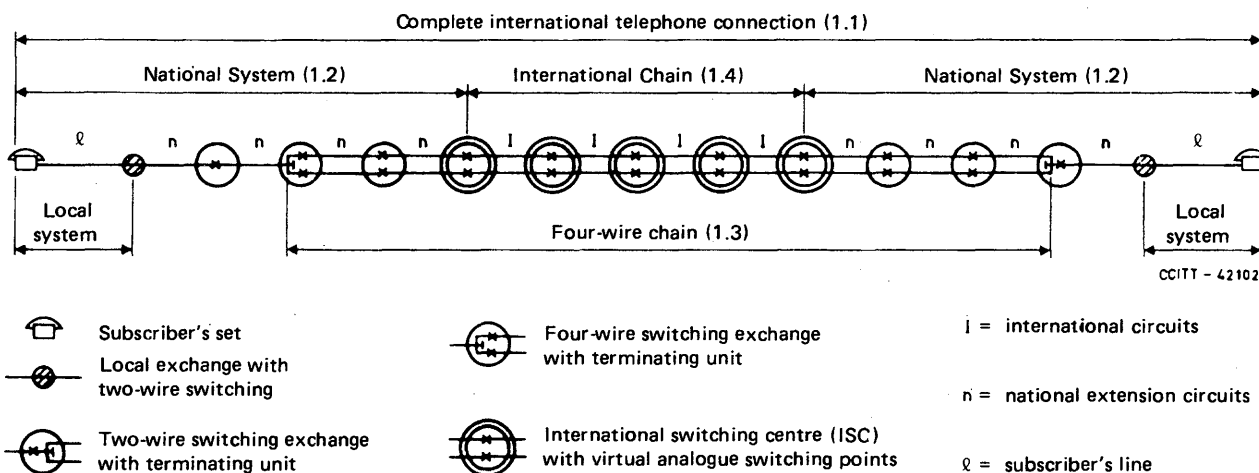
Note – Ideal coders and decoders are assumed to show a relation between analogue and digital signals and vice versa exactly in accordance with the appropriate tables for A-law or μ -law of Recommendation G.711 [2].

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

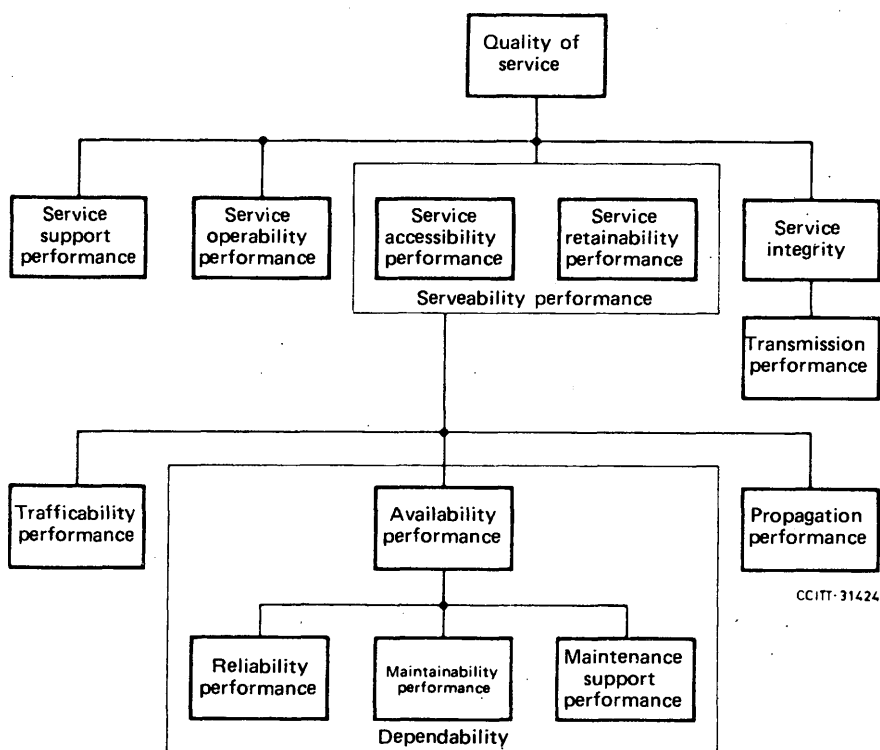
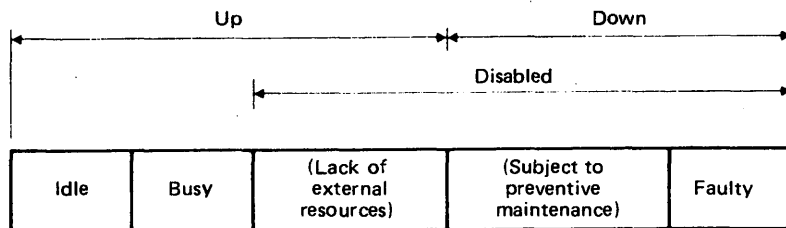


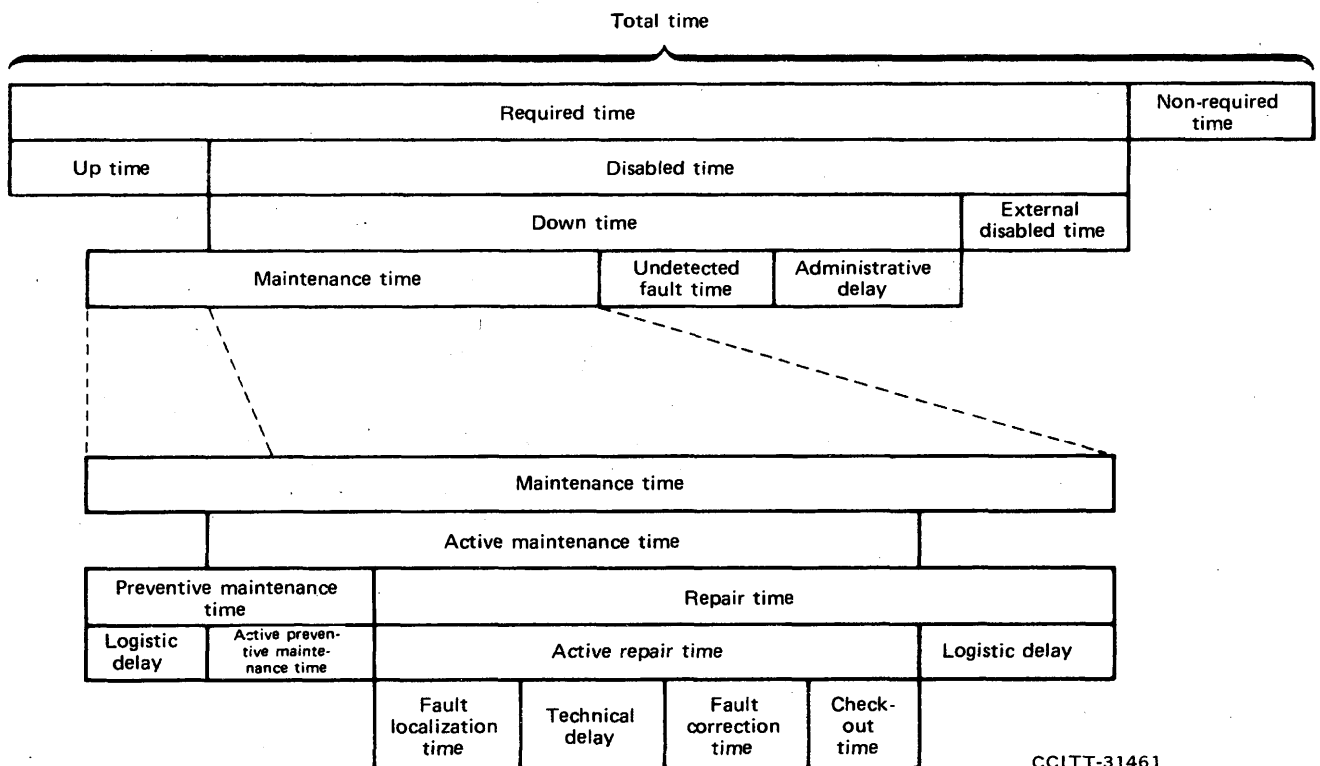
FIGURE 1/G.106

Performance concepts



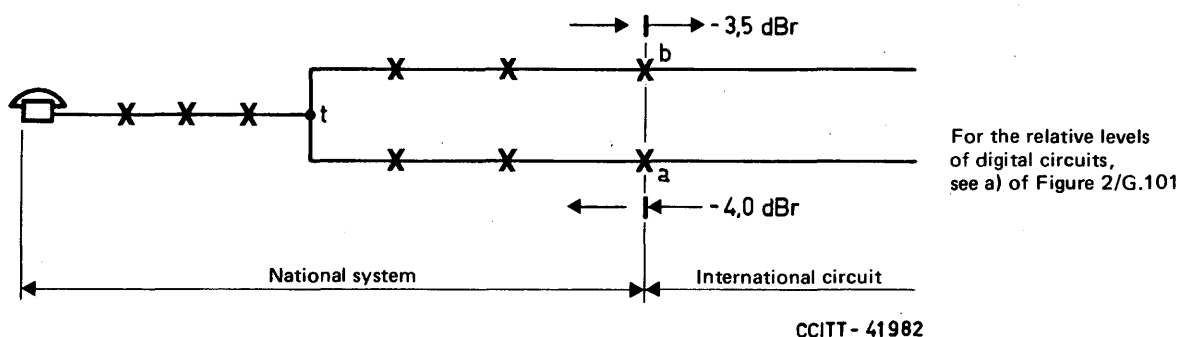
CCITT-05.770

FIGURE 2/G.106
Classification of item states



CCITT-31461

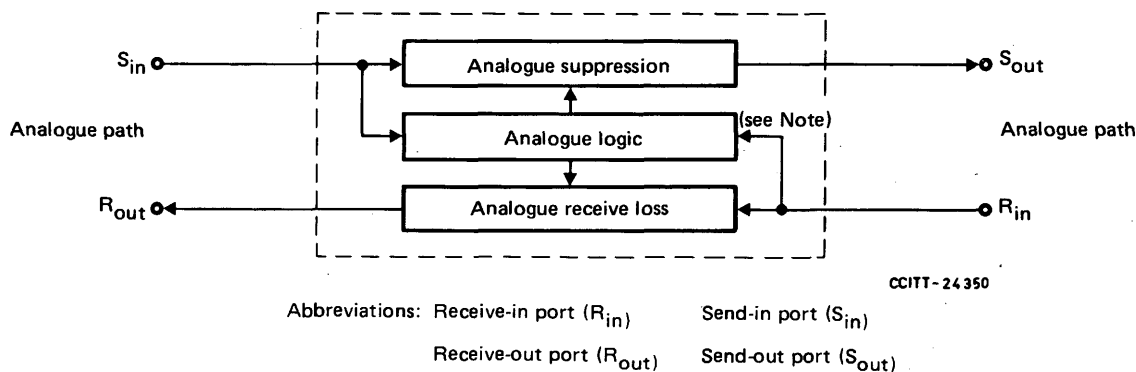
FIGURE 3/G.106
Time diagram



Virtual analogue switching points of the international circuit

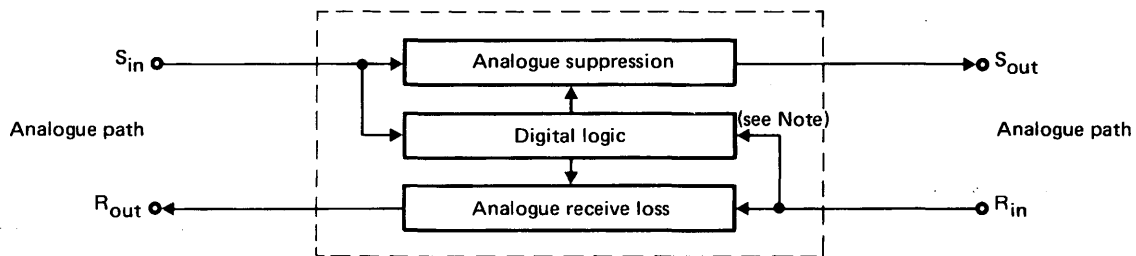
Note – The values of relative level shown are those of the international circuit. The values of the relative levels of the national circuit are not shown, since they depend on the national transmission plan. The virtual analogue switching points will generally have no physical existence, but are a necessary concept in the planning of national systems.

FIGURE 1/G.111
Definition of the virtual analogue switching points



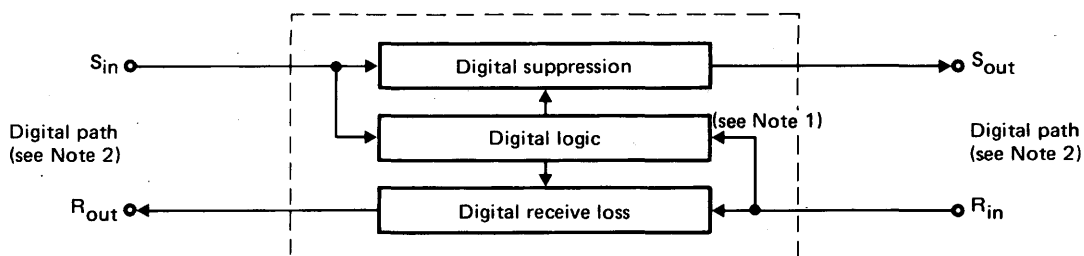
Note – This input may be connected to either side of the receive loss, depending on the logic circuitry.

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.

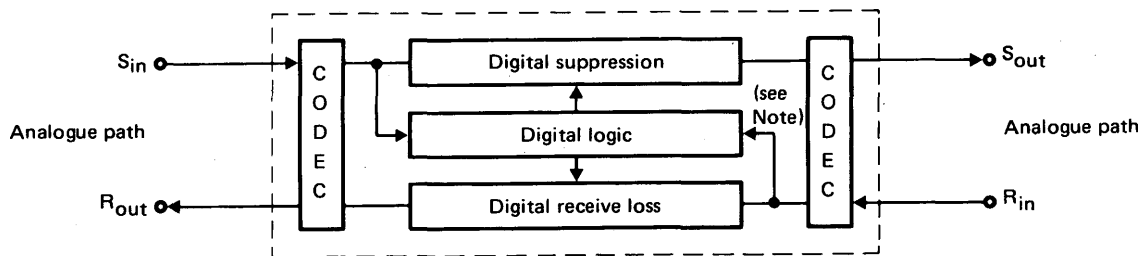
FIGURE 2/G.164
Type B echo suppressor



Note 1 – This input may be connected to either side of the receive loss, depending on the logic circuitry.

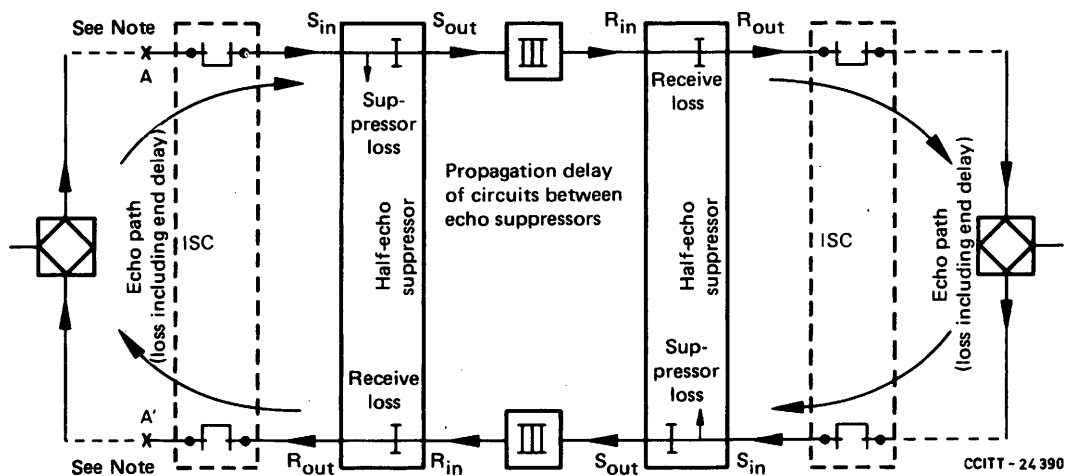
Note 2 – The digital path may be at any digital interface, i.e. 64 kbit/s, 1544 or 2048 kbit/s or at any higher order interface.

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

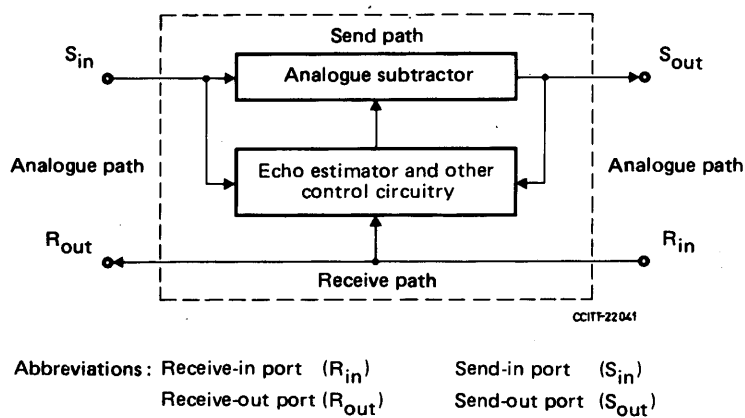
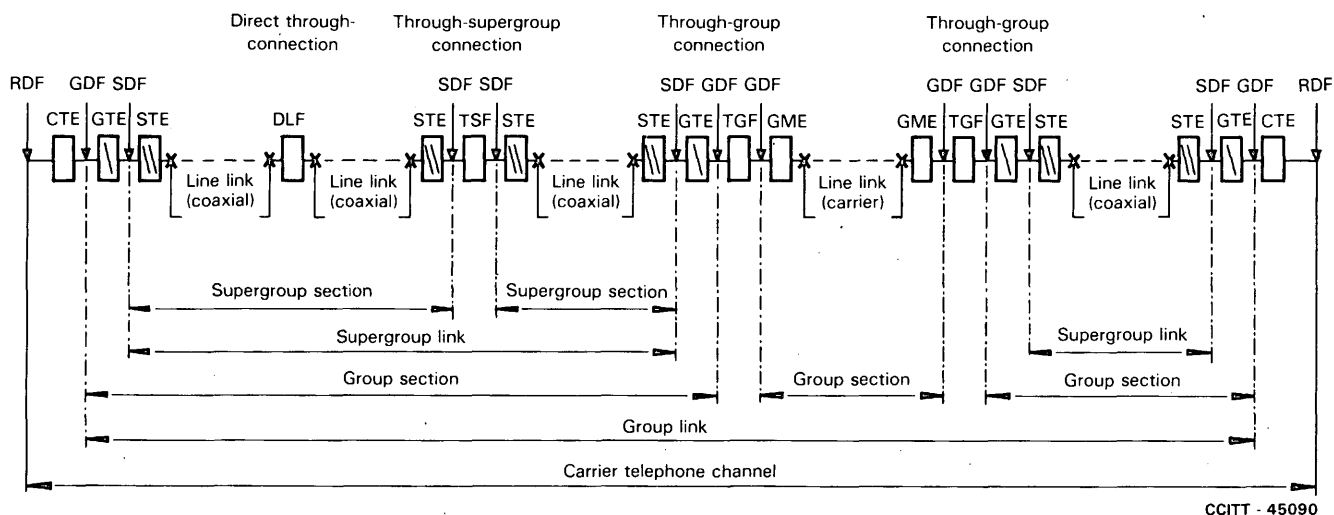


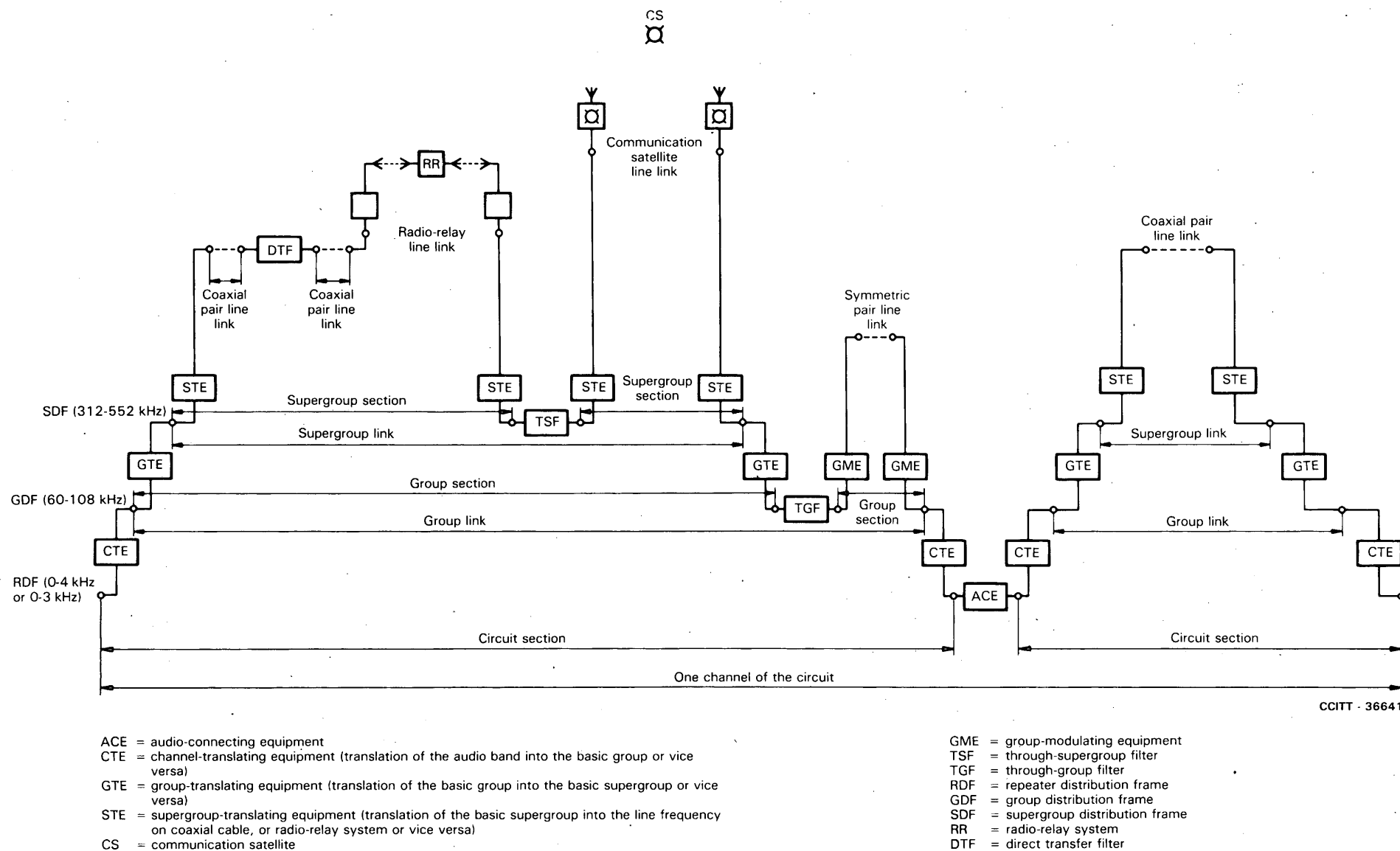
FIGURE 1/G.165
 Type A echo canceller



- 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

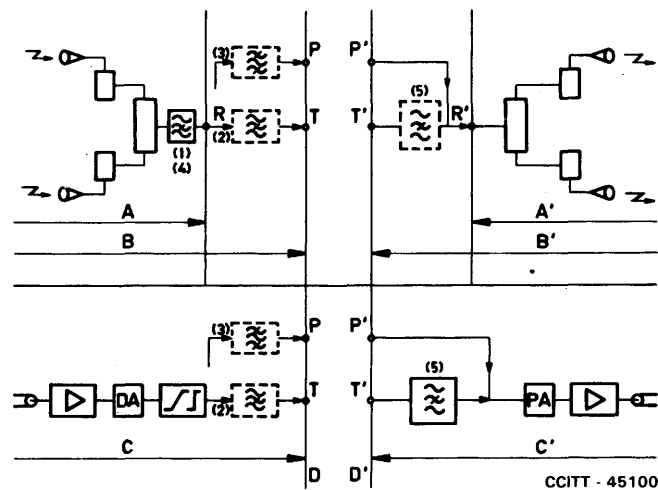
Note — This diagram shows only one direction of transmission.

FIGURE 2/G.211



CCITT - 36641

FIGURE 3/G.211
 Channel of a group set up on several line links in tandem



A, A'
B, B'
C, C'
D, D'
R
R'
 Point *P'*
 Between *T* and *T'*
DA
PA

= radio-relay system
 = line link by means of radio-relay system
 = line link by means of cable system
 = boundary of the high-frequency line equipment
 = radio-relay system output
 = radio-relay system input
 = provided for possible injection of regulating pilots
 = telephony terminating equipment and/or direct through-connection equipment
 = de-emphasis network
 = 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

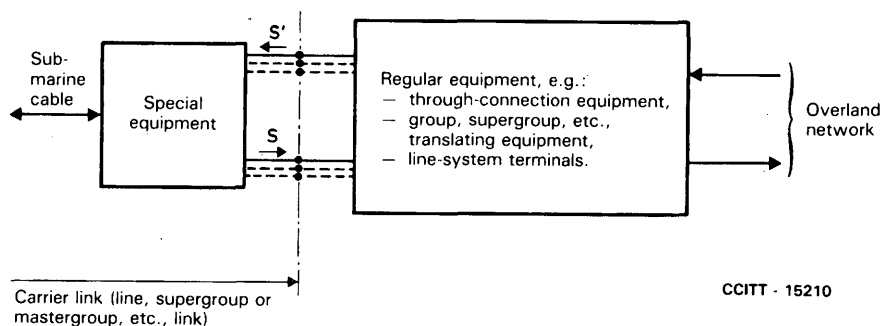
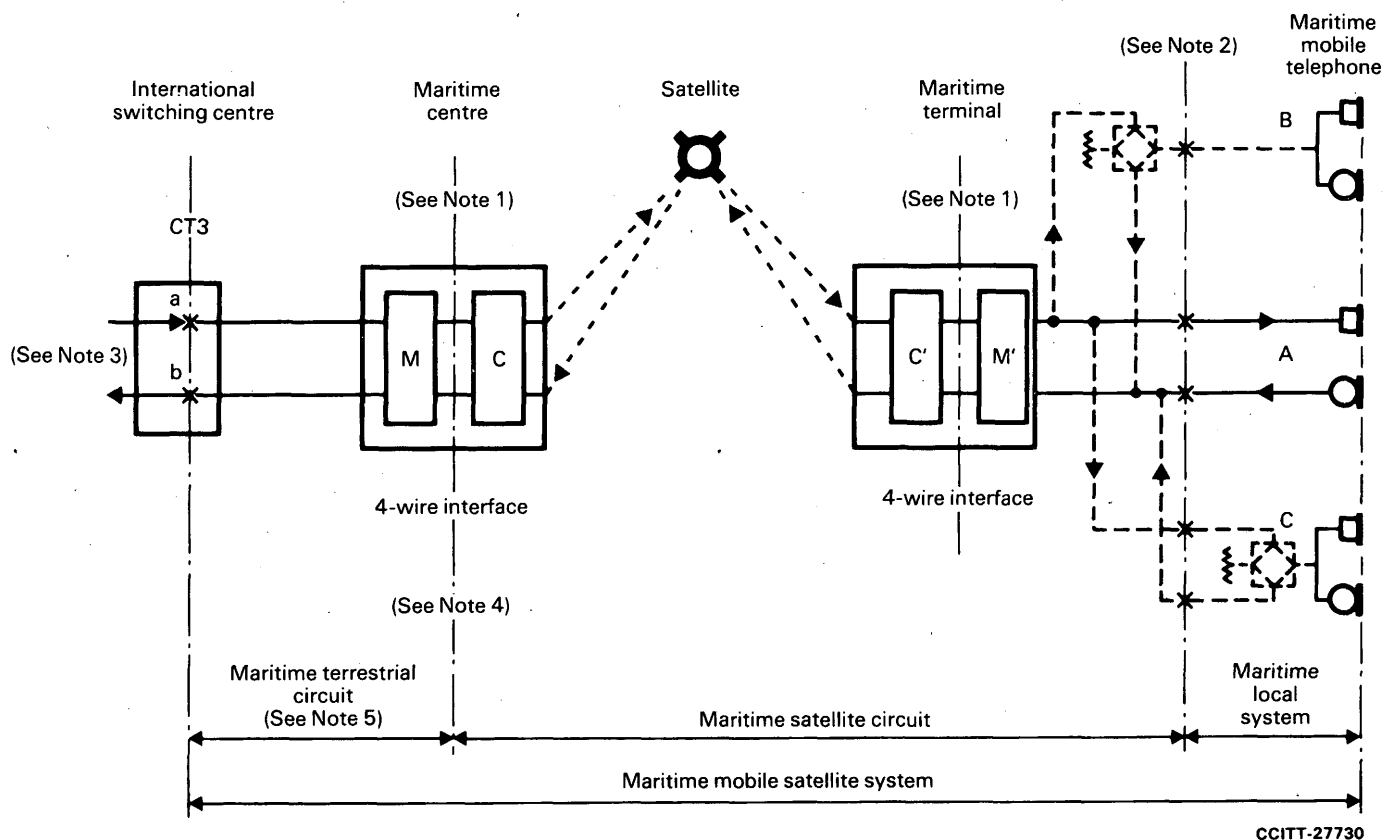


FIGURE 1/G.371

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, companders, 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

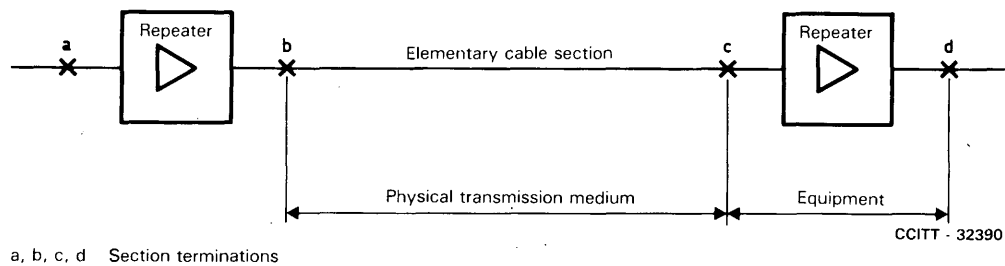


FIGURE 1/G.601
Terminology for generic reference to repeaters and cable sections

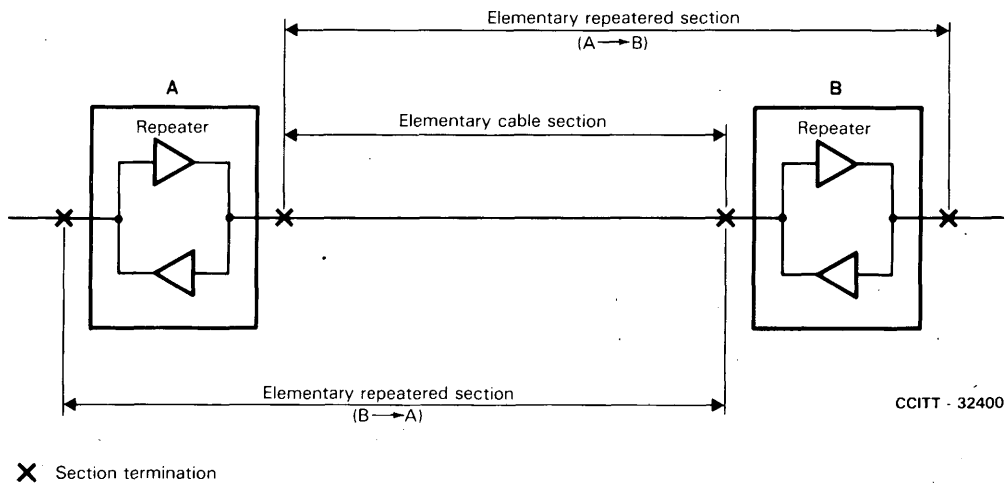


FIGURE 2/G.601
Terminology for elementary repeatered section

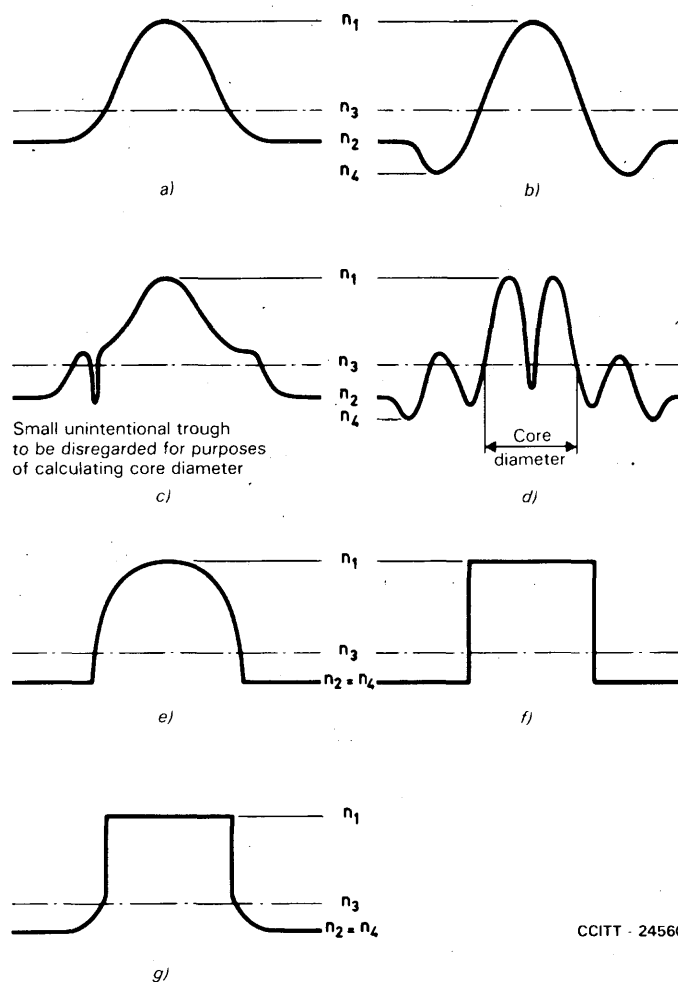


FIGURE A-1/G.651
Some refractive index profiles



Note 6 — I-K is an example of a digital line link.

Examples of digital link, digital section, digital line section, etc.

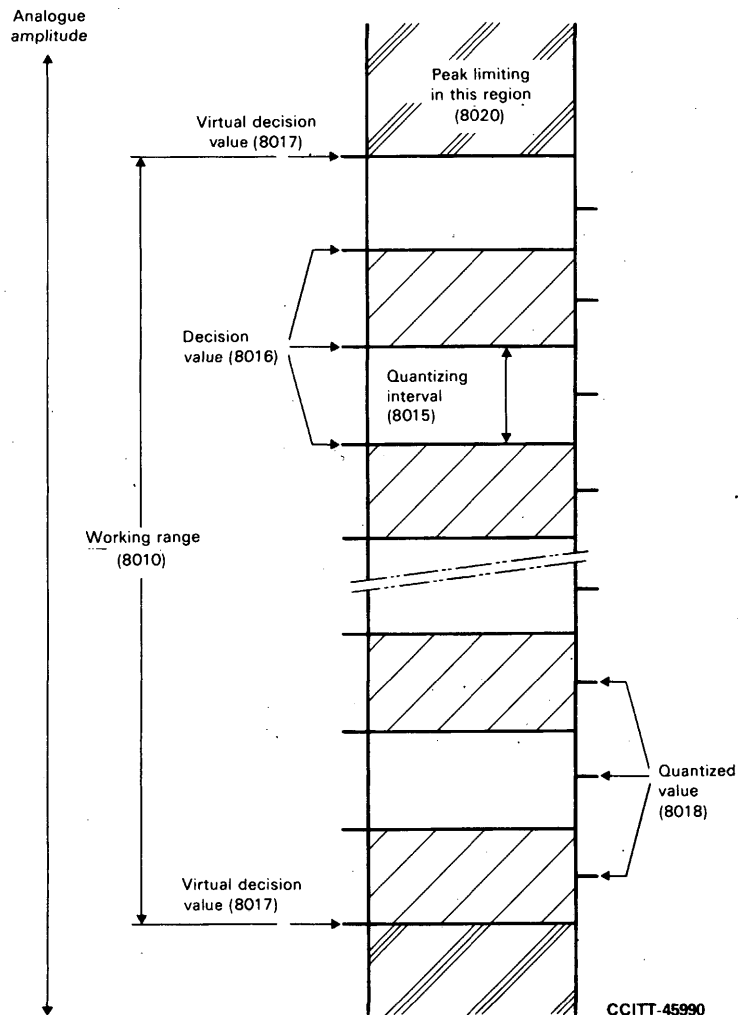
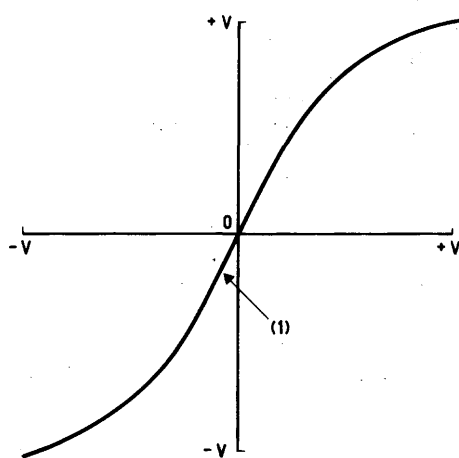
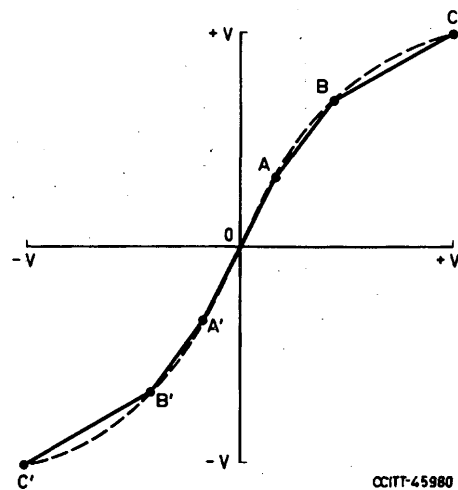


FIGURE 2/G.701
Illustration of terms associated with quantizing (8011)



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

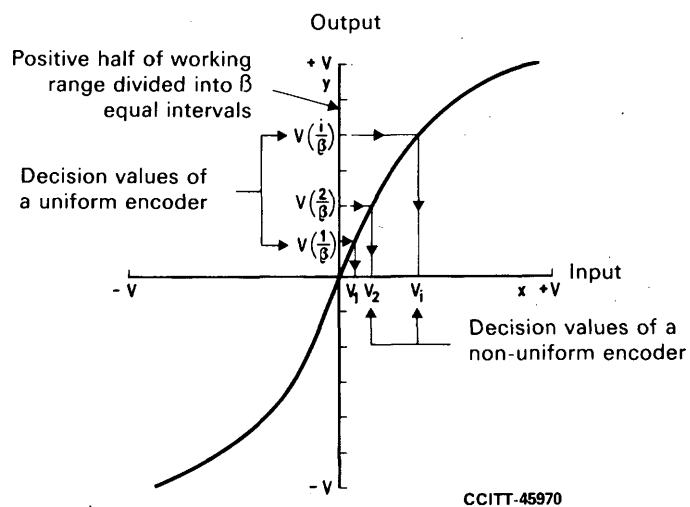


FIGURE 4/G.701

Relationship between the decision values of a uniform and a non-uniform encoding law

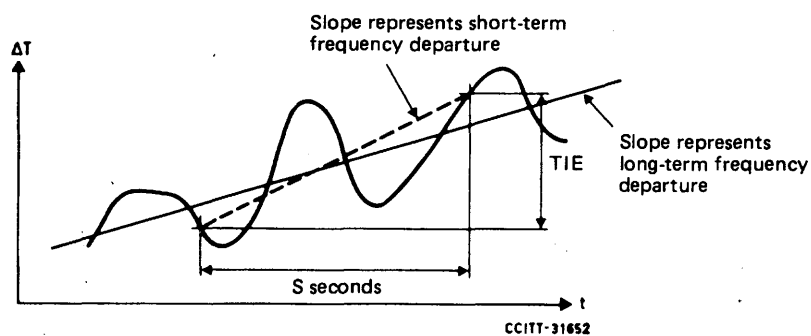
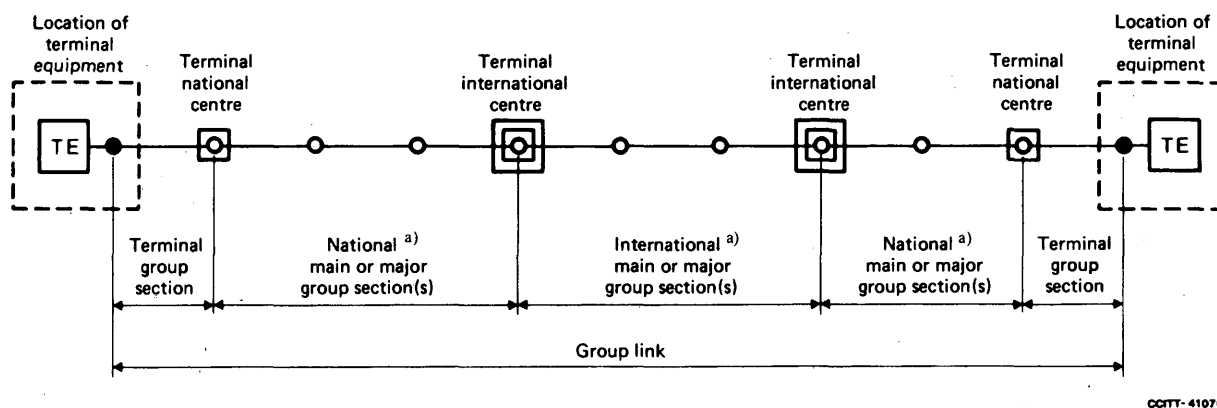


FIGURE 1/G.811

Definition of time interval error (TIE)



TE terminal equipment (e.g. data modem, etc.)

- defined test point at the interface between the terminal equipment and the end of the group link
- a centre (e.g. a repeater station) where there is a defined test point and points at which through-group filters, equalizers, etc., are inserted

^{a)} These sections are composed of one or more group sections.

FIGURE 1/H.14
Example of the constitution of a group link for wide-spectrum signal transmission

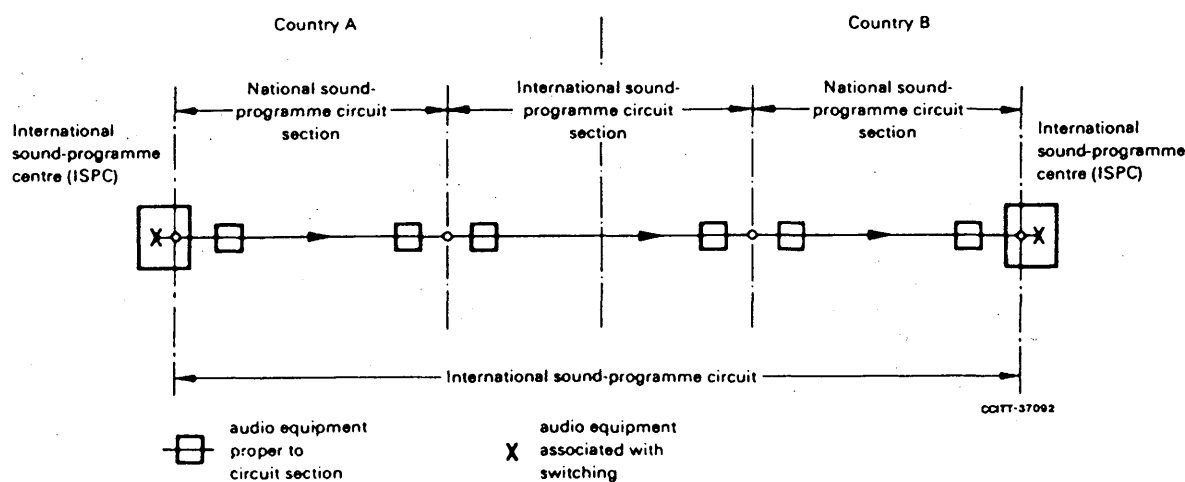


FIGURE 1/J.13
An international sound-programme circuit composed of two national and one international sound-programme circuit-section

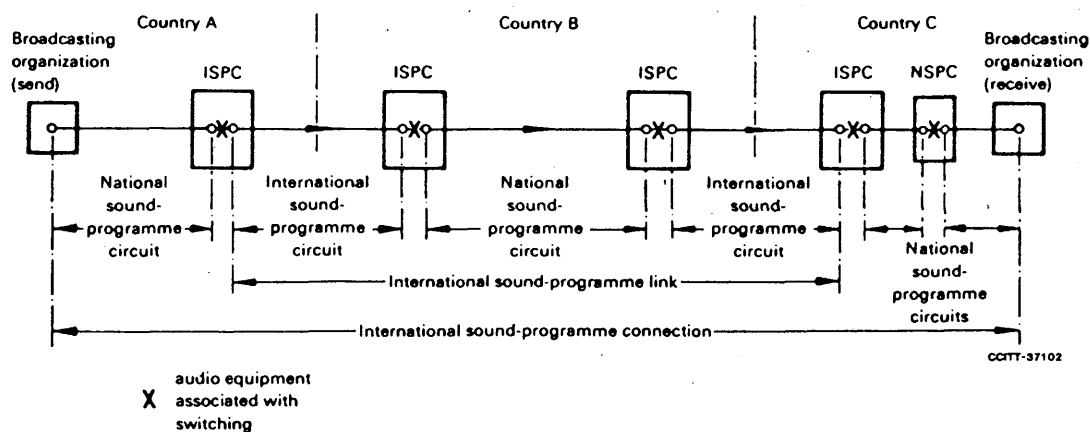
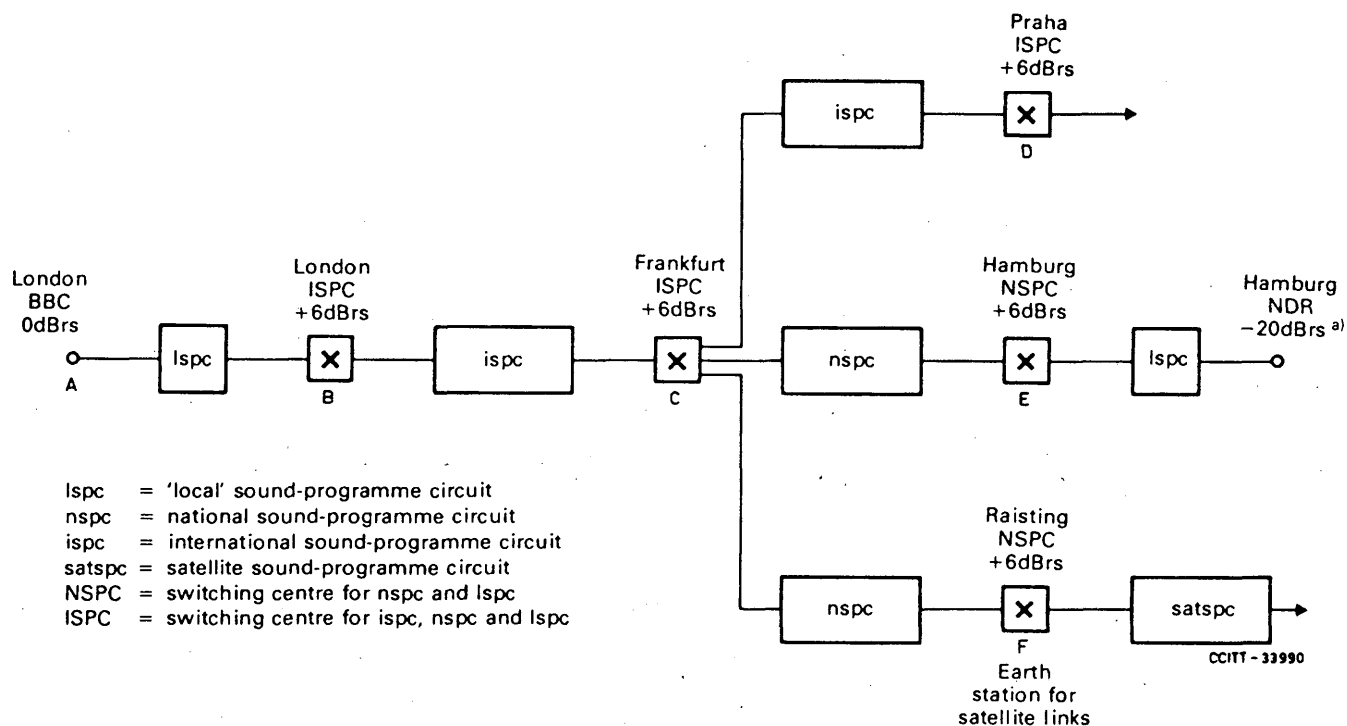


FIGURE 2/J.13

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

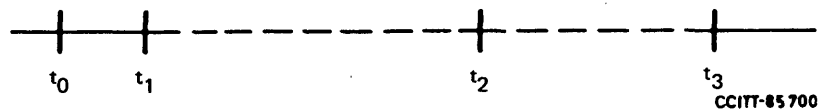


Note – Maximum level of sound programme signals: +9dBm0s (this means +9dBms at a 0dBrs relative level point and +15dBms at a +6dBrs relative level point respectively). The value of +9dBms corresponds to a peak voltage of 3.1 V which is the maximum value of a sine-wave signal of 2.2 V r.m.s.

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



- t_0 : time instant at which the request for communication and connection is made,
 t_1 : time instant at which the connection and communication is established,
 t_2 : time instant at which request for communication and connection release is made,
 t_3 : time instant at which communication and connection is cleared.

Note – Recommendation I.112 provides also definitions for these three values (No. 205, 206, 207). However, the definitions proposed are more general (no reference to a time diagram) and are circuit-mode oriented.

FIGURE I-1/I.130

Establishment of communication and connection time diagram

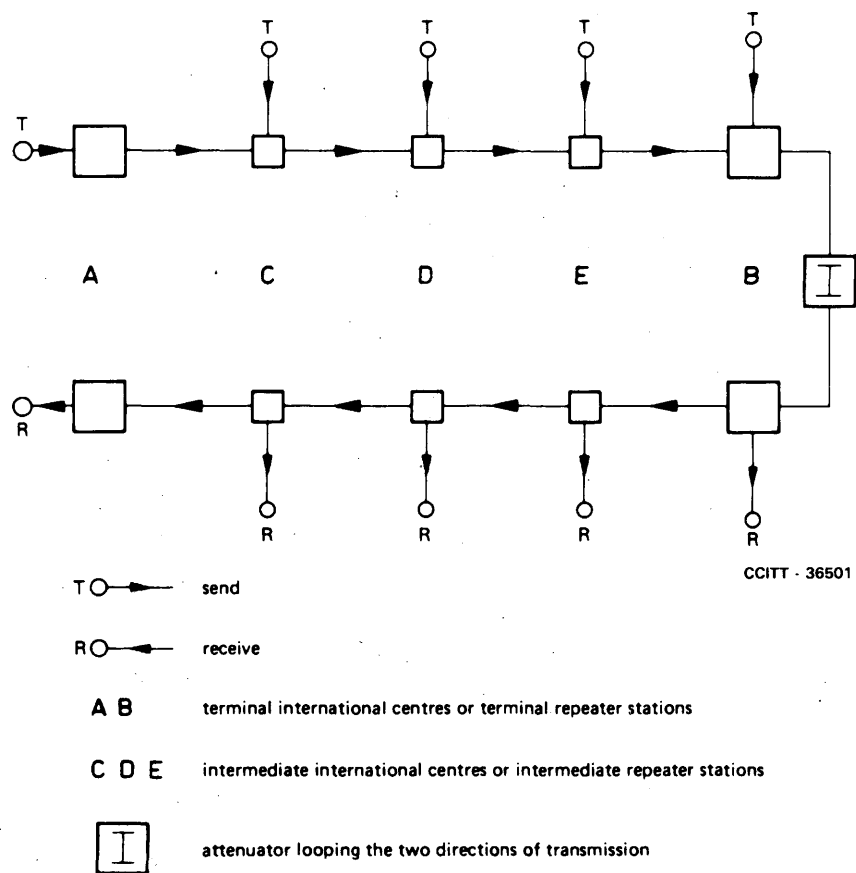
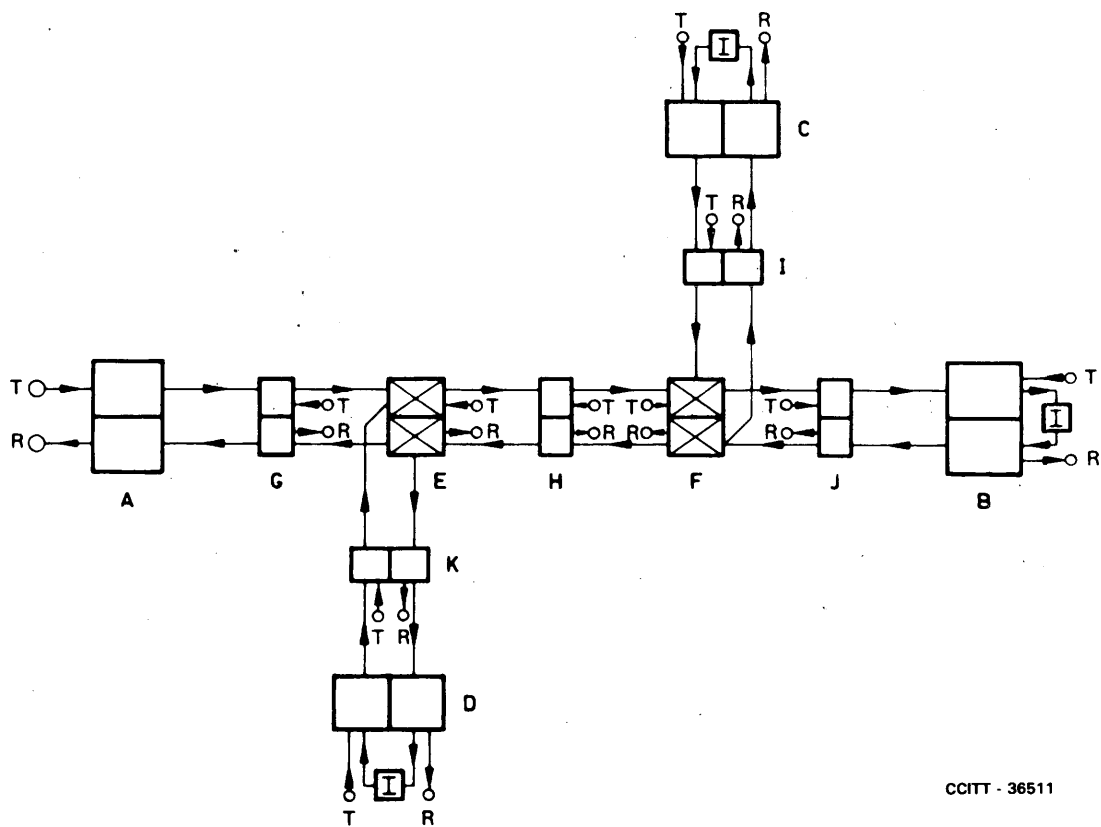


FIGURE 1/M.100

Example of an omnibus service circuit



T → send
R ← receive

- A B C D** terminal international centres or terminal repeater stations
E F international centres (or repeater stations) with branching facilities
G H I J K intermediate international centres or intermediate repeater stations
I attenuator looping the two directions of transmission

FIGURE 2/M.100
Multiterminal service circuit

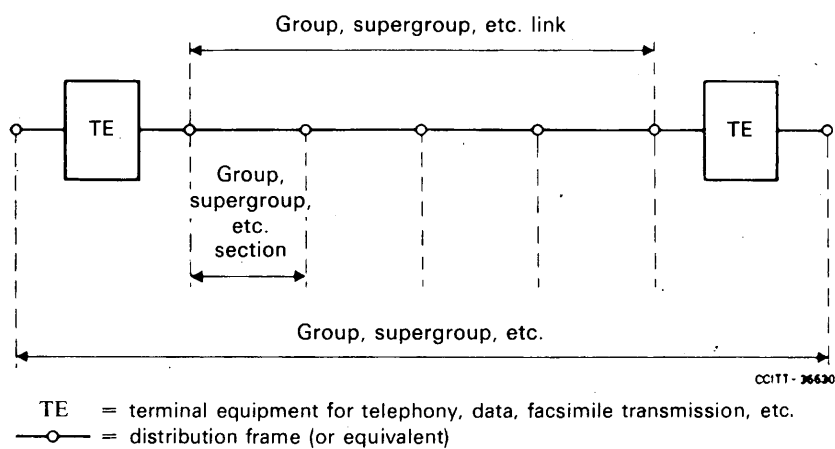
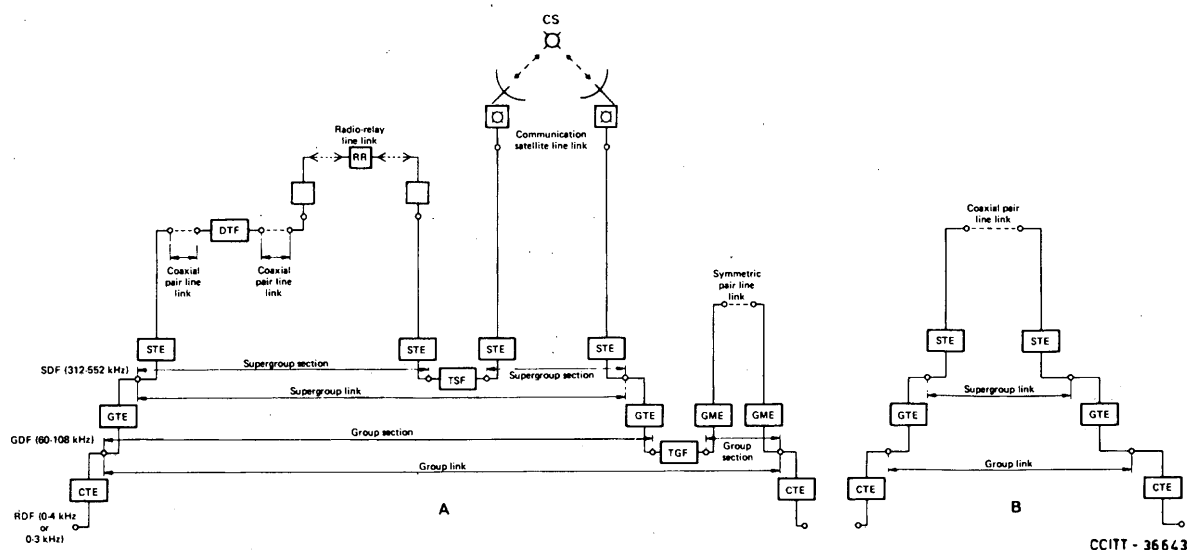


FIGURE 1/M.300

Group, supergroup, etc. link

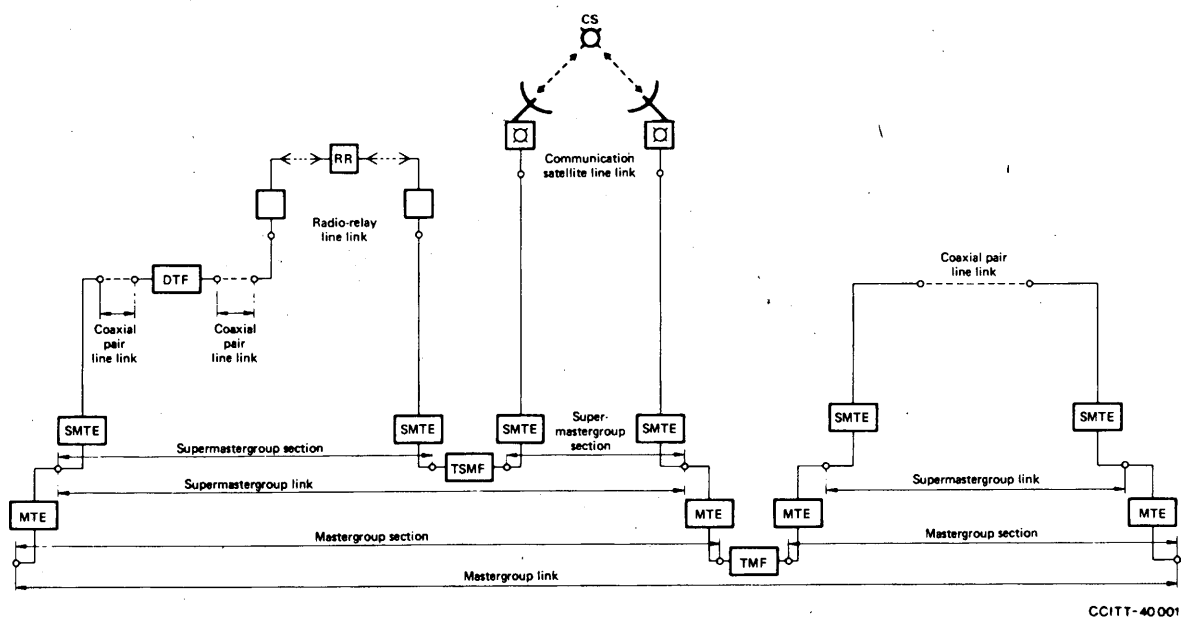


CTE = channel translating equipment
(translation of the audio band into the basic group or vice versa)
GTE = group translating equipment
(translation of the basic group into the basic supergroup)
STE = supergroup translating equipment
(translation of the basic supergroup into the line frequency on
coaxial cable, or radio-relay system or vice versa)
GME = group modulating equipment

DTF = direct through-connection filter
TSF = through-supergroup filter
TGF = through-group filter
RDF = repeater distribution frame
GDF = group distribution frame
SDF = supergroup distribution frame
RR = radio-relay station
CS = communication satellite

(The terminology used in this figure is in conformity with the definitions of Recommendation M.300. However, there are small inconsistencies with respect to recommendations giving details of lining-up procedure.)

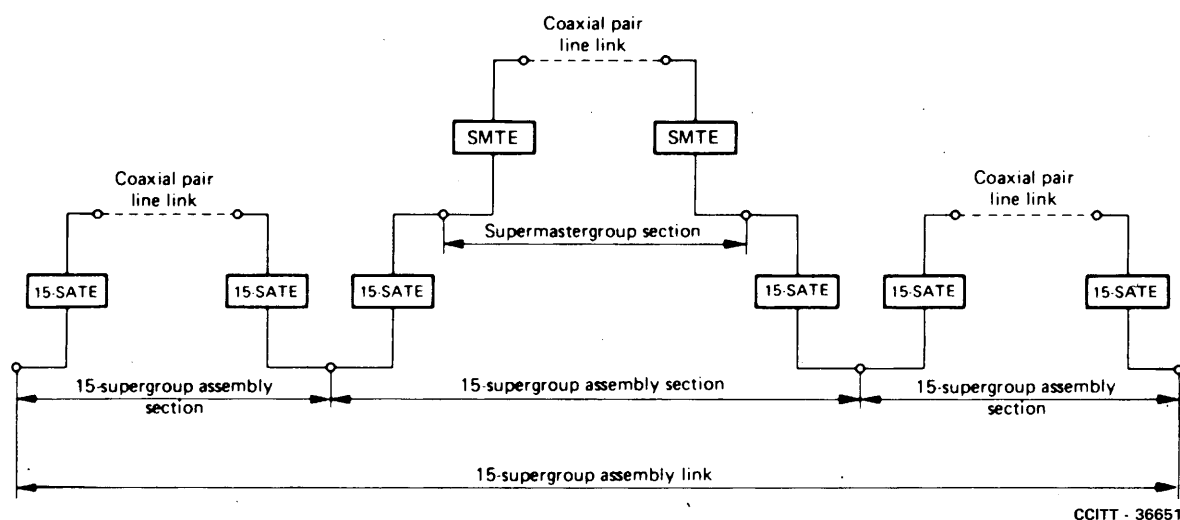
FIGURE 2/M.300
Channel of a group set-up on: several line links in tandem (A), a single line link (B)



MTE = mastergroup translating equipment
SMTE = supermastergroup translating equipment
TMF = through-mastergroup filter
TSMF = through-supermastergroup filter

DTF = direct through-connection filter
RR = radio-relay station
CS = communication satellite

FIGURE 3/M.300
Mastergroup link



SMTE = supermastergroup translating equipment
 15-SATE = 15-supergroup assembly translating equipment

FIGURE 4/M.300
 15-supergroup assembly link

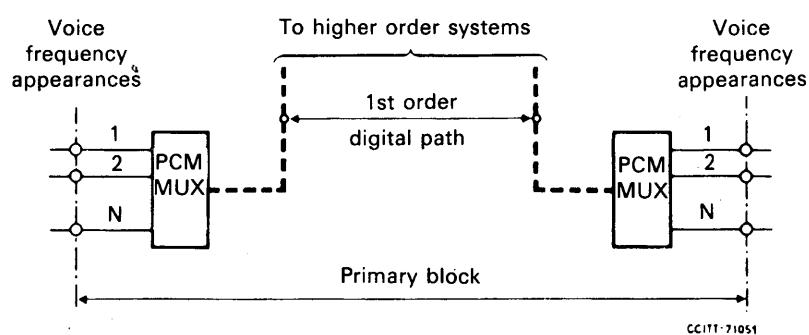
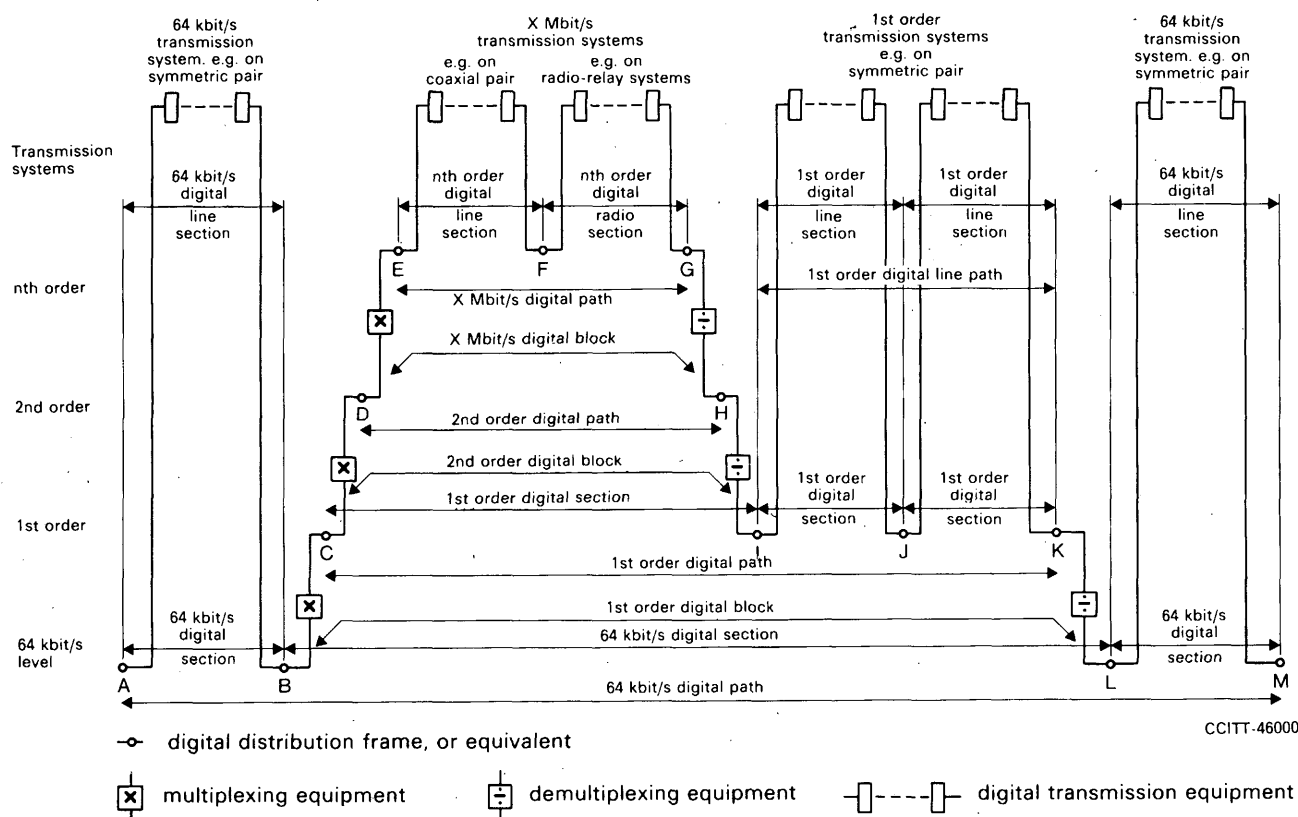
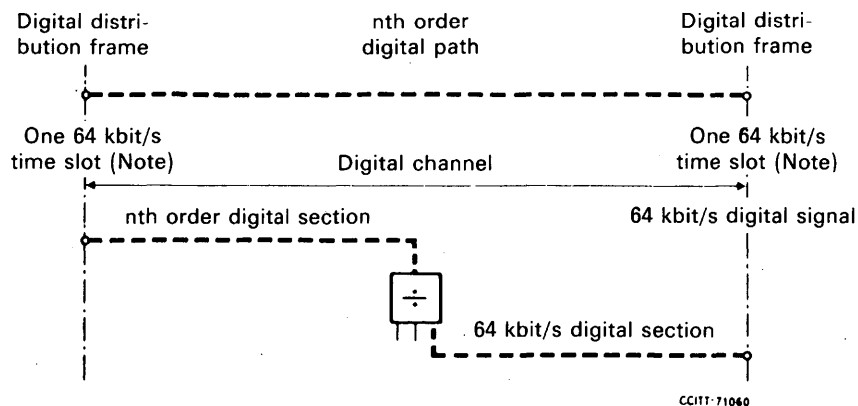


FIGURE 5/M.300
 Example of a primary block



- 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 line section, which is a particular case of a 64 kbit/s digital section.
- Note 3* — A-M is a 64 kbit/s digital path which comprises three 64 kbit/s digital sections, A-B, B-L and L-M.
- Note 4* — F-G is an X Mbit/s digital radio section which forms part of an X Mbit/s digital path E-G.
- Note 5* — C-I is a 1st order digital section which contains a 2nd order digital path D-H.
- Note 6* — I-K is an example of a digital line path.

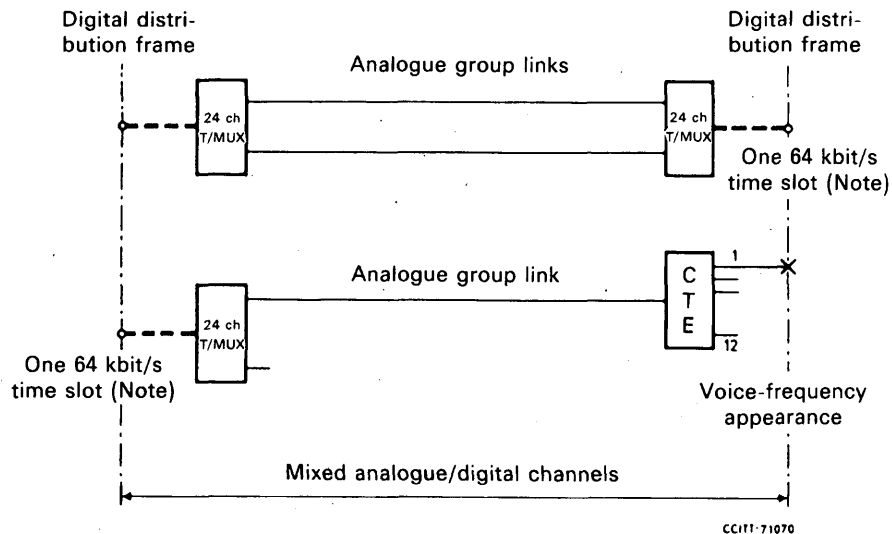
FIGURE 6/M.300
Examples of digital path, digital section, digital line section, etc.



Note — Here the digital channel appears as a 64 kbit/s time slot in a digital path or section. It is not directly accessible.

FIGURE 7/M.300

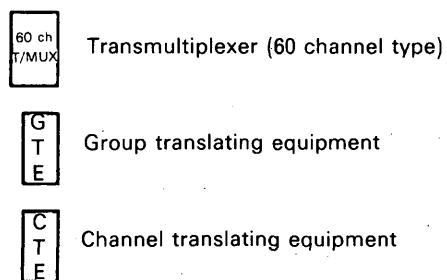
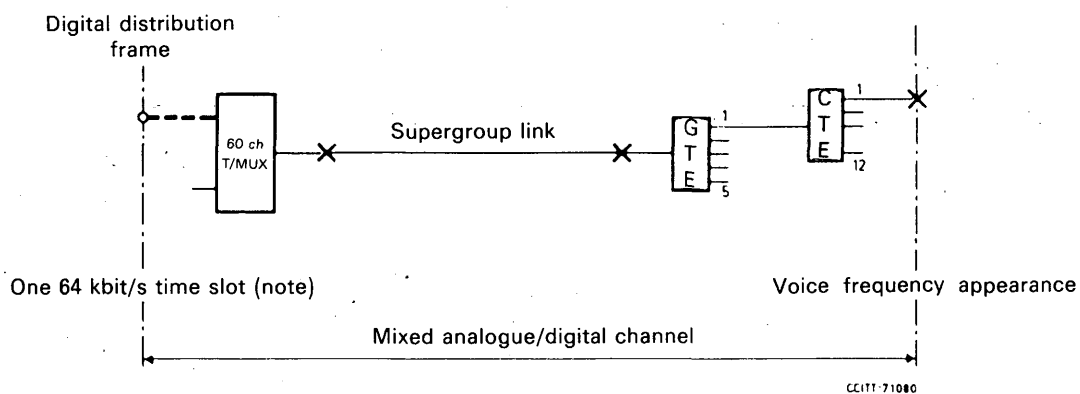
Diagrammatic representations of a digital channel



Note — Here the digital channel appears as a 64 kbit/s time slot in a digital path or section. It is not directly accessible.

FIGURE 8/M.300

Examples of mixed analogue/digital channels



Note — Here the digital channel appears as a 64 kbit/s time slot in a digital path. It is not directly accessible.

FIGURE 9/M.300

Example of a mixed analogue/digital channel

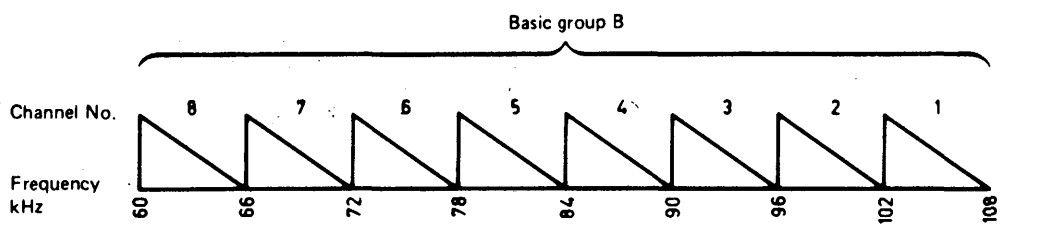
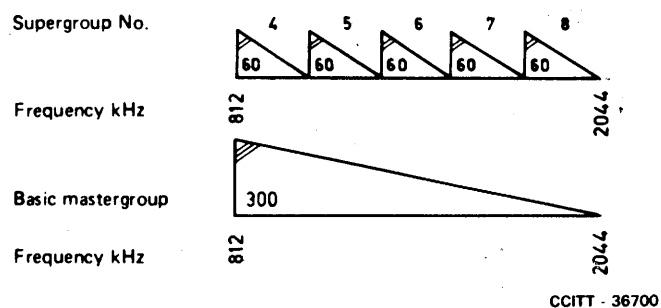
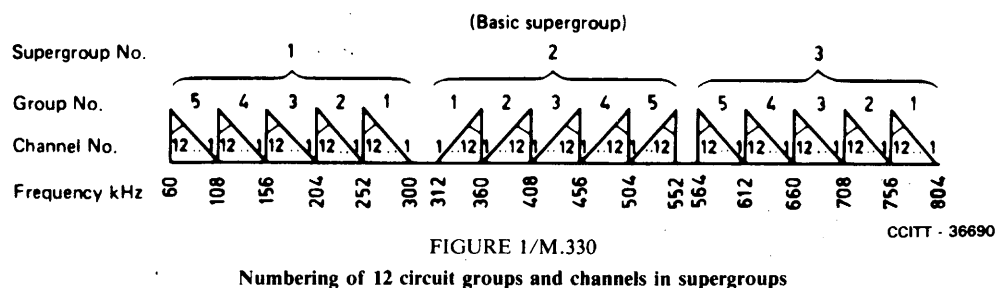
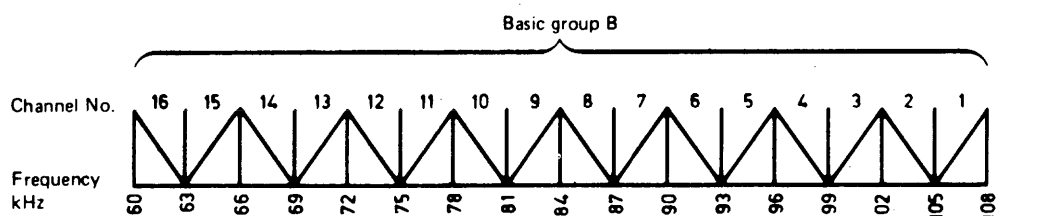
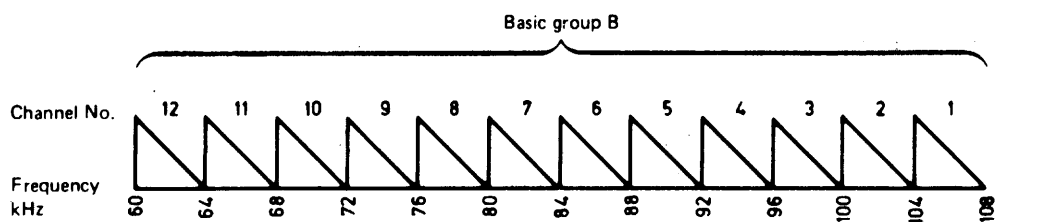


FIGURE 1/M.320

Numbering of channels in 8 channel group



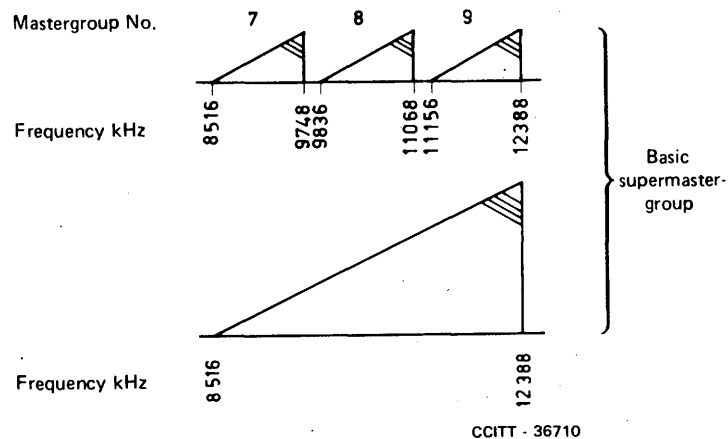
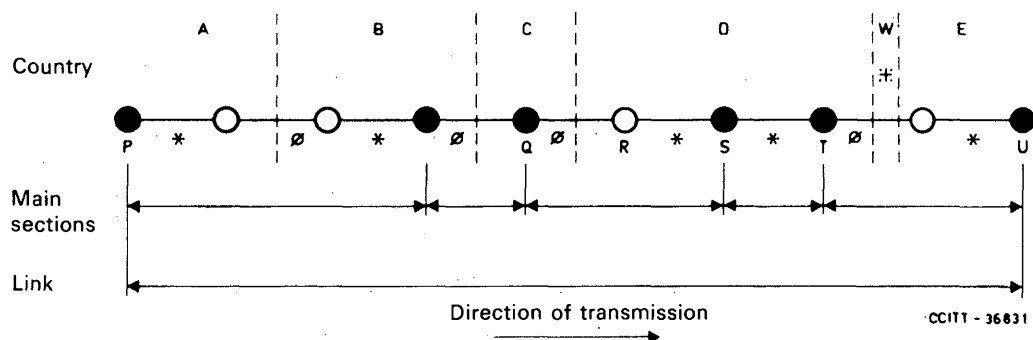


FIGURE 1/M.350
Numbering of mastergroup within a supermastergroup



- * National section
- ∅ International section
- ‡ The group, supergroup, etc., passes through country W without being reduced to the appropriate basic frequency band. There are thus no control or frontier stations for the group, supergroup, etc., in these countries.
- Frontier stations
- Control stations

FIGURE 2/M.460

Example of an international link showing how it may be divided into sections of control for lining-up and maintenance

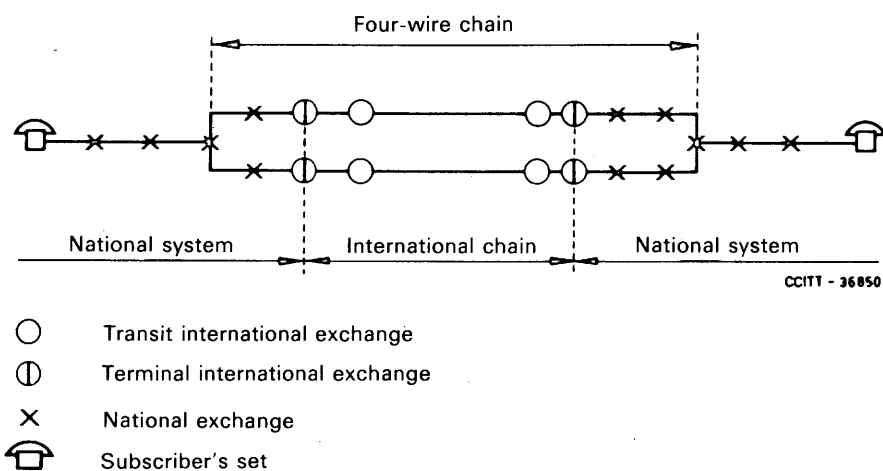
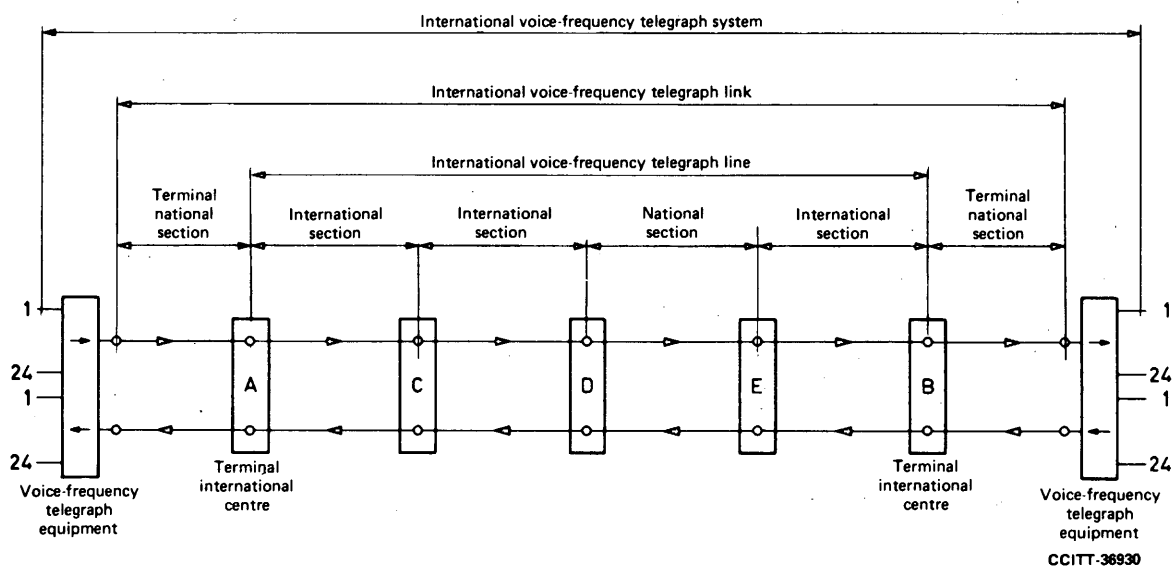


FIGURE 1/M.560

Constituent parts of an international telephone connection



(At the intermediate centres C, D and E at the terminal international centres A and B, the signals transmitted are at audio-frequencies. At these points it is possible to make measurements.)

FIGURE 1/M.800

The components of an international voice-frequency telegraph system

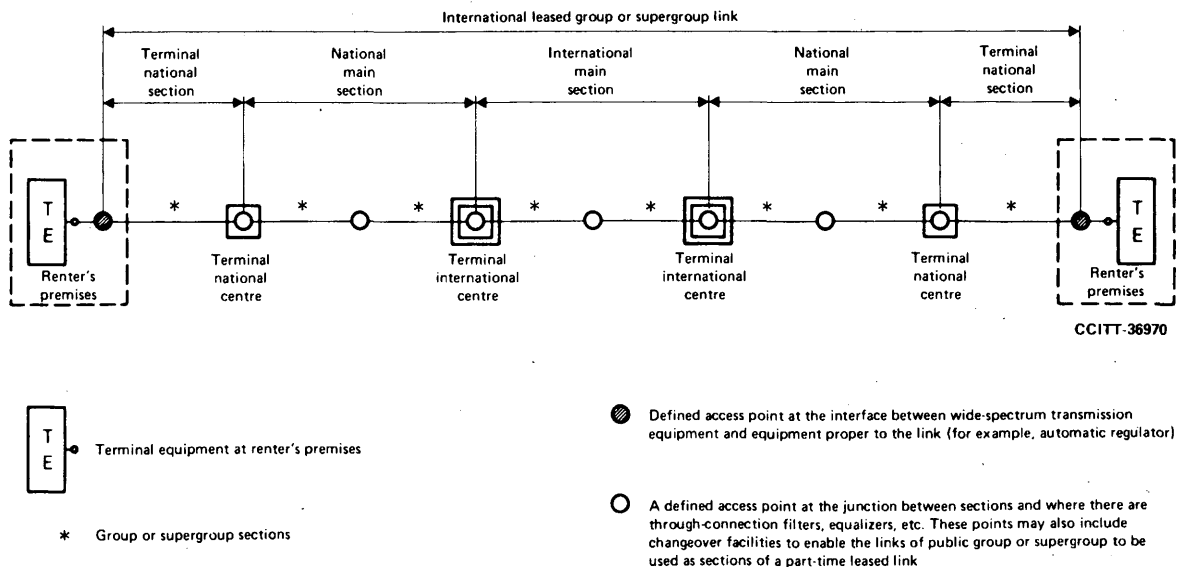


FIGURE 1/M.900
Example of the basic constitution of an international leased group or supergroup link
for wide-spectrum signal transmission

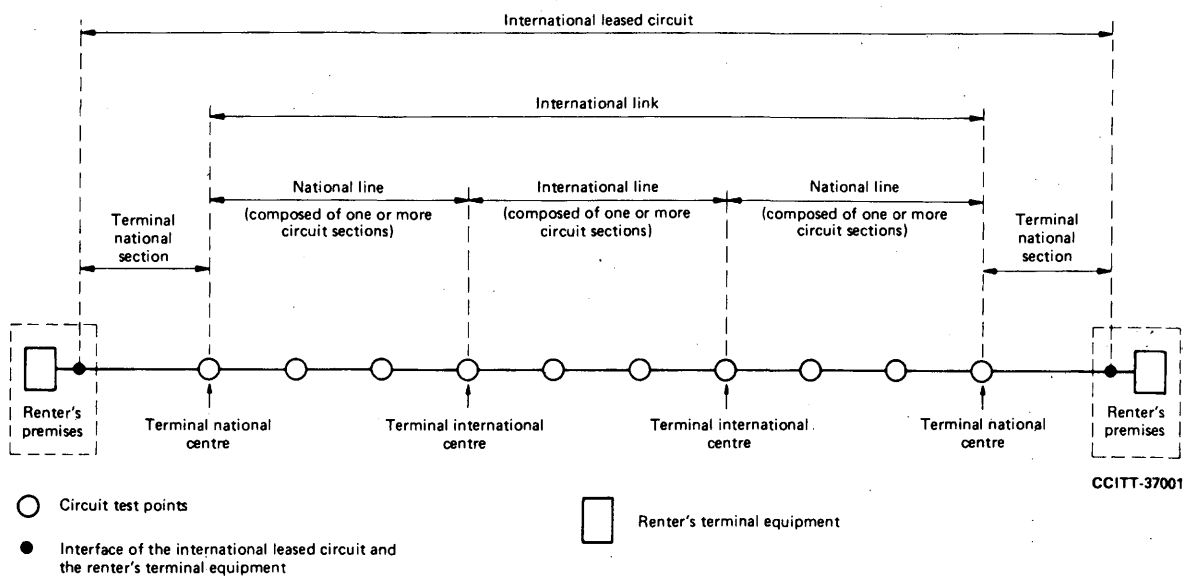
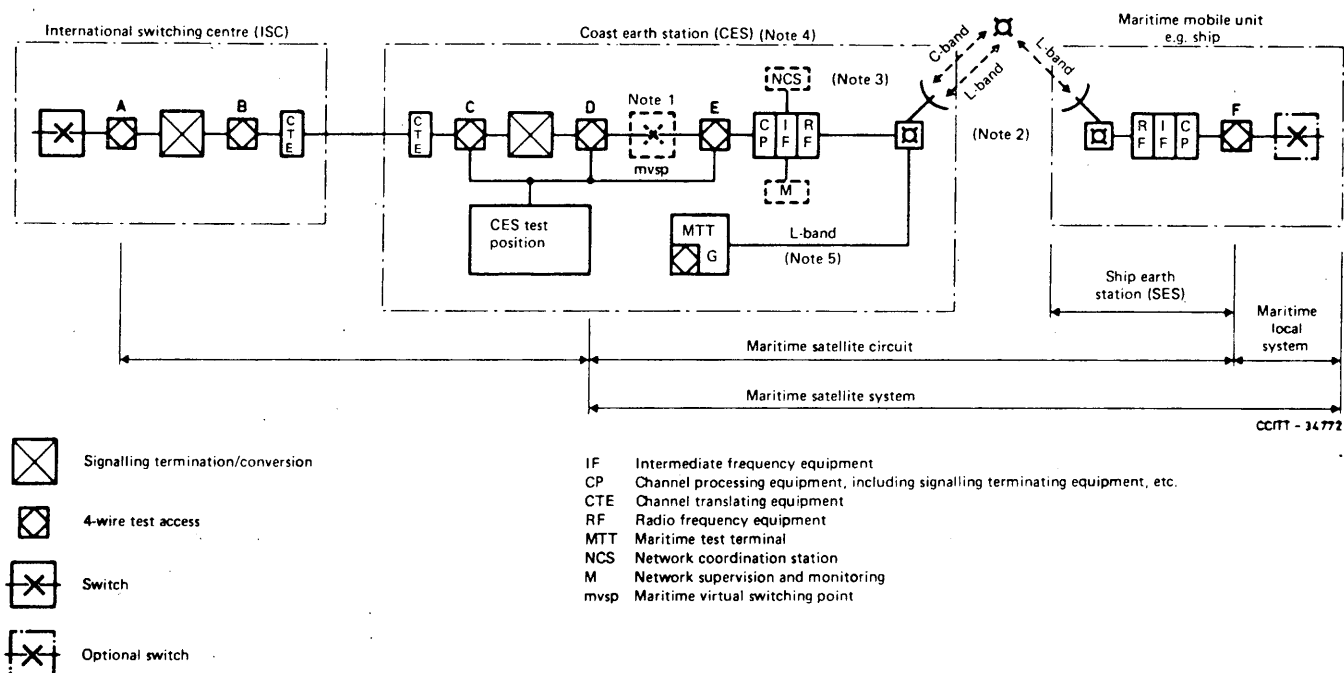


FIGURE 2/M.1010
Basic constitution of a point-to-point international leased circuit



- 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

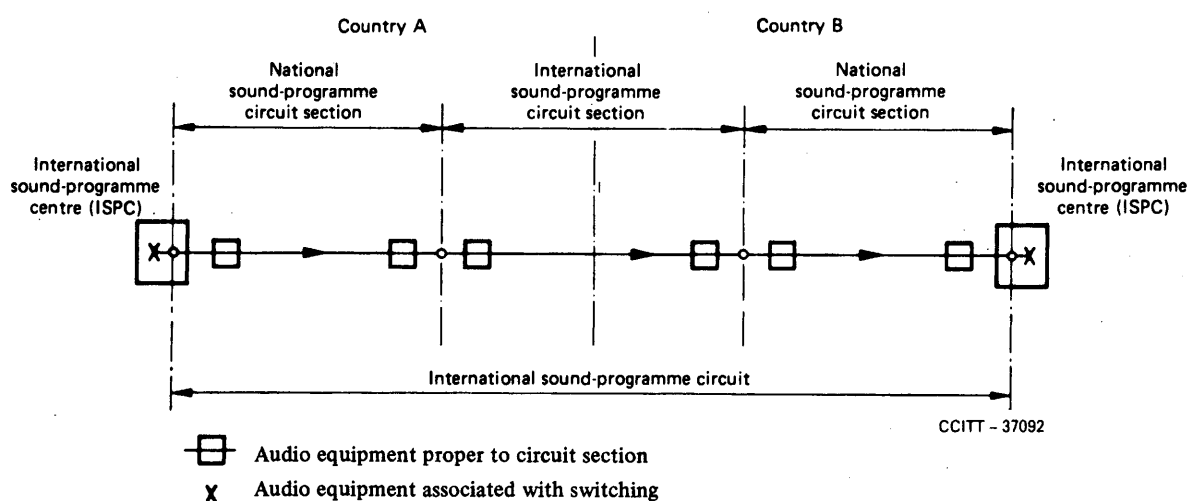
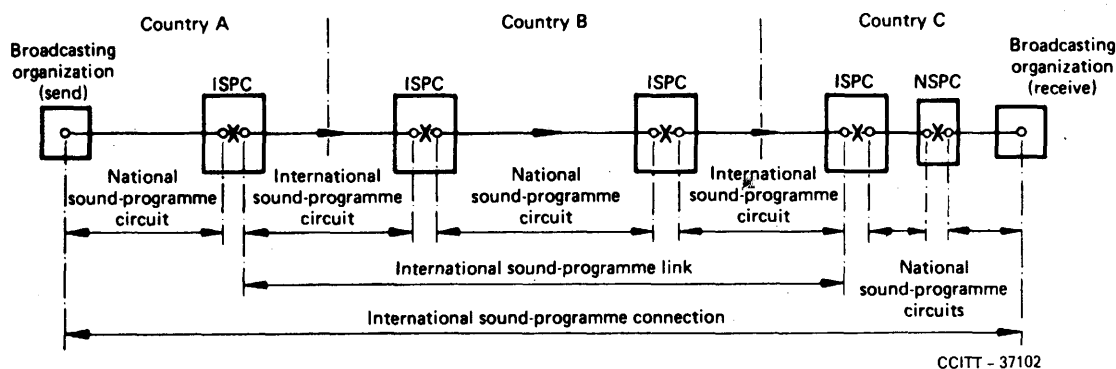


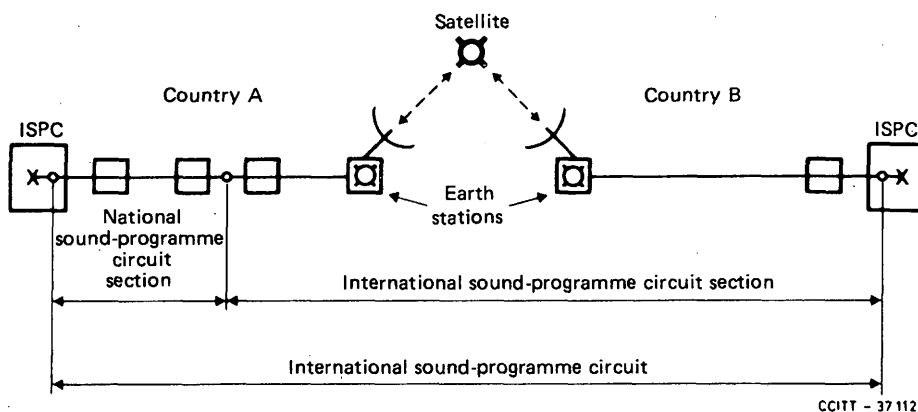
FIGURE 1/N.1
An international sound-programme circuit composed of two national and one international sound-programme circuit-sections



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



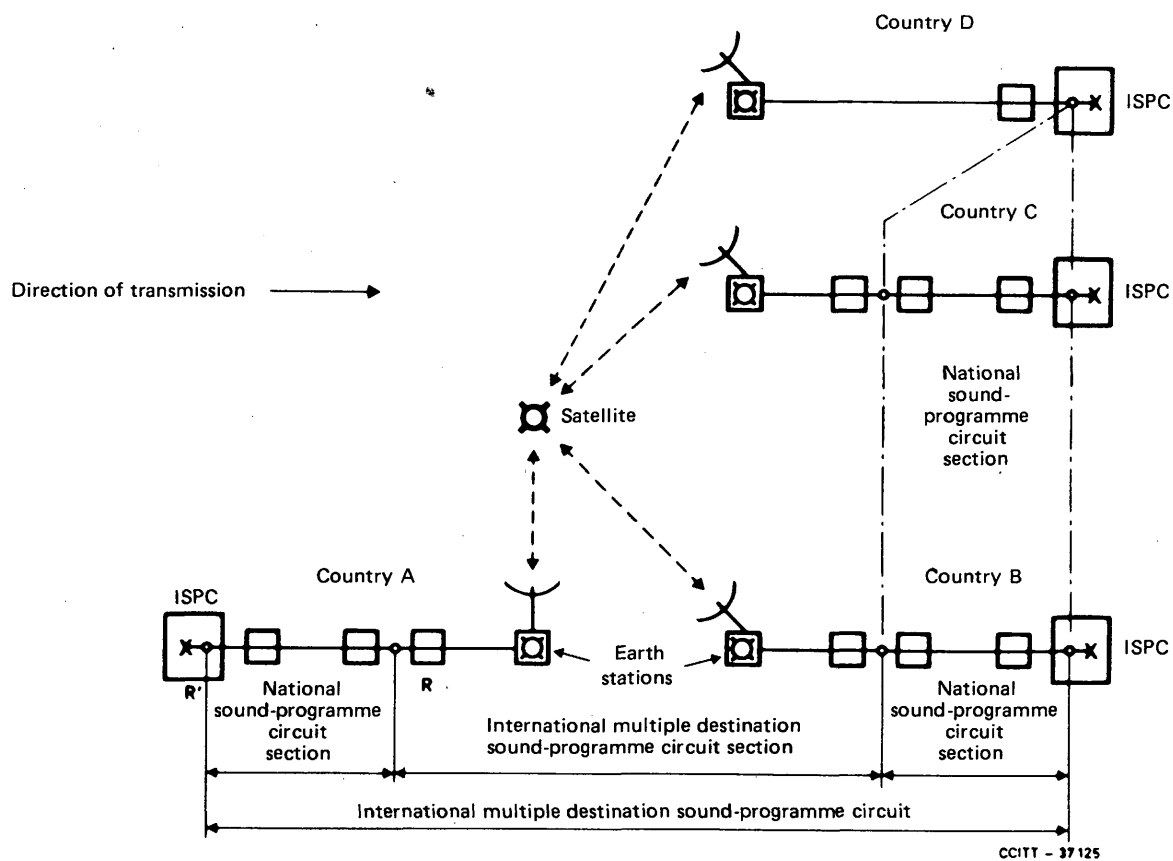
□ Audio-equipment proper to the circuit section

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
-  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

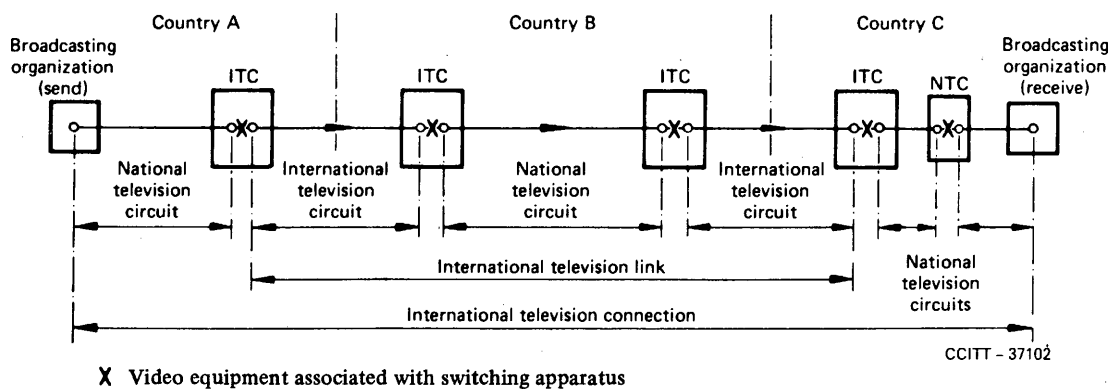
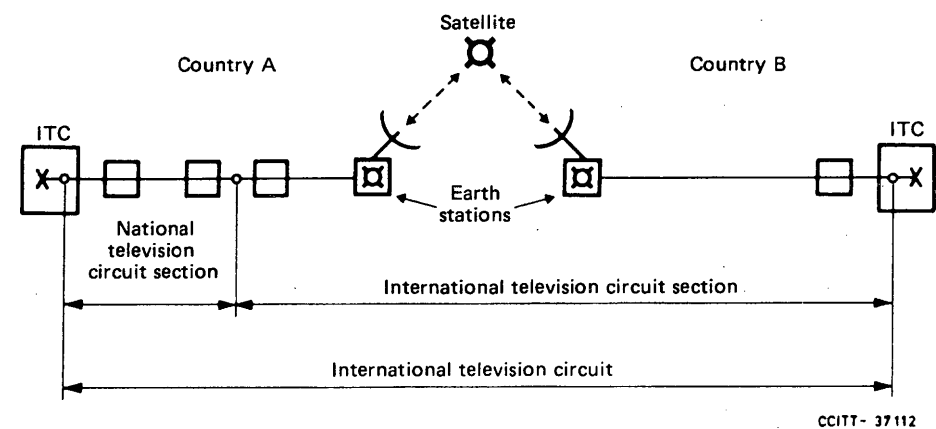


FIGURE 2/N.51

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

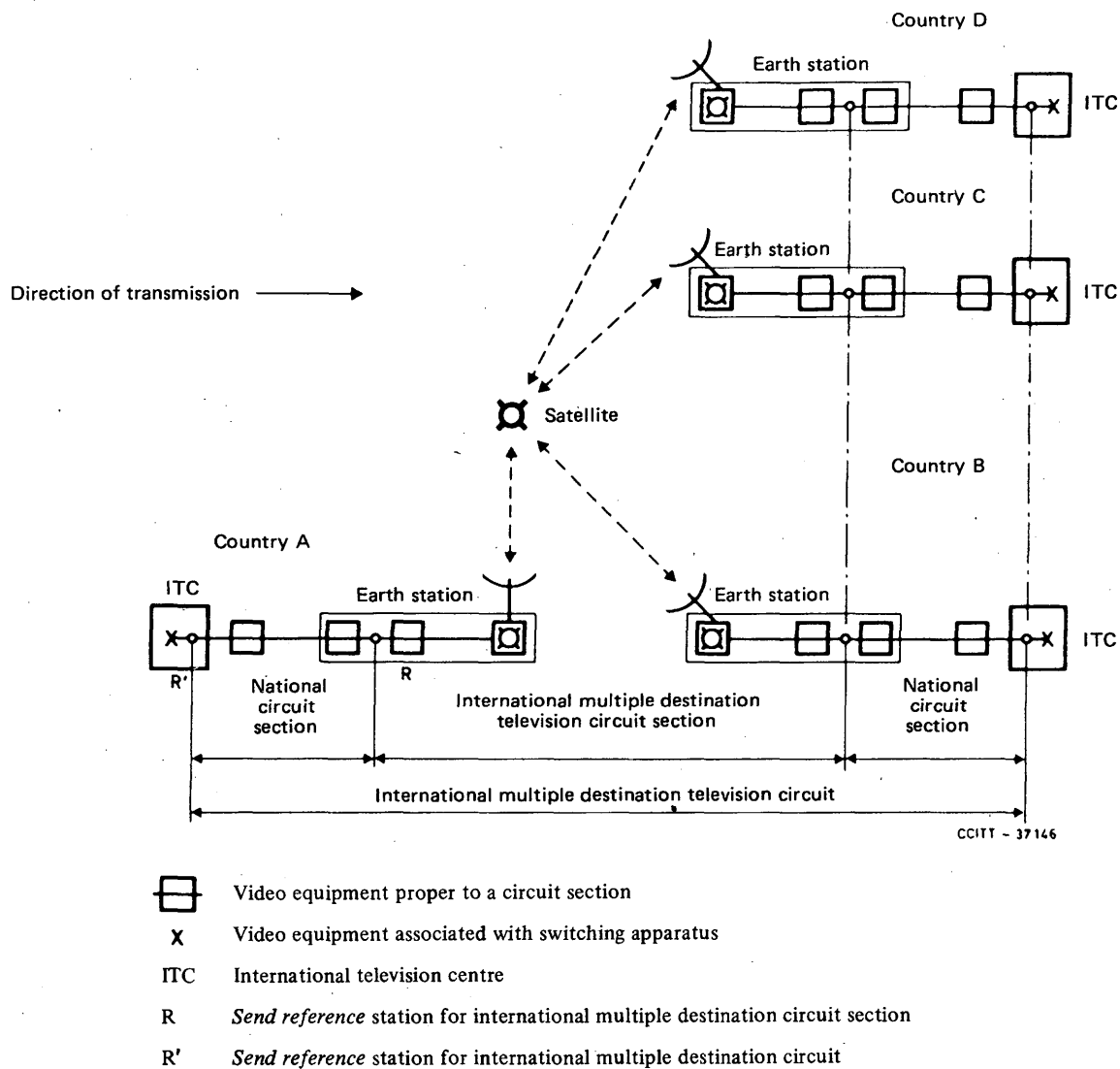


FIGURE 4/N.51

International multiple destination television circuit comprising an international multiple destination satellite circuit section and national terrestrial circuit sections

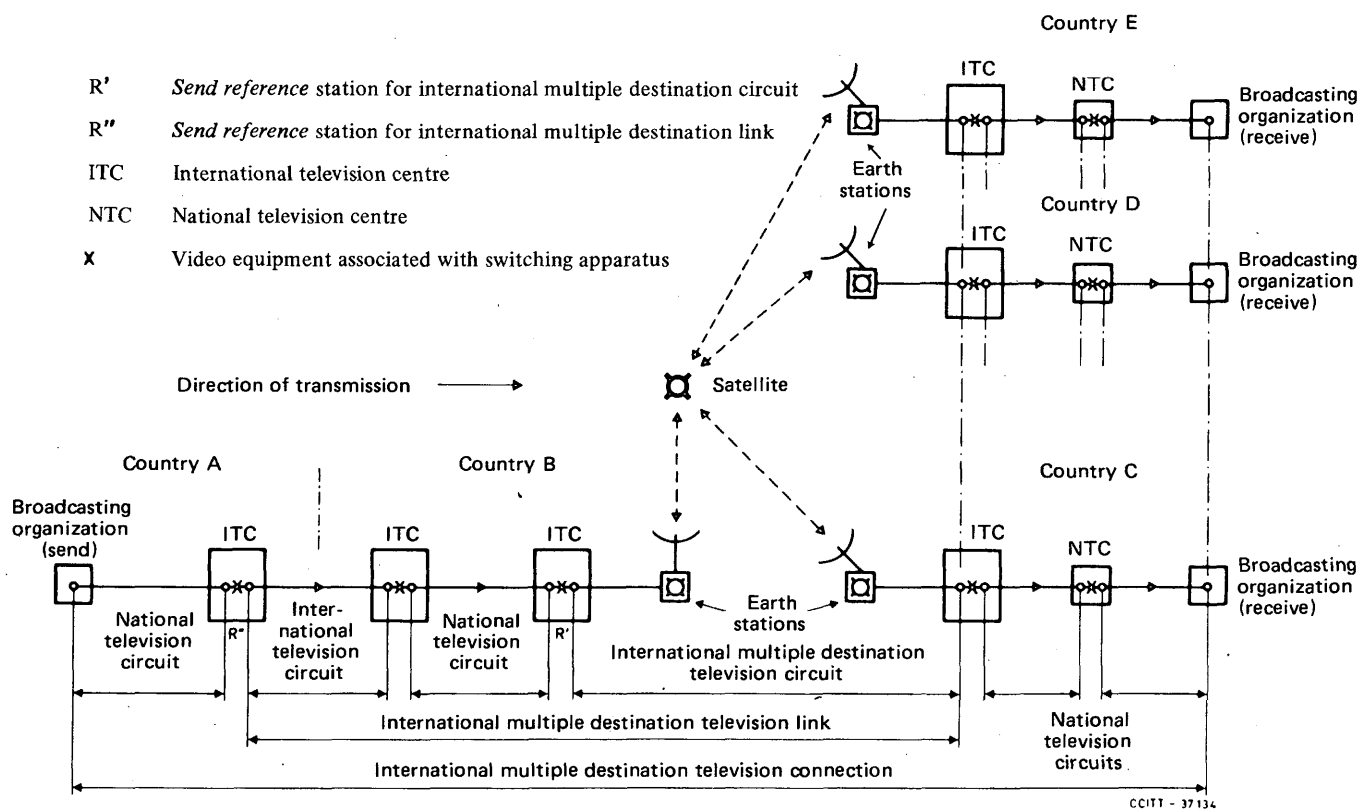


FIGURE 5/N.51

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

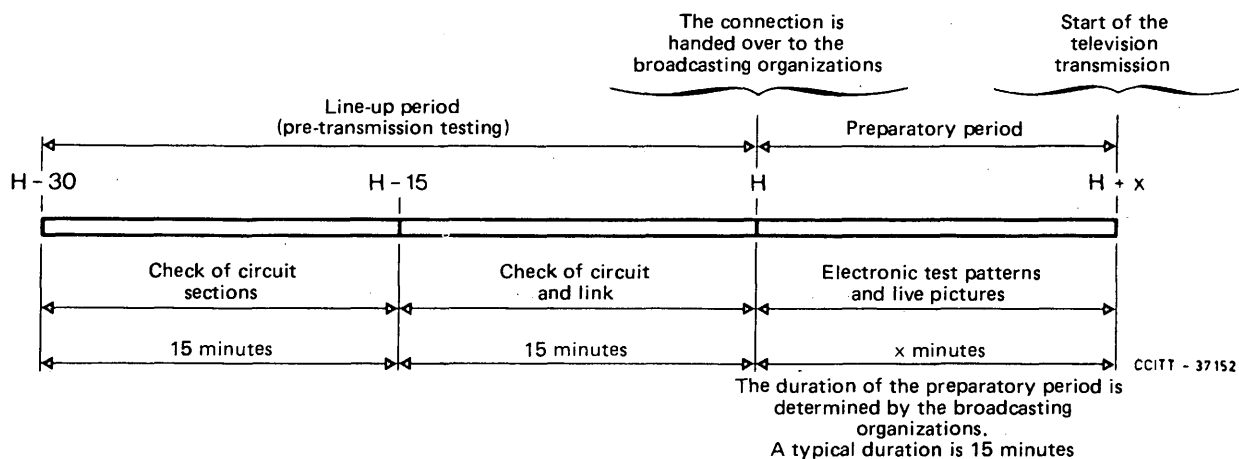
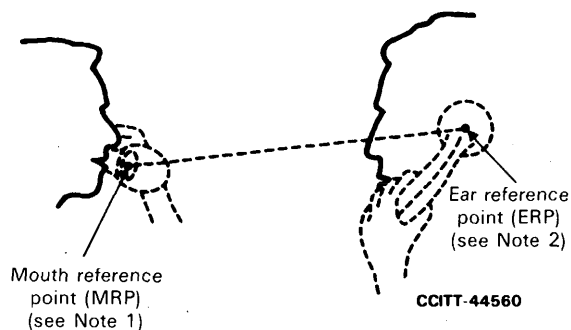


FIGURE 1/N.54

Time allocation in the line-up period and the preparatory period in the case of television transmissions



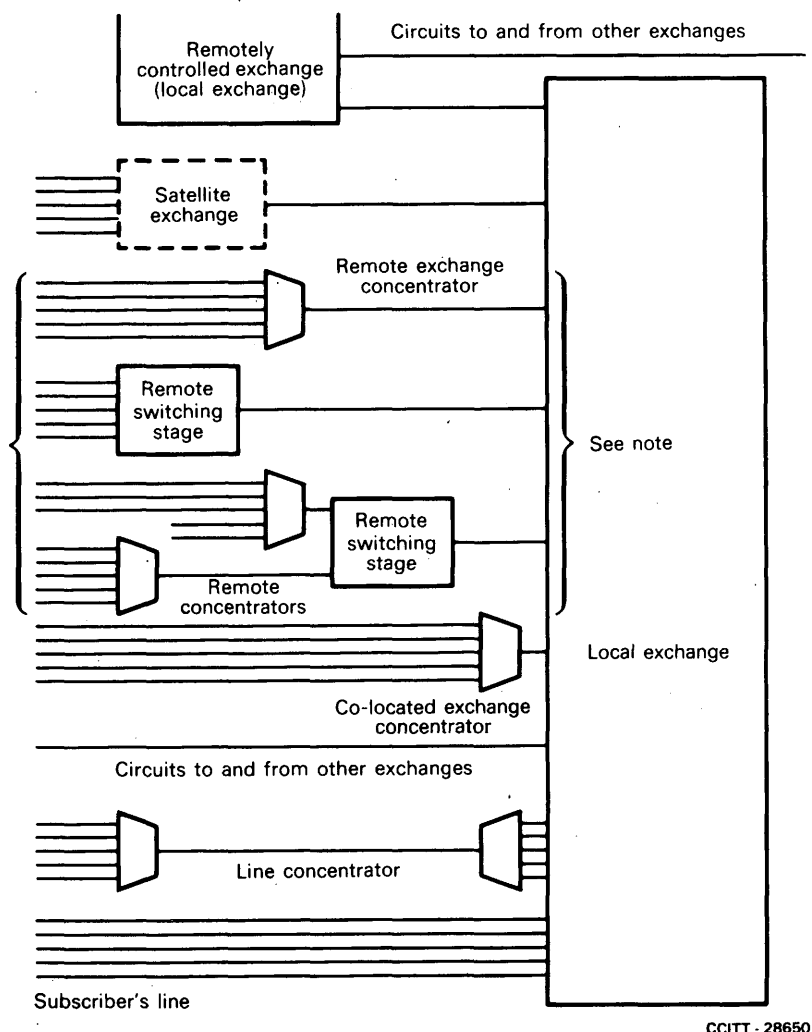
Note 1 — The mouth reference point is located at a distance of 25 mm in front of the lips on the horizontal axis through the centre of the opening of the mouth. It is defined in the absence of any obstruction.

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

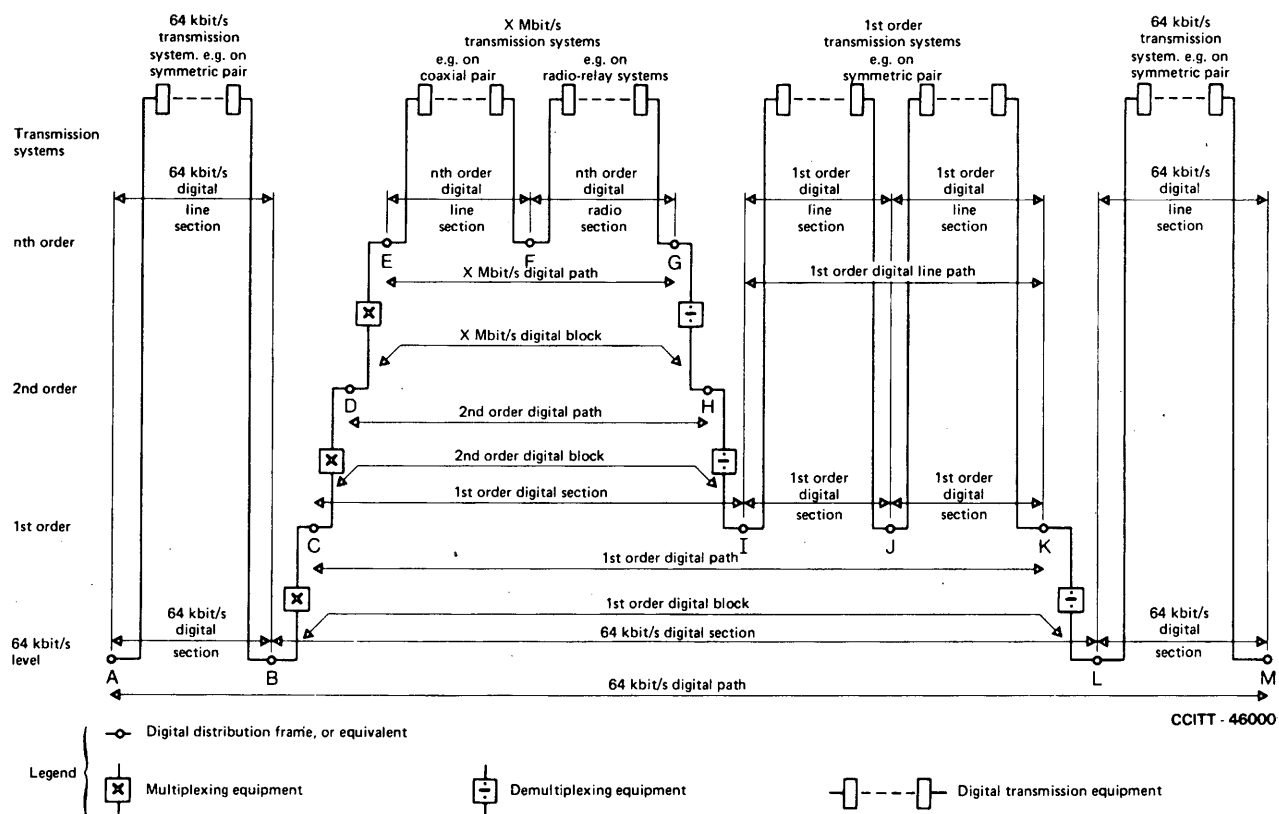
Definitions of mouth and ear reference points



Note — The brackets comprise the component parts of a geographically distributed exchange.

FIGURE 1/Q.9

Exchange and related terms



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 line section, which is a particular case of a 64 kbit/s digital section.
Note 3 – A-M is a 64 kbit/s digital path which comprises three 64 kbit/s digital sections, A-B, B-L and L-M.
Note 4 – F-G is an X Mbit/s digital radio section which forms part of an X Mbit/s digital path E-G.
Note 5 – C-I is a 1st order digital section which contains a 2nd order digital path D-H.
Note 6 – I-K is an example of a digital line path.

FIGURE 2/Q.9
 Examples of digital path, digital section, digital line section, etc.

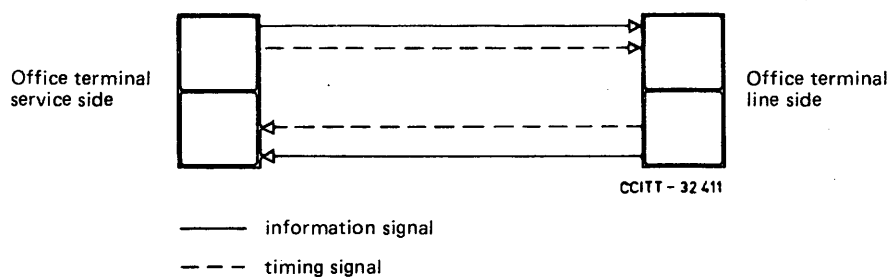


FIGURE 3/Q.9

Codirectional interface (G.703)

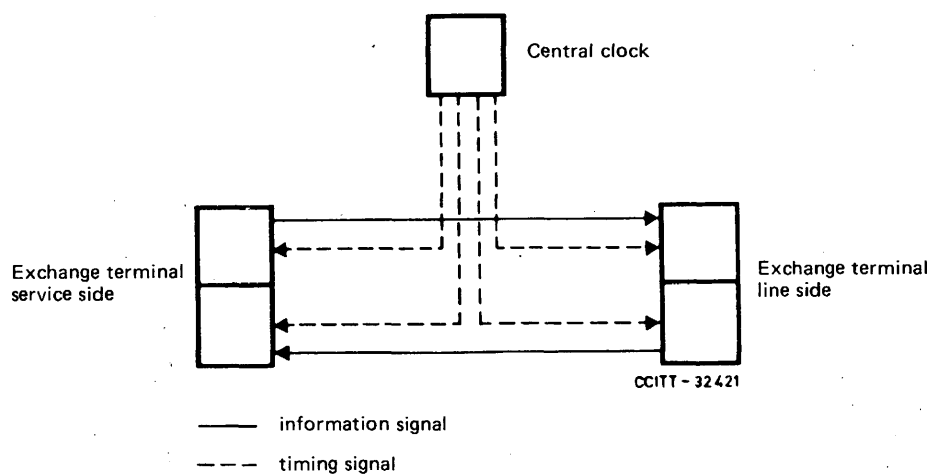


FIGURE 4/Q.9

Centralized clock interface (G.703)

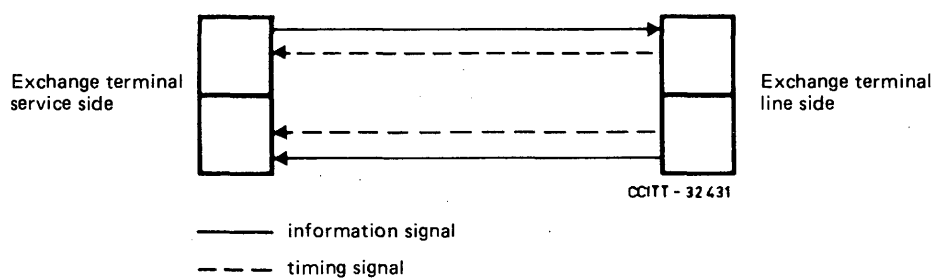


FIGURE 5/Q.9

Contradirectional interface (G.703)

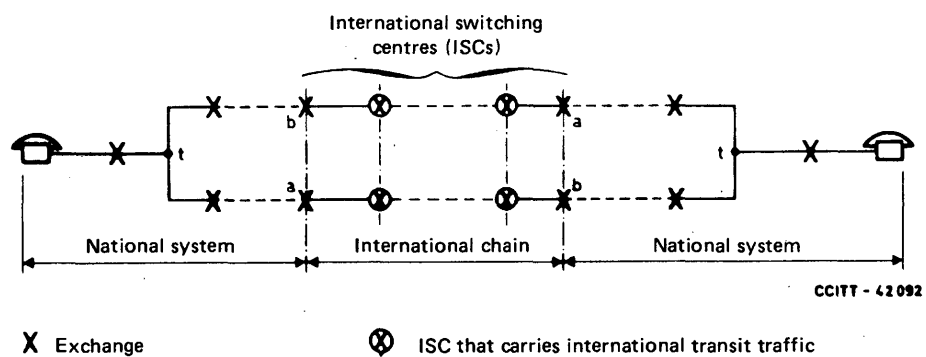
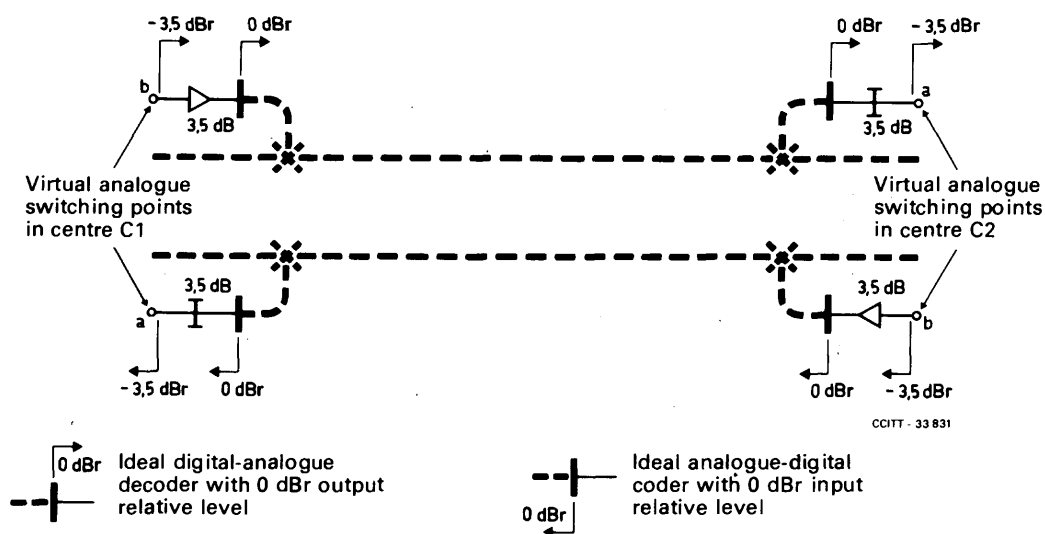


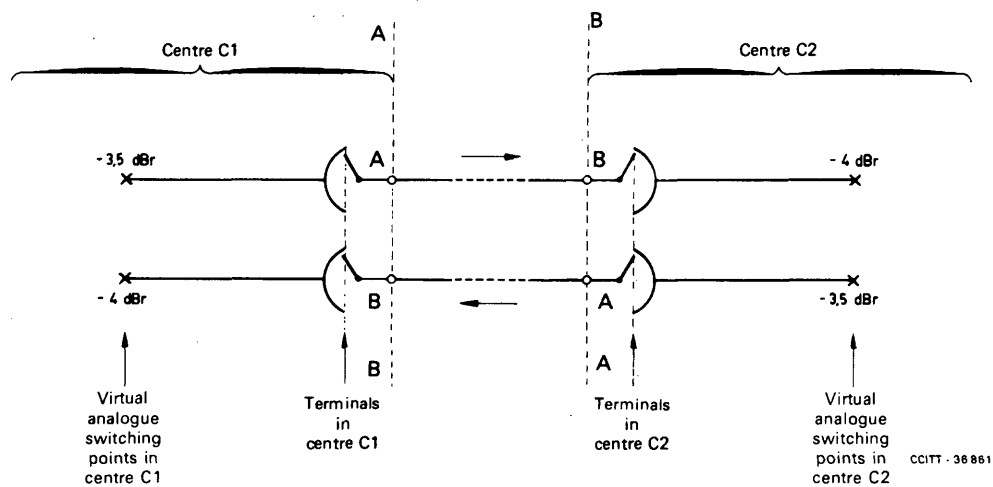
FIGURE 1/Q.40

Definition of the constituent parts of an international connection



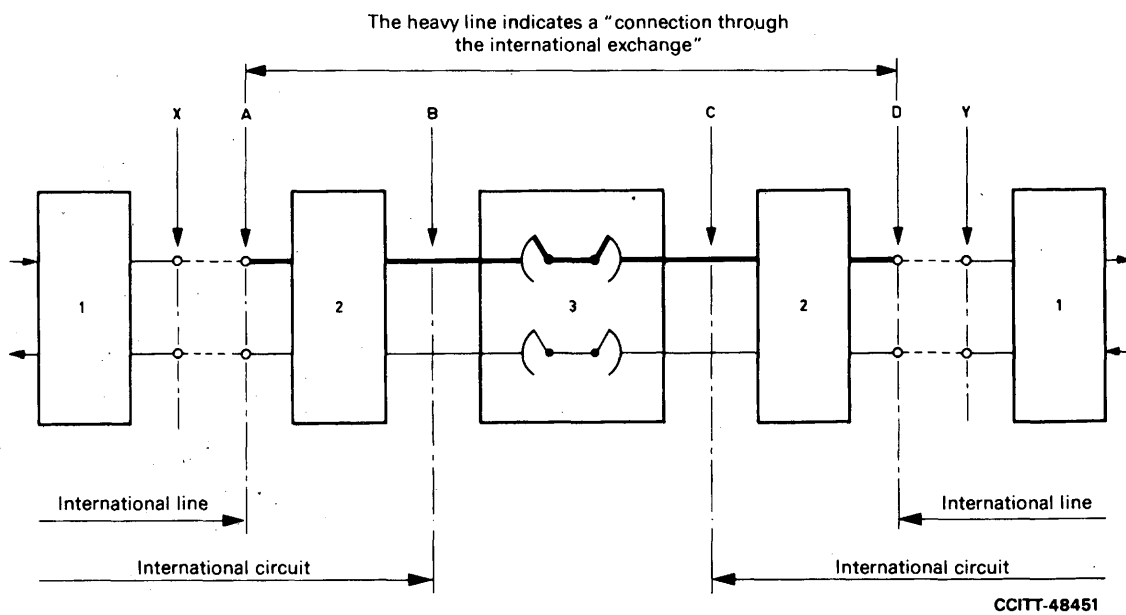
Note – Ideal coders and decoders are assumed to show a relation between analogue and digital signals and vice versa exactly in accordance with the appropriate tables for A-law or μ -law of Recommendation G.711 [8].

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



- 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 suppressors, compandors, equalizers, line signal receivers, etc., in addition to the cabling.

FIGURE 1/Q.45
International exchange

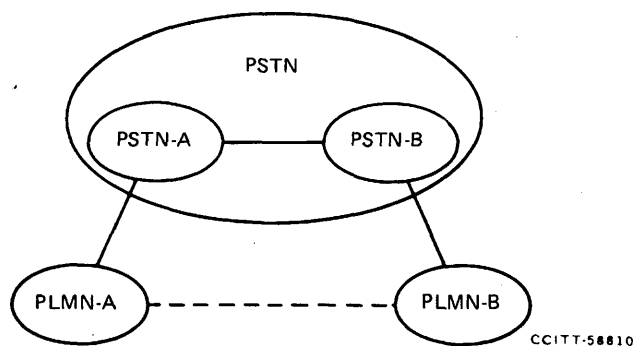


FIGURE 1/Q.70

The use of the concept PLMN for country A and country B

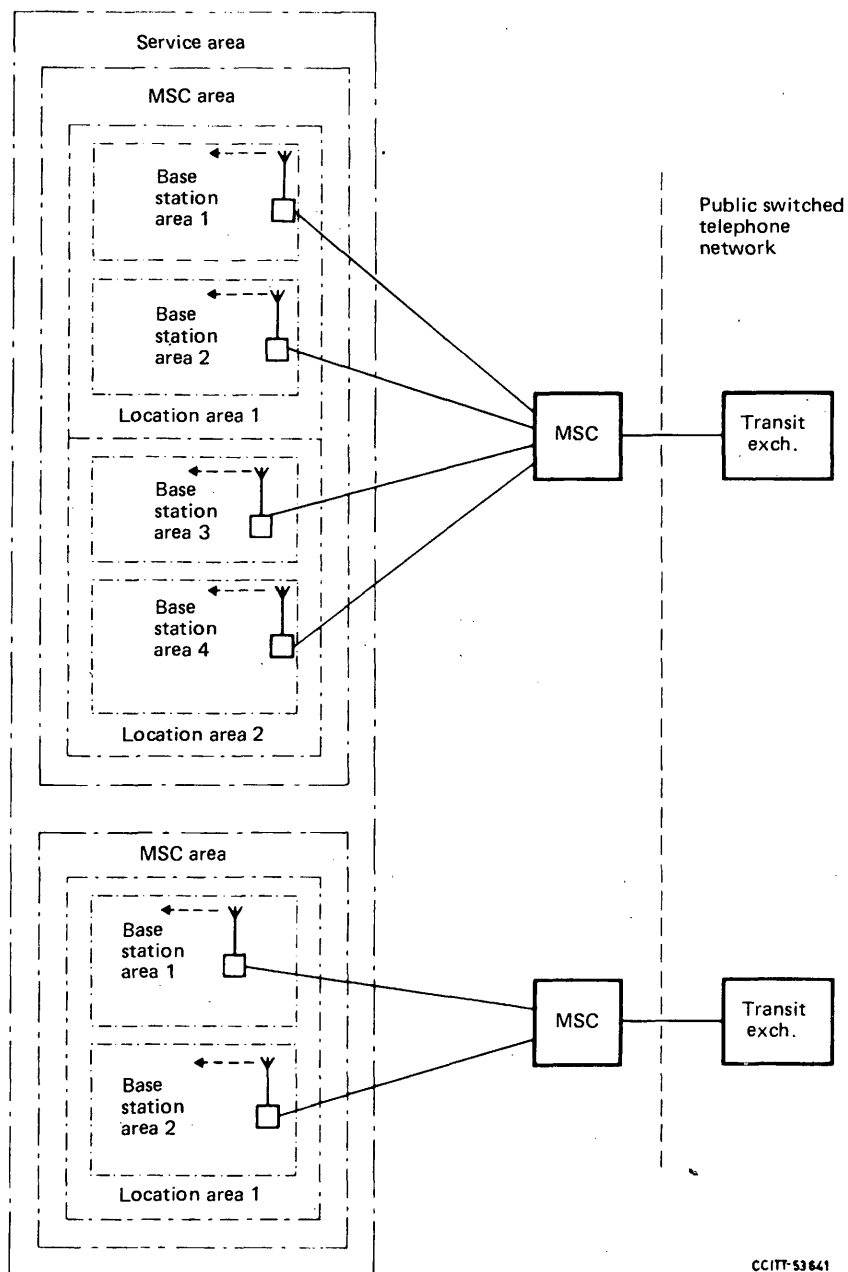


FIGURE 2/Q.70

Use of the definitions.
In this example the service area consists of one PLMN

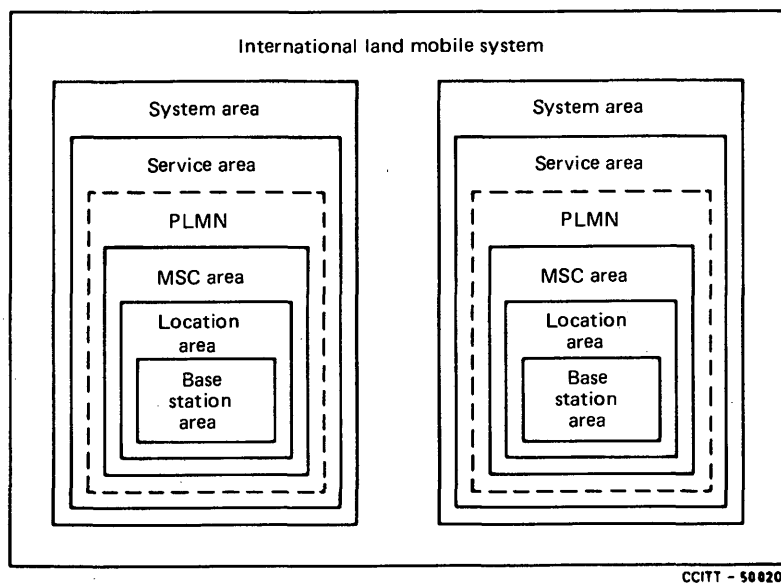


FIGURE 3/Q.70

Composition of the international land mobile system

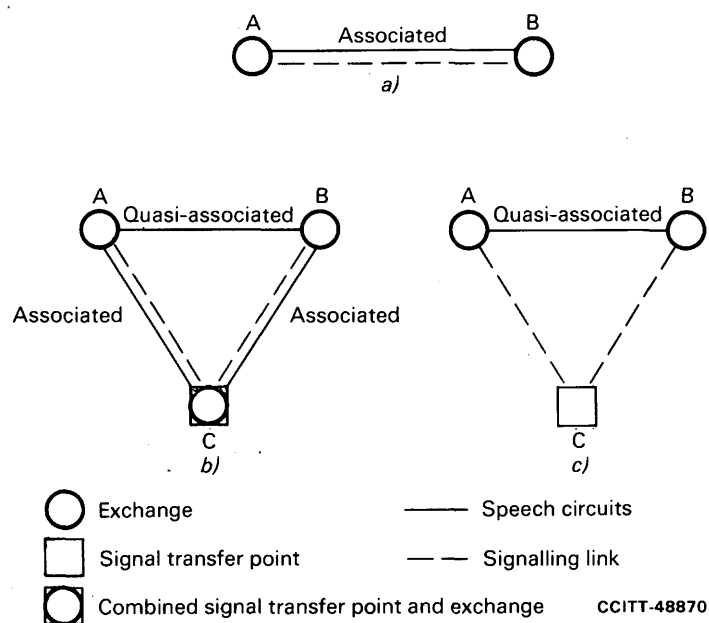
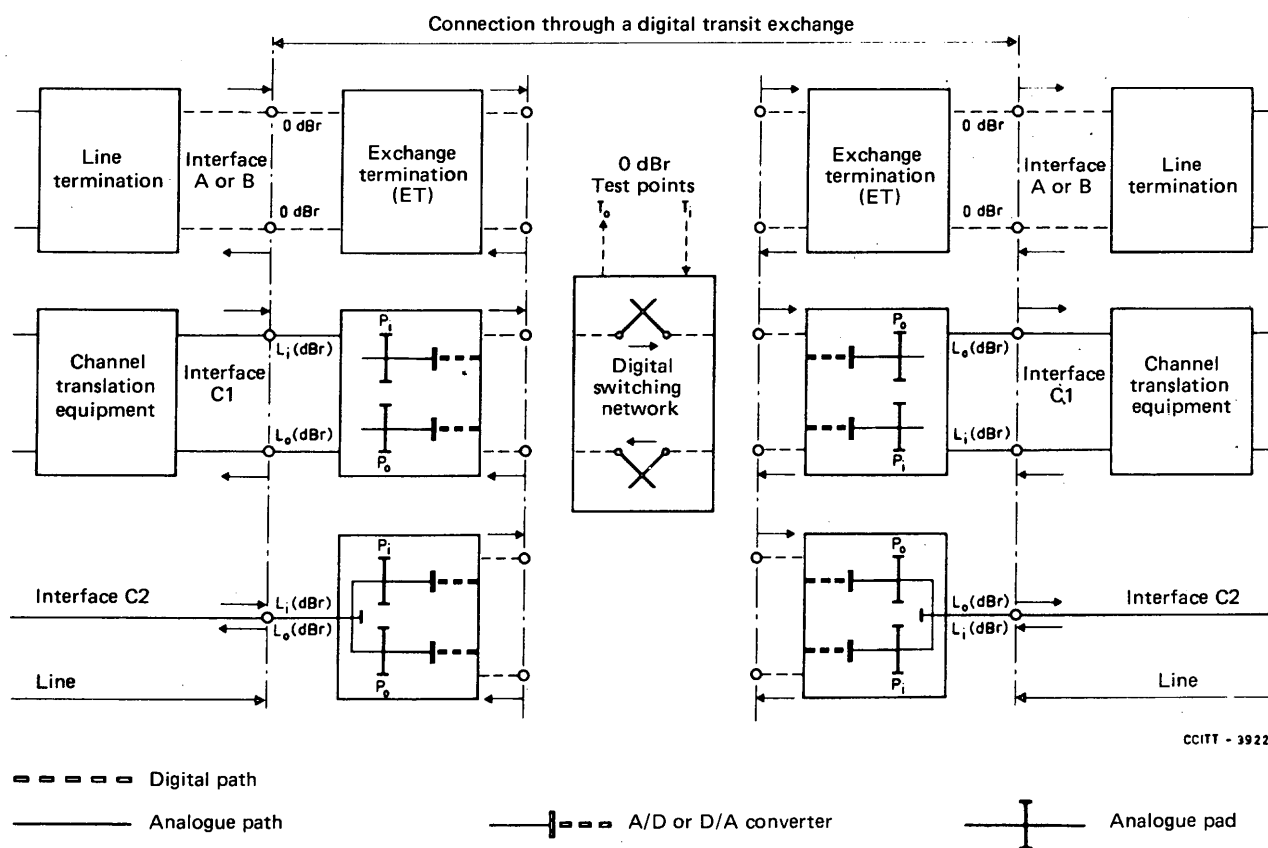


FIGURE 4/Q.253

Example of associated and quasi-associated modes of operation



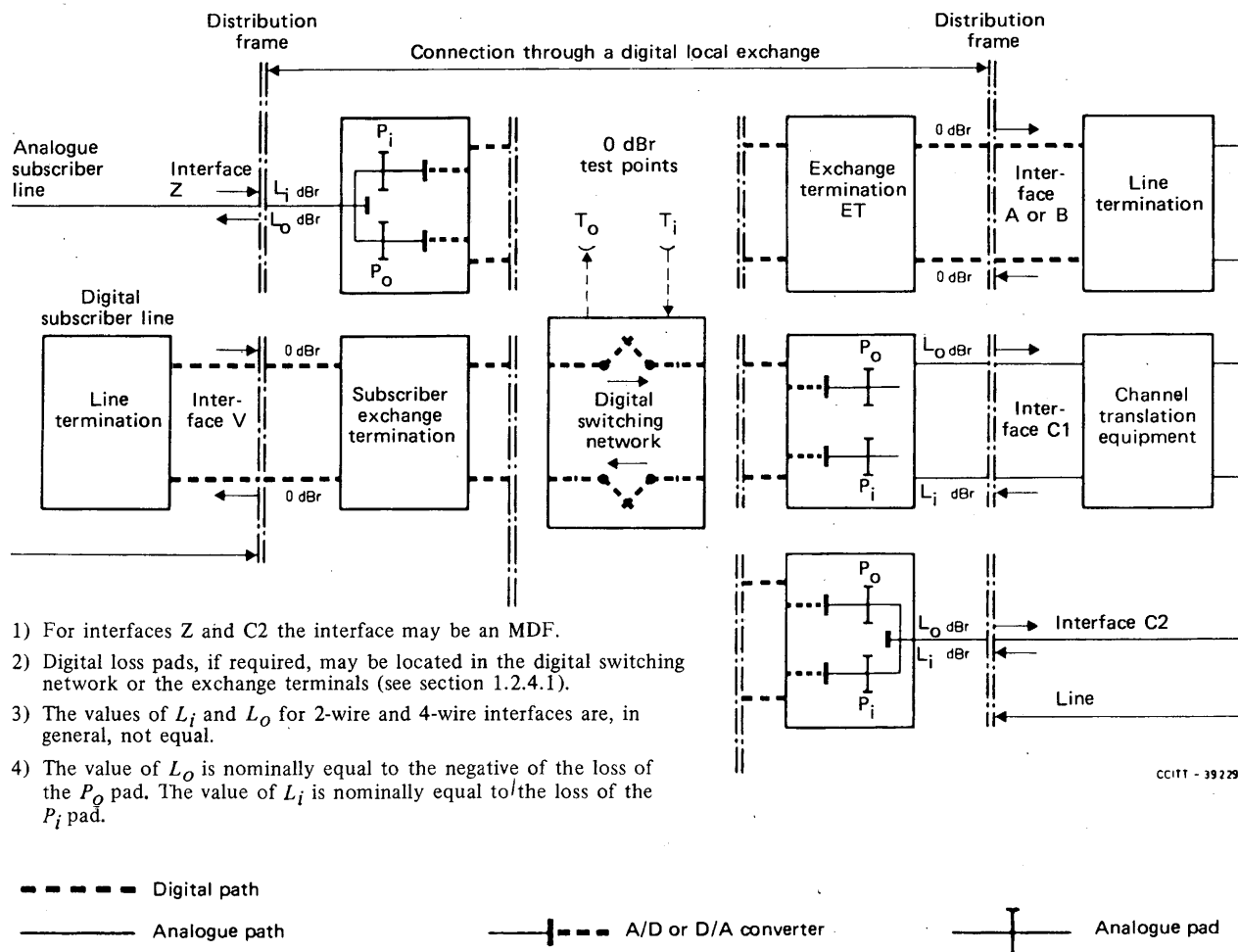
Note 1 – Digital loss pads, if required, may be located in the digital switching network or the exchange terminals (see § 1.2.3.1).

Note 2 – The values of L_i and L_o for 2-wire interfaces may not necessarily be equal to those of 4-wire interfaces.

Note 3 – The value of L_o is nominally equal to the negative of the loss of the P_o pad. The value of L_i is nominally equal to the loss of the P_i pad.

FIGURE 1/Q.507

Transmission levels and test points at a digital transit exchange



CCITT - 39229

FIGURE 1/Q.517

Transmission levels and test points at a digital local exchange

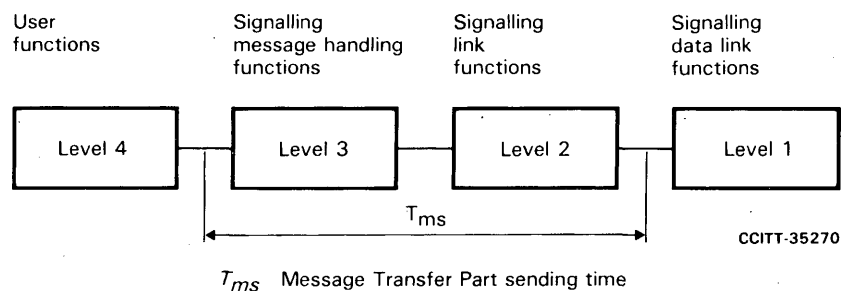


FIGURE 8/Q.706
Functional diagram of the Message Transfer Part sending time

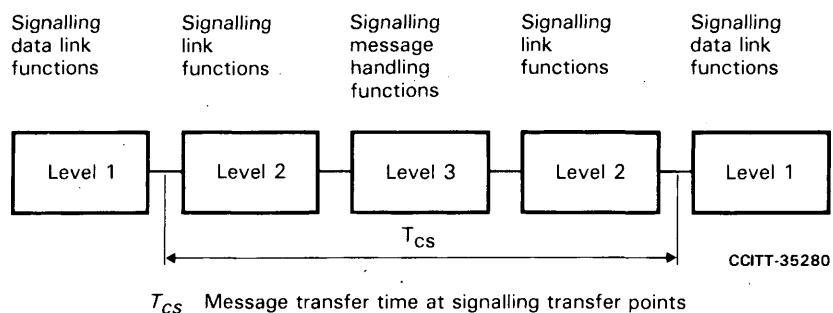


FIGURE 9/Q.706
Functional diagram of the message transfer time at signalling transfer points

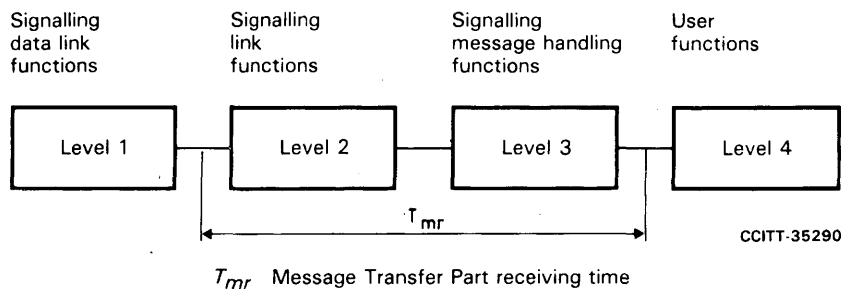


FIGURE 10/Q.706
Functional diagram of the Message Transfer Part receiving time

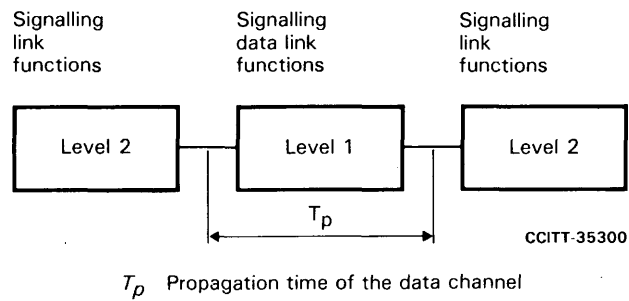
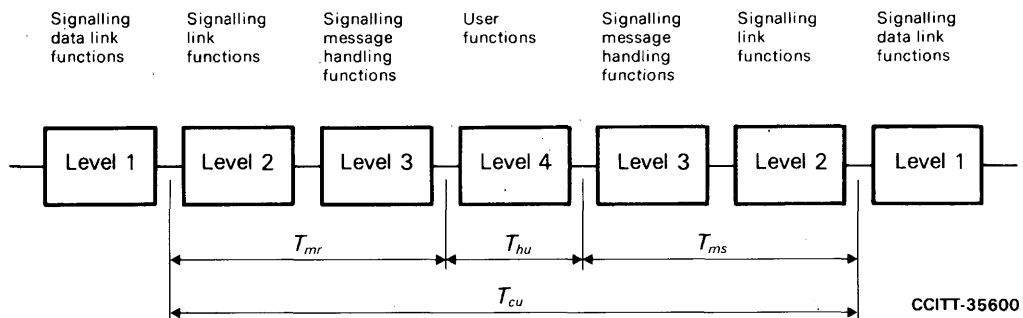


FIGURE 11/Q.706
Functional diagram for the propagation time



T_{cu} Cross-office transfer time

T_{hu} Telephone User Part handling time

T_{mr} Message Transfer Part receiving time^{a)}

T_{ms} Message Transfer 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

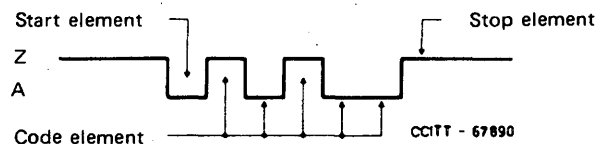
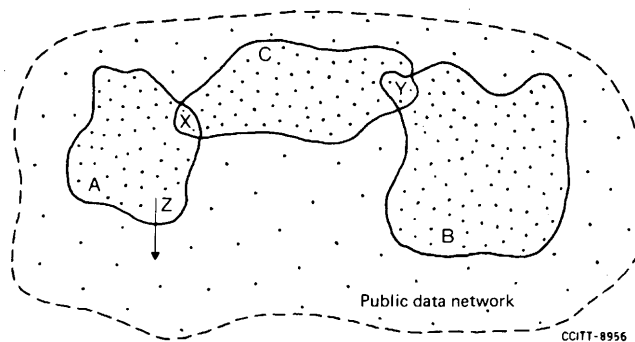


FIGURE 1/R.140
Example of the use of the term code element



Notes

1. A, B and C are closed user groups
2. Terminal X belongs to closed user groups A and C
3. Terminal Y belongs to closed user groups B and C
4. Terminal Z in closed user group A has outgoing access

FIGURE 1/X – Diagram associated with the definitions of closed user group and closed user group with outgoing access

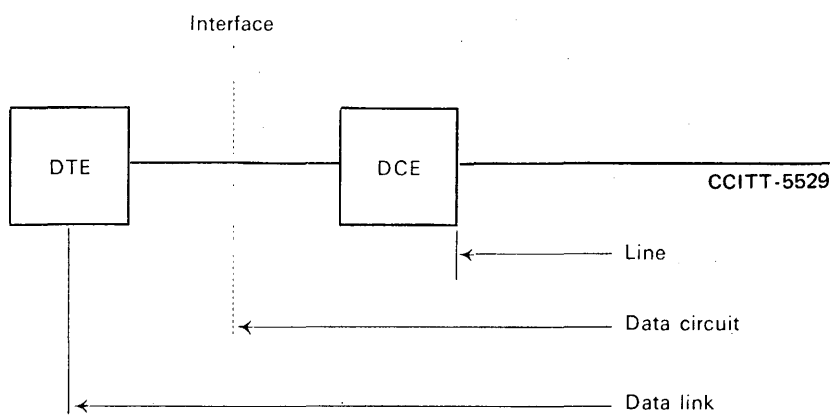
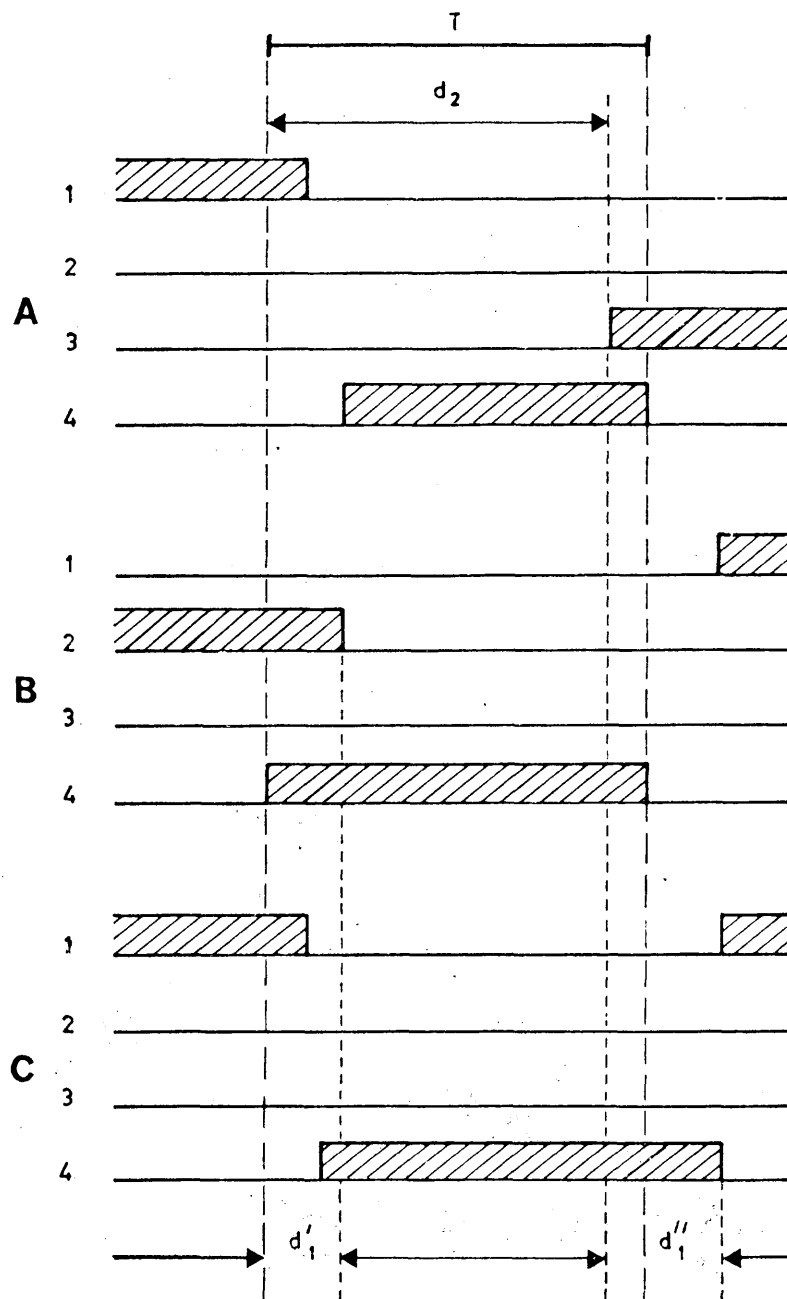


FIGURE 2/X



CCITT-4891

$$\text{Degree of late distortion: } \delta_l = \frac{d_1 \max}{T}$$

$$\text{Degree of early distortion: } \delta_e = \frac{T - d_2 \min}{T} = \frac{(T - d_2) \max}{T}$$

T = theoretical duration of the significant interval

FIGURE 3/X – Degree of anisochronous parallel distortion

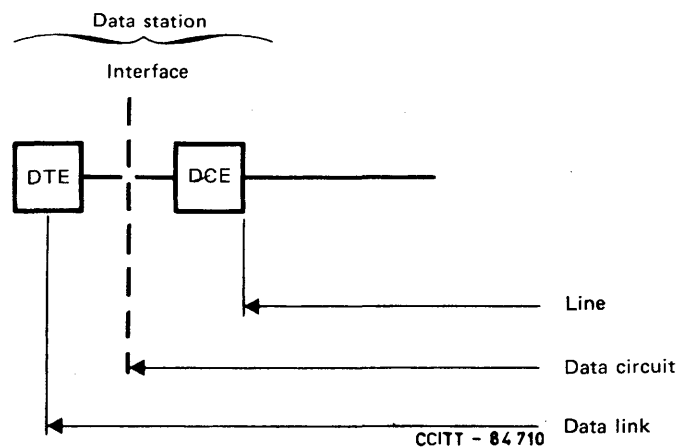


FIGURE 1/X.15
Components of a data link

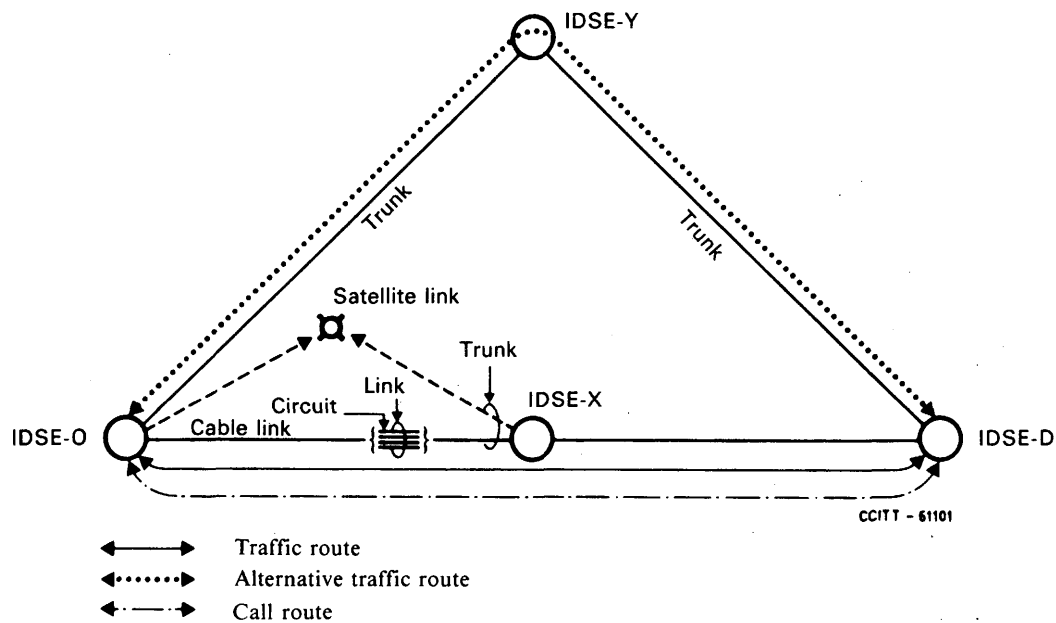
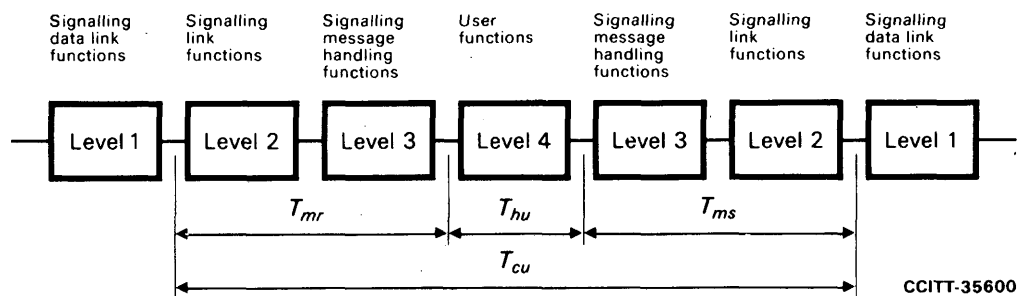


FIGURE A-1/X.110
The network part of the international public data network (IPDN)

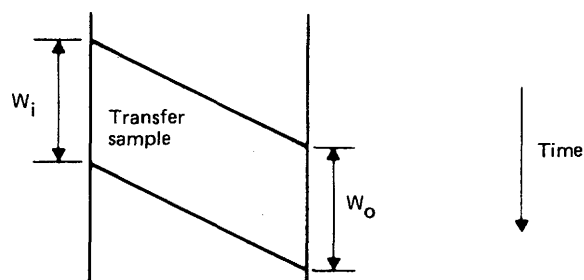


T_{cu} Cross-office transfer time
 T_{hu} Data User Part handling time
 T_{mr} Message Transfer Part receiving time
 T_{ms} Message Transfer Part sending time

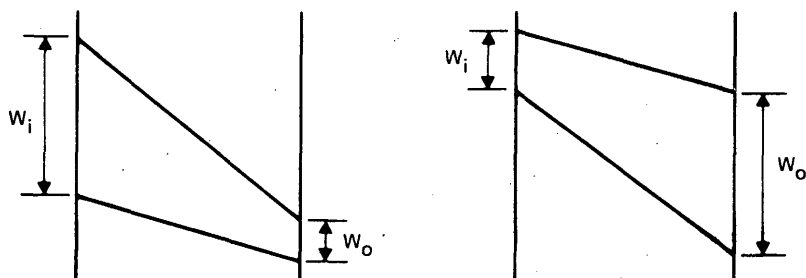
The definitions of these times are given in Recommendation Q.706.

FIGURE 19/X.61

Functional diagram of the signal transfer time



Case 1 – No rate conversion: $W_i = W_o$



Case 2 – Rate increase: $W_i > W_o$

Case 3 – Rate reduction: $W_i < W_o$

$$\text{User information transfer rate} = \frac{B1_s}{\text{Max } (W_i \text{ or } W_o)}$$

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$B1_s$ = Total successful transfer outcomes in the transfer sample

FIGURE 4/X.140

User information transfer rate

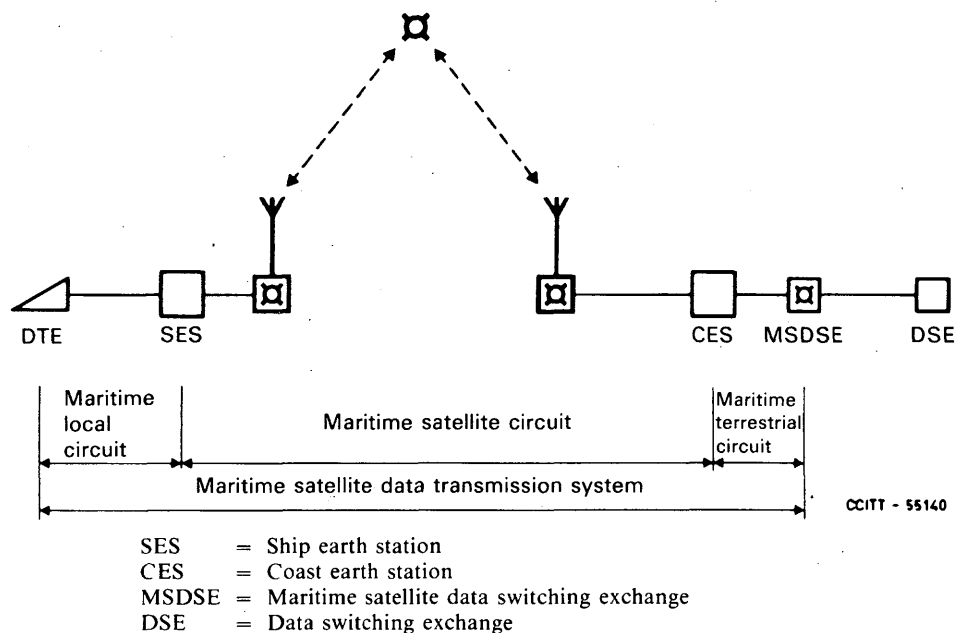


FIGURE 1/X.350

Composition of the maritime satellite data transmission system

TABLE 1/G.821

Error performance objectives for international ISDN connections

Performance classification	Objective
(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 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 time pattern.

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 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

ⓐ These positions are reserved for national use. CCITT - 26622

