ITU

INTERNATIONAL TELECOMMUNICATION UNION

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY

Montreal, 27 September - 6 October 2000

Book 1

Resolutions

ITU-T Series A Recommendations:
Organization of the work of the ITU-T

Study Group and other groups

List of study Questions (2001-2004)

ITU-T *Telecommunication Standardization Sector of ITU*

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ITU-T

TELECOMMUNICATION
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FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY
(Montreal, 2000)

BOOK No. 1

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PART 1

Resolutions adopted by the Assembly
of the ITU Telecommunication Standardization Sector

CONTENTS

RESOLUTION 1

Rules of procedure of the ITU Telecommunication Standardization Sector (ITU-T)

(Montreal, 2000)[1]

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that, in accordance with Article 17 of the Constitution of the International Telecommunication Union the duties of ITU-T shall be to study technical, operating and tariff questions and to issue Recommendations on them with a view to developing telecommunication standards, on a worldwide basis;

b)   that the ITU-T Recommendations and reports resulting from these studies must be in harmony with the International Telecommunication Regulations (Melbourne, 1988), complement the basic principles therein and assist all those concerned in the provision and operation of telecommunication services to meet the objectives set down in the Preamble and Article 1 of those Regulations;

c)   that, accordingly, the rapid developments in telecommunication technology and services require timely and reliable ITU-T Recommendations to assist all Member States in the balanced development of their telecommunication infrastructures;

d)   that general working arrangements of the Telecommunication Standardization and Radiocommunication Sectors are defined in the Convention of the International Telecommunication Union;

e)   that careful review of the more detailed working arrangements has been made in order to adapt them to meet the increasing demand for developing Recommendations with the most effective use of the limited resources available to Member States, Sector Members and ITU headquarters,

decides

that, as far as ITU-T is concerned, the general provisions referred to in *considering* d) above shall be amplified by the provisions set down in this Resolution and in the Resolutions to which they refer. In case of conflict, the Constitution, the Convention, International Telecommunication Regulations (ITR) and the Rules of Procedure of conferences and other meetings of the International Telecommunication Union (in that order) shall prevail over this Resolution.

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[1]   Previously published (Geneva, 1956 and 1958; New Delhi, 1960; Geneva, 1964; Mar del Plata, 1968; Geneva, 1972, 1976 and 1980, Malaga-Torremolinos, 1984; Melbourne, 1988; Helsinki, 1993; Geneva, 1996).

SECTION 1

World Telecommunication Standardization Assemblies

1.1 Preparations for the World Telecommunication Standardization Assembly (WTSA)

1.1.1 If WTSA meets at the seat of the Union, the precise date of the meeting shall be decided by the Director of the Telecommunication Standardization Bureau (TSB) in agreement with the Secretary-General of the Union. If WTSA does not meet at the seat of the Union, the exact date of the meeting shall be decided by the inviting government in agreement with the Director of TSB.

1.1.2 The Secretary-General of ITU shall send an invitation to participate in WTSA to all Member States of the Union. The invitation shall also be sent, in conformity with Article 25 of the Convention (or Article 28 according to the circumstances), to the ITU-T Sector Members as well as to the organizations referred to in this Article. If WTSA does not meet at the seat of the Union, the Secretary-General of ITU shall issue the above-mentioned invitation on behalf of the inviting government.

1.1.3 Member States, Sector Members of ITU-T (Nos. 110 to 112 of the Constitution) and any other organization intending to send a delegation, representatives or observers to WTSA are required to advise the Director of TSB, in writing, at least one month before the meeting, of the names and functions of the delegates of Member States (e.g. heads of delegation), representatives or observers. The Director of TSB shall forward this information to the inviting Member State.

1.1.4 The General Secretariat and the elected officials of the Union shall be represented at WTSA in an advisory capacity.

1.1.5 Prior to the official opening of WTSA, the heads of delegation shall meet:

a) to prepare, on the basis of proposals by the Director of TSB, the programme of work of WTSA, for submission to the latter at its first meeting;

b) to designate the persons who will be proposed as vice-chairmen and, if necessary (when WTSA meets at the seat of the Union), chairman of WTSA;

c) to determine the committees to be proposed to WTSA for establishment.

1.2 Committees

1.2.1 In accordance with section 4 of the Rules of Procedure of conferences and other meetings of the International Telecommunication Union, the following committees are proposed:

a) "Committee on Working Methods of ITU-T", which considers the Telecommunication Standardization Advisory Group (TSAG) report and submits to WTSA, for consideration, proposals on the working methods of ITU-T providing an efficient implementation of the ITU-T work programme.

b) "Committee on the ITU-T Work Programme and Organization", which considers the report of TSAG, and submits a report to WTSA setting out the allocation of work to study groups, and an organizational structure necessary to support the work programme (see 1.3), consistent with ITU-T priorities and strategy.

This committee shall include:

– the chairmen of the study groups, the Chairman of TSAG and the chairmen of other groups set up by WTSA.

c) "Budget Control Committee", which examines the accounts for expenditure incurred by the current WTSA, in accordance with the Rules of Procedure of conferences and other meetings of ITU and the estimate of the financial needs of ITU-T up to the next WTSA.

d) "Editorial Committee", which refines the wording of any text such as Resolutions arising from the WTSA's deliberations. This committee also aligns the official languages for such text.

e) "Steering Committee", which coordinates all matters connected with the smooth execution of work of WTSA and plans the order and number of meetings, avoiding overlapping wherever possible in view of the limited number of members of some delegations.

1.2.2 The Plenary Meeting of WTSA may set up committees to consider matters referred to the Assembly (No. 18 of the Rules of Procedure of conferences and other meetings of ITU).

1.3 Programme of work

1.3.1 During WTSA, the heads of delegation shall meet:

a) to consider the proposals of the Committee on the ITU-T Work Programme and Organization concerning the work programme and the constitution of study groups in particular;

b) to draw up proposals concerning the designation of chairmen and vice-chairmen of study groups, TSAG and any other groups established by WTSA (see Section 2).

1.3.2 WTSA shall set up the committees listed in 1.2.1 and 1.2.2 above. On the basis of the proposals by the Committee on the Work Programme and Organization of ITU-T and the assessment of those proposals by the heads of delegation, it shall set up study groups and, where appropriate, other groups.

1.3.3 The programme of work of WTSA shall be designed to provide adequate time for consideration of the important administrative and organizational aspects of ITU-T. As a general rule, the programme of work should include:

1.3.3.1 WTSA shall examine the reports of the study groups and the report of the Director of TSB on activities in the previous study period and TSAG report on fulfilment of specific functions delegated to it by the previous WTSA. While WTSA is in session, study group chairmen shall make themselves available to WTSA to supply information on matters which concern their study groups.

1.3.3.2 In those cases as indicated in Section 9, a WTSA may be asked to consider approval of one or more Recommendations. The report of any study group(s) proposing such action should include information on why the normal procedure is not being applied.

1.3.3.3 WTSA shall receive and consider the reports of the committees it has set up and take final decisions on the proposals submitted to it by those committees.

1.3.3.4 The Committee on the Work Programme and Organization of ITU-T shall meet to prepare proposals on the programme and organization of the work of ITU-T consistent with ITU-T priorities and strategy. Specifically, it shall:

a) review the Questions set for study or further study;

b) allocate these Questions to study groups and other groups as appropriate;

c) decide, when a Question, or a group of closely related Questions, concerns several study groups, whether:

  – to accept the recommendation of TSAG;

  – to entrust the study to a single study group or

  – adopt an alternative arrangement;

d)	produce a clear description of the general area of responsibility within which each study group may amend existing Recommendations, in collaboration with other groups, as appropriate;

e)	review, and adjust as necessary, the lists of Recommendations for which each study group is responsible.

1.3.3.5 The Committee on Working Methods of ITU-T shall meet to prepare proposals on the ITU-T work methods on the basis of the results of TSAG activity presented in TSAG report to the Assembly and the proposals of ITU-T Sector Members.

1.3.3.6 The Budget Control Committee shall meet to approve the accounts for expenditure incurred by the current WTSA in accordance with the Rules of Procedure of conferences and other meetings of ITU and prepare a report proposing that WTSA should approve an estimate of the financial needs of ITU-T until the next WTSA, for subsequent submission to the ITU Council.

1.3.3.7 After considering the proposals made by the heads of delegation, WTSA shall appoint the chairmen and vice-chairmen of study groups, and of TSAG. See Article 20 of the Convention and 3.1 below.

## 1.4	Voting

1.4.1	Any proposal (e.g. a draft Recommendation) put to the vote during a WTSA shall be considered as approved if it obtains a majority of votes: the minutes of WTSA shall give the result of the vote without listing the delegations that voted for or against, unless a delegation expressly asks for its vote to be mentioned.

1.4.2	When a country is not represented by an Administration, the representatives of the entities and organizations approved by the Member State concerned shall be entitled jointly, whatever their number, to a single vote when authorized in writing by the relevant Member State according to No. 239 of the Convention.

SECTION 2

Study groups and other groups

## 2.1	Classification of study groups and other groups

2.1.1	WTSA establishes study groups in order for each of them:

a)	to pursue the goals set down in a set of Questions related to a particular area of study in a task-oriented fashion;

b)	to review and, as necessary, to recommend amendment or deletion of existing Recommendations and definitions within its general area of responsibility (as defined by WTSA), in collaboration with other groups as appropriate.

2.1.2	Regarding the role of TSAG, which functions in a manner analogous to a study group, see Section 4.

2.1.3	To facilitate their work, study groups may set up working parties, joint working parties and Rapporteur Groups to deal with some of the tasks assigned to them (see ITU-T A.1 clause 2).

2.1.4	A joint working party shall submit draft Recommendations to its lead study group.

2.1.5	A Regional Group may be established to deal with Questions and studies of particular interest to a group of Member States and Sector Members in an ITU region (e.g. the TAF Group).

2.1.6   A study group may be set up by WTSA in order to carry out joint studies with the Radiocommunication Sector and prepare draft Recommendations on questions of common interest. The Telecommunication Standardization Sector shall be responsible for the management of this study group and approval of its Recommendations. WTSA shall appoint the chairman and vice-chairman of the study group[2], in consultation with the Radiocommunication Assembly as appropriate, and will receive the formal report of the work of the study group. A report for information may also be prepared for the Radiocommunication Assembly.

2.1.7   A study group may be designated by WTSA or TSAG as the lead study group for ITU-T studies forming a defined programme of work involving a number of study groups. This lead study group should be responsible for the study of the appropriate core Questions. In addition, in consultation with the relevant study groups and in collaboration, where appropriate, with other standards bodies, the lead study group has the responsibility to define and to maintain the overall framework and to coordinate, to assign (recognizing the mandates of the study groups) and to prioritize the studies to be done by the study groups and to ensure the preparation of consistent, complete and timely Recommendations.

2.2   Meetings outside Geneva

2.2.1   Study groups or working parties may meet outside Geneva if invited to do so by Member States or by other duly authorized entities of countries that are Member States of the Union and if the holding of a meeting outside Geneva is desirable (e.g. in association with symposiums or seminars). Such invitations shall be considered only if they are submitted to a WTSA or to an ITU-T study group meeting and they shall be finally accepted after consultation with the Director and if they are compatible with the credits allocated to ITU-T by the Council.

2.2.2   The invitations mentioned in 2.2.1 above shall be issued and accepted and the corresponding meetings outside Geneva organized only if the conditions laid down in Resolution 5 (Kyoto, 1994) of the Plenipotentiary Conference and ITU Council Decision 304 are met.

2.2.3   Should an invitation be cancelled for any reason, it shall be proposed to Member States or to other duly authorized entities, that the meeting be convened in Geneva, in principle on the date originally planned.

2.3   Participation in meetings

2.3.1   Member States and other duly authorized entities shall be represented in the study groups and other groups, such as working parties and Rapporteur Groups, in whose work they wish to take part, by participants registered by name and chosen by them as qualified to investigate technically and operationally satisfactory solutions to the Questions under study. Exceptionally, however, registration with a study group or other group may be made without specifying the name of the participants concerned. Chairmen of meetings may invite individual experts as appropriate.

2.3.2   The meetings of regional tariff groups shall, in principle, be limited to delegates and representatives of Member States and recognized operating agencies (for the definition of these terms see the Annex to the Constitution) in the region. However, each regional tariff group may invite other participants to attend all or part of a meeting.

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[2]   In special cases, WTSA may appoint the chairman and request the Radiocommunication Assembly to appoint a vice-chairman.

2.4 Reports of study groups to WTSA

2.4.1 All study groups shall meet sufficiently in advance of WTSA for the report of each study group to WTSA to reach Administrations of Member States and Sector Members at least one month before WTSA.

2.4.2 The report of each study group to WTSA is the responsibility of the study group chairman, and shall include:

– a short but comprehensive summary of the results achieved in the study period;

– reference to all Recommendations (new or revised) that have been approved by the Member States during the study period;

– reference to all Recommendations deleted during the study period;

– reference to the final text of all draft Recommendations (new or revised) that are forwarded for consideration by WTSA;

– the list of new or revised Questions proposed for study;

– review of Joint Coordination Group activities for which it is the lead study group (see ITU-T A.1 clause 2.2.2).

SECTION 3

Study group management

3.1 Chairmen and vice-chairmen

3.1.1 These guidelines are provided to the heads of delegation in connection with the appointment of chairmen and vice-chairmen at WTSAs and to study group chairmen in connection with the selection of working party chairmen.

3.1.2 Appointment of chairmen and vice-chairmen shall be primarily based upon proven competence both in technical content of the study group concerned, and the management skills required. Other considerations, including incumbency, shall be secondary.

3.1.3 The mandate of a vice-chairman shall be to assist the chairman in matters relating to the management of the study group including substitution for the chairman at official ITU-T meetings or replacement of the chairman should he or she be unable to continue with study group duties. Each working party chairman provides technical and administrative leadership and should be recognized as having a role of equal importance to that of the study group vice-chairman.

3.1.4 Vice-chairmen shall not be automatically selected as working party chairmen but shall not be excluded from consideration along with other qualified members of the study group.

3.1.5 To the extent possible, and taking into account the need for proven competence, appointment or selection to the management team should utilize the resources of as broad a range of Member States and Sector Members as possible.

3.1.6 In principle, a working party chairman, on accepting this role, is expected to have the support necessary to fulfil this commitment throughout the study period.

SECTION 4

Telecommunication Standardization Advisory Group

4.1   In accordance with Article 14A of the Convention, the Telecommunication Standardization Advisory Group (TSAG) is open to representatives of Administrations of Member States and representatives of ITU-T Sector Members and to chairmen of the study groups. Its principal duties are to review priorities, programmes, operations, financial matters and strategies for the ITU-T's activities, to review progress in the implementation of its work programme, provide guidelines for the work of the study groups and to recommend measures, *inter alia*, to foster cooperation and coordination with other relevant bodies, within ITU-T and with the Radiocommunication and Development Sectors and the General Secretariat, and with other standardization organizations, forums and consortia outside ITU.

4.2   TSAG will identify changing requirements and provide advice on appropriate changes to be made to the priority of work in ITU-T study groups, planning, and allocation of work between study groups (and between Sectors), giving due regard to the cost and availability of resources within TSB and the study groups. TSAG will monitor the activities of any Joint Coordination Groups and may also recommend the establishment of such groups, if appropriate. TSAG may also advise on further improvements to ITU-T working methods.

4.3   TSAG shall be composed of representatives of Administrations of Member States and representatives of Sector Members, and, as ex-officio members, the study group chairmen or their designated representatives, and the Director of TSB.

4.4   Taking into account only its advisory function, TSAG has no formal authority. The study group chairmen provide for the action required within their study groups or Joint Coordination Groups. The Director provides the necessary liaison between ITU-T and other Sectors and the General Secretariat of ITU or other standards bodies.

4.5   However, in addition to TSAG's advisory role, WTSA may assign temporary authority to TSAG to consider and act on matters specified by WTSA. TSAG may consult with the Director on these matters, if necessary. WTSA should assure itself that the special functions entrusted to TSAG do not require financial expenses exceeding the ITU-T budget. The report on TSAG activity on the fulfilment of specific functions shall be submitted to the next WTSA. Such authority shall terminate when the following WTSA meets, although WTSA may decide to extend it for a designated period.

4.6   TSAG holds regular scheduled meetings, included on the ITU-T timetable of meetings and announced in accordance with 1.1 of ITU-T A.1. The meetings should take place as necessary, but at least once a year[3].

4.7   In the interest of minimizing the length and costs of the meetings, the Chairman of TSAG should collaborate with the Director of TSB in making appropriate advance preparation, for example by identifying the major issues for discussion.

4.8   In general, the same rules of procedure as for study groups in this Resolution should apply to TSAG and its meetings, for example, for submission of contributions. However, at the discretion of the chairman, written proposals may be submitted during the TSAG meeting provided they are based on on-going discussions taking place during the meeting and are intended to assist in resolving conflicting views which exist during the meeting.

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[3]   The Director and the study group chairmen may use the opportunity of these meetings to consider any appropriate measure related to activities described in 4.4 and 4.5 above.

4.9   TSAG shall prepare a report of its activities after each meeting to be distributed in accordance with normal ITU-T procedures, and a report at its last meeting prior to WTSA for its use. The report to WTSA should summarize TSAG's activities on the matters assigned to it by WTSA and offer advice on allocation of work, proposals on ITU-T working methods, strategies and relations with other relevant bodies inside and outside ITU, as appropriate. This report shall be transmitted to the Director for submission to the Assembly.

SECTION 5

Duties of the Director

5.1   The Director of TSB shall take the necessary preparatory measures for meetings of WTSA, TSAG, study groups and other groups, and coordinate their work so that the meetings produce the best results in the shortest possible time. The Director shall fix, by agreement with TSAG and study group chairmen, the dates and programmes of TSAG, study group and working party meetings and shall group these meetings in time according to the nature of the work and the availability of TSB and other ITU resources.

5.2   The Director manages the allocation of the ITU-T financial and TSB human resources required for meetings administered by TSB, for the dissemination of the associated documents to ITU Member States and Sector Members (meeting reports, contributions, etc.), for ITU-T publications, for the authorized operational support functions for the international telecommunication network and services (Operational Bulletin, code assignments, etc.) and for operation of TSB.

5.3   In the Director's estimate of the financial needs of ITU-T until the next WTSA, the Director shall communicate to WTSA (for information) a summary of the accounts for the years which have elapsed since the preceding WTSA and the estimated expenses of ITU-T to cover its financial requirements until the next WTSA.

The estimated expenses of ITU-T shall first be submitted for preliminary examination to the Budget Control Committee of WTSA, whose chairman shall prepare a report on the subject for WTSA. After approval, the estimated expenses of ITU-T shall be sent by the Director of TSB to the Secretary-General of the Union, for submission to the Council.

5.4   The Director shall communicate to the Secretary-General, for inclusion in the budgetary estimates of the Union to be submitted to the Council, the estimated expenses of ITU-T, on the basis of the estimate of financial needs approved by WTSA.

5.5   The Director shall submit for preliminary examination by the Budget Control Committee, and thereafter for approval by WTSA, the accounts for expenditure incurred for the current WTSA.

5.6   The Director shall submit to WTSA a consolidated report on the proposals that have been received from TSAG (see 4.9) concerning the organization, terms of reference and work programme of study groups and other groups for the next study period. The Director may give views on these proposals.

5.7   In addition, the Director may, within the limits imposed by the Convention, submit to WTSA any report or proposal which would help to improve the work of ITU-T, so that WTSA may decide what action to take. In particular, the Director shall submit to WTSA such proposals concerning the organization and terms of reference of the study groups for the next study period as may be considered necessary.

5.8   The Director may request assistance from the study group and TSAG chairmen regarding proposals for potential candidates for study group and TSAG chairmen and vice-chairmen, for consideration by the heads of Delegation.

5.9   After the close of WTSA, the Director shall supply Administrations of Member States and Sector Members taking part in the activities of ITU-T with a list of the study groups and other groups set up by WTSA, indicating the general areas of responsibility and the Questions that have been referred to the various groups for study and requesting them to advise him/her of the study groups or other groups in which they wish to take part.

Furthermore, the Director shall supply the international organizations with a list of the study groups and other groups set up by WTSA, asking them to advise him/her of the study groups or other groups in which they wish to participate in an advisory capacity.

5.10   Administrations of Member States, Sector Members and other participating organizations are requested to supply these particulars after each WTSA as soon as possible and not later than two months after they have received the Director's circular, and to update them regularly.

5.11   In the interval between WTSAs, when circumstances so demand, the Director is authorized to take exceptional measures to ensure the efficiency of the work of ITU-T within the limits of the credits available.

5.12   In the interval between WTSAs, the Director may request assistance from the chairmen of study groups and the Chairman of TSAG regarding the allocation of available financial and human resources to be able to assure the most efficient work of ITU-T.

5.13   In consultation with the chairmen of study groups and the Chairman of TSAG, the Director should ensure an appropriate flow of executive summary information on the work of the study groups. This information should be designed to assist in following and appreciating the overall significance of the work progressing in ITU-T.

SECTION 6

Contributions

6.1   Contributions are submitted and formatted according to ITU-T A.1 and ITU-T A.2, respectively.

SECTION 7

Development and approval of Questions

7.1   **Development of Questions**

7.1.1   Member States, and other duly authorized entities, shall submit proposed Questions at least two months before the study group meeting which will consider the Question(s).

7.1.2   Each proposed Question should be formulated in terms of specific task objective(s) and shall be accompanied by appropriate information as listed in Appendix I. This information should clearly justify the reasons for proposing the Question and indicate the degree of urgency, while taking into account the relationship of the work of other study groups and standardization bodies.

7.1.3   TSB shall circulate the forms received proposing the Questions to the Member States and Sector Members of the study group(s) concerned so as to be received at least one month before the study group meeting which will consider the Question(s).

7.1.4   New or revised Questions may also be proposed by a study group itself during a meeting.

7.1.5   Each study group shall consider the proposed Questions to determine:

i)   the clear purpose of each proposed Question;

ii)   the priority, urgency and type of new Recommendation(s) desired, or changes to existing Recommendations resulting from the study of the Questions;

iii)   that there be as little overlap of work as possible between the proposed Questions both within the study group concerned and with Questions of other study groups and the work of other standardization bodies.

7.1.6   Agreement by a study group to submit proposed Questions for approval is achieved by reaching consensus among the Member States and Sector Members present that the above criteria have been satisfied.

7.1.7   TSAG, to the extent practicable, shall be made aware of all proposed Questions in the collective letter announcing the TSAG meeting, in order to allow it to consider the possible implications on the work of all ITU-T study groups or other groups. In collaboration with the author(s) of proposed Question(s), TSAG considers, reviews and, if appropriate, may recommend changes to these Question(s), taking into account the criteria in 7.1.5 above.

7.1.8   The opportunity for review by TSAG of the Questions prior to approval may be dispensed with only where urgent approval of the proposed Question is justified in the opinion of the Director of TSB, after consulting the chairman of TSAG and the chairman of any other study groups where overlap or liaison problems could arise.

7.1.9   In summary, there are three possible methods of developing a draft Question for approval for inclusion in the work programmes of ITU-T:

a)   processing through a study group and TSAG;

b)   as in a) plus consideration in the relevant committee of WTSA, when the study group meeting is its last prior to a WTSA;

c)   processing through a study group only, where urgent treatment is justified.

7.1.10   If, despite the above provisions, a Member State proposes a Question directly to a WTSA, the Member State should be invited to submit the proposal to the next meeting of TSAG to allow time for its thorough examination.

7.1.11   In order to allow for the specific characteristics of the developing countries, TSB shall take account of the relevant provisions of WTSA Resolution 17 in responding to any request submitted by the developing countries through BDT, particularly with regard to matters connected with training, information, the examination of questions which are not covered by the ITU-D study groups and the technical assistance required for the examination of certain questions by the ITU-D study groups.

7.2   Approval of Questions by WTSA (see Figure 7.1a)

7.2.1   At least two months prior to WTSA, TSAG shall meet to consider, review and, where appropriate, recommend changes to Questions for WTSA's consideration, while ensuring that the Questions respond to the overall needs and priorities of the ITU-T work programme and are duly harmonized to:

i)   avoid duplication of effort;

ii)   provide a coherent basis for interaction between study groups;

iii)   facilitate monitoring overall progress in the drafting of Recommendations;

iv)   facilitate cooperative efforts with other standardization organizations.

7.2.2   At least one month before WTSA, the Director of TSB will inform the Member States and Sector Members of the list of proposed Questions, as agreed by TSAG.

7.3   Approval of proposed Questions between WTSAs (see Figure 7.1b)

7.3.1   Between WTSAs, and after development of proposed Questions (see 7.1 above), there are two possible methods of approving new or revised Questions, as set out in 7.3.2 or 7.3.3 below.

7.3.2   New or revised Questions may be approved by a study group if consensus at the study group meeting is achieved. In addition, some Member States and Sector Members (normally at least four) have to commit themselves to support the work, e.g. by contributions, provision of Rapporteurs or editors and/or hosting of meetings. The names of the supporting Sector Member organizations should be recorded in the meeting report.

a)   The proposed Question shall be adopted and have the same status as Questions approved at a WTSA.

b)   The Director shall notify the results by circular.

7.3.3   Alternatively, if consensus of the study group to approve a new or revised Question is not achieved, the study group may request consultation of the Member States.

a)   The Director of TSB shall request Member States to notify him/her within two months whether they approve or do not approve the proposed new or revised Question.

b)   The proposed Question shall be adopted, and have the same status as Questions approved at a WTSA, if:

–   a simple majority of all the Member States responding are in agreement; and

–   at least ten replies are received.

c)   The Director of TSB shall notify the results of the consultation by circular. (See also 8.2.)

7.3.4   Between WTSAs, the periodic meetings of TSAG will review the work programme of ITU-T and recommend revisions as necessary.

7.3.5   In particular, TSAG will consider any new and revised Questions to determine whether a proposed new or revised Question is in line with the mandate of the study group.

7.4   Deletion of Questions

Study groups may decide in each individual case which of the following alternatives is the most appropriate one.

7.4.1   Deletion of a Question by WTSA

Upon the decision of the study group, the chairman shall include in his/her report to WTSA the request to delete a Question. WTSA may approve this request.

7.4.2   Deletion of a Question between WTSAs

7.4.2.1 At a study group meeting, it may be agreed by reaching consensus among those present to delete a Question, e.g. either because work has been terminated or because no contributions have been received at that meeting and at the previous two study group meetings. Notification about this agreement, including an explanatory summary about the reasons for the deletion, shall be provided by a circular. If a simple majority of the Member States responding has no objection to the deletion within two months, the deletion will come into force. Otherwise the issue will be referred back to the study group.

7.4.2.2 Those Member States which indicate disapproval are requested to provide their reasons and to indicate the possible changes that would facilitate further study of the Questions.

7.4.2.3 Notification about the result will be given in a circular, and TSAG will be informed by a report from the Director. In addition, the Director shall publish a list of deleted Questions whenever appropriate, but at least once by the middle of a study period.
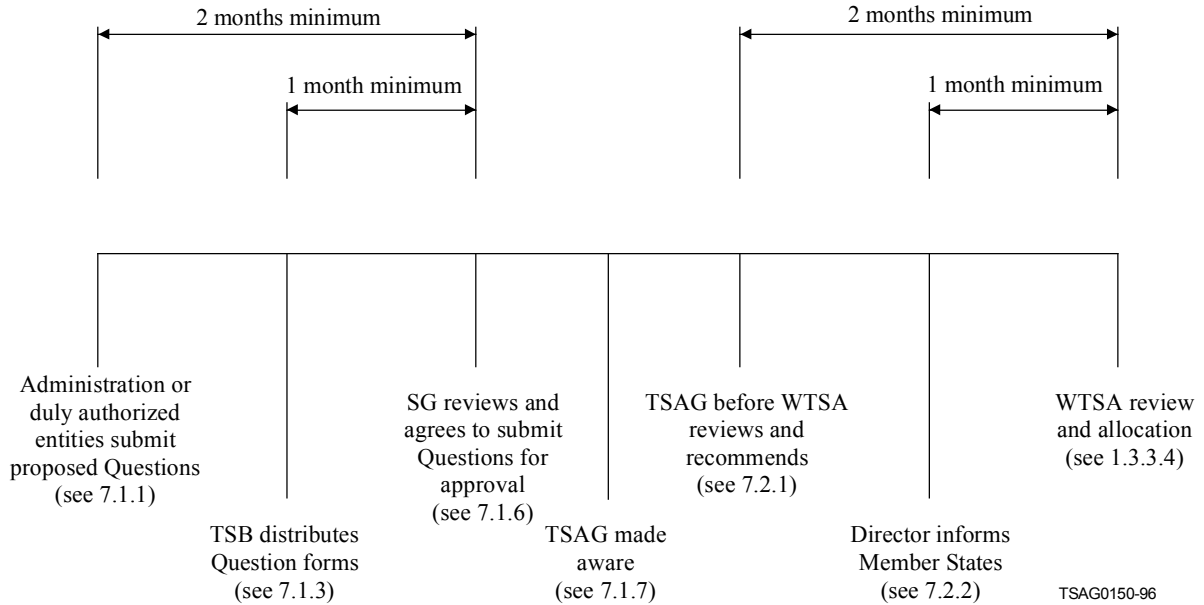
Figure 7.1a – Approval of Questions at WTSA

2 months minimum

1 month min.

Periodic TSAG meetings

SG approves
Questions
(see 7.3.2)

Director notifies
Member States and
Sector Members of
results
(see 7.3.2b))

2 months

Administrations or
duly authorized
entities submit
proposed Questions
(see 7.1.1)

SG reviews and
agrees to submit
Questions for
approval
(see 7.1.6)

Periodic meeting
of TSAG reviews
and recommends
(see 7.3.4)

SG requests
consultation of
Member States
(see 7.3.3)

Member State
replies
submitted
(see 7.3.3b))

TSB distributes
Question forms
(see 7.1.3)

TSAG made
aware
(see 7.1.7)

Director requests
Member State approval
(see 7.3.3a))

Director notifies
Member States and
Sector Members
of results
(see 7.3.3c))

TSAG0160-96

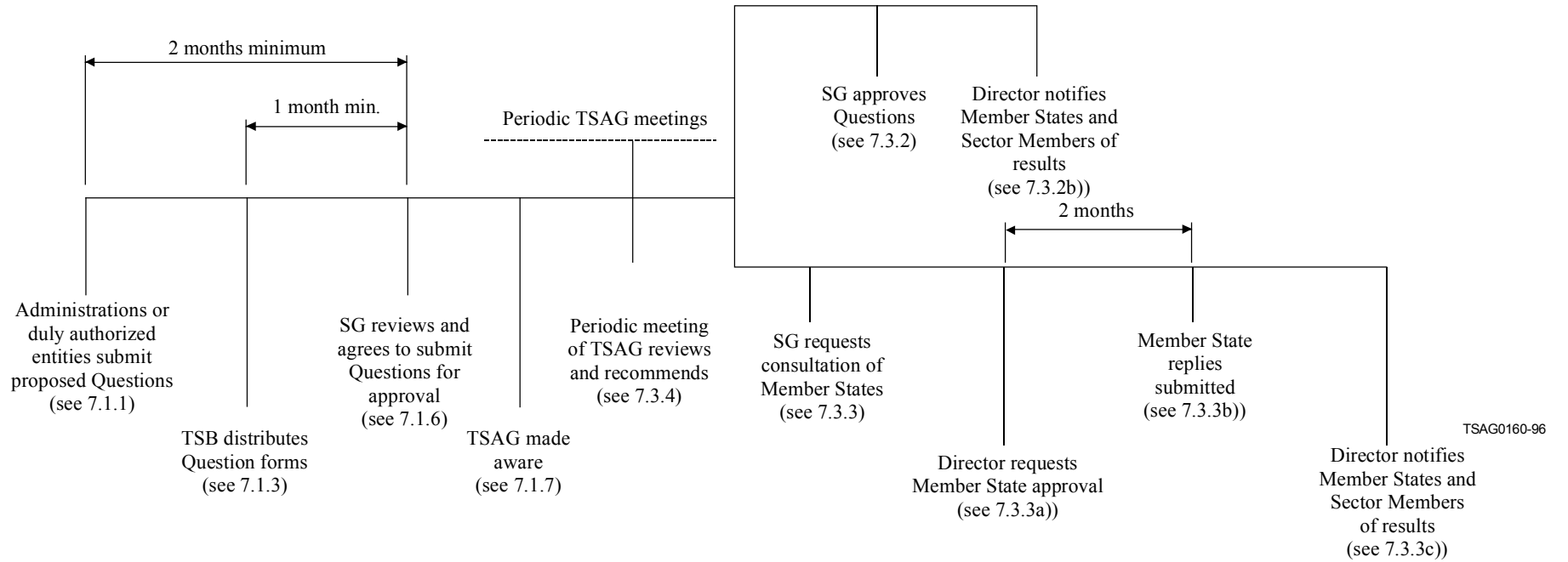**Figure 7.1b – Approval of Questions between WTSAs**

SECTION 8

Selection of Recommendation approval process

8.1   Selection of the approval process

"Selection" refers to the act of choosing the Alternative Approval Process (AAP) or choosing the Traditional Approval Process (TAP) (see Section 9) for the development and approval of new and revised Recommendations.

8.1.1   Selection at a study group meeting

As a general approach, Recommendations in ITU-T Standardization Domain 04 (numbering/addressing) and Domain 11 (tariff/charging/accounting) are assumed to fall under TAP. Likewise, Recommendations not in Domains 04 or 11 are assumed to fall under AAP. However, explicit action at the study group meeting can change the selection from AAP to TAP, and vice versa, if consensus of the Member States and Sector Members present at the meeting so decides.

If consensus is not achieved, the same process used at a WTSA, as described in 1.4 above, shall be used to decide the selection.

8.1.2   Selection at WTSA

As a general approach, Recommendations in ITU-T Standardization Domain 04 (numbering and addressing) and Domain 11 (tariff, charging and accounting) are assumed to fall under TAP. Likewise, Recommendations not in Domains 04 or 11 are assumed to fall under AAP. However, explicit action at WTSA can change the selection from AAP to TAP, and vice versa.

If consensus is not achieved, the process described in 1.4 above shall be used to decide the selection.

8.2   Notification of the selection

When the Director notifies the membership that a Question has been approved, the Director shall also include notification of the proposed selection for the resulting Recommendations. If there are any objections, which must be based on provisions of No. 246D of the ITU Convention, they shall be forwarded to the next study group meeting, in writing, where there can be a reconsideration of the selection (see 8.3 below).

8.3   Reconsideration of the selection

At any time, up to the decision to put a draft new or revised Recommendation into the "Last Call" comment process, the selection can be reconsidered based on provisions of No. 246D. Any request for reconsideration must be in writing to a study group or working party meeting. A proposal from a Member State or Sector Member to change the selection requires to be seconded before it can be addressed by the meeting.

Using the same procedures as described in 8.1.1, the study group will decide if the selection will remain as is, or if it will be changed.

The selection may not be changed once the Last Call has been agreed (ITU-T A.8, clause 3.1), or determination has been agreed (see 9.3.1 below).

SECTION 9

Approval of new and revised Recommendations
using the Traditional Approval Process

9.1 General

9.1.1 Procedures for approval of Recommendations which require formal consultation of Member States are found in this section of Resolution 1. According to No. 246B of the ITU Convention, draft new or revised ITU-T Recommendations are adopted by a study group in accordance with procedures established by WTSA, and Recommendations which do not require formal consultation of Member States for their approval are considered approved. Procedures for such approval of Recommendations are found in ITU-T A.8. In accordance with the Convention, the status of Recommendations approved is the same for both methods of approval.

9.1.2 In the interests of speed and efficiency, approval should normally be sought as soon as the relevant texts are mature, by a formal consultation in which the Director of TSB asks Member States to delegate authority to the competent study group to proceed with the approval process and subsequent agreement at a formal meeting of the study group.

The competent study group may also seek approval at a WTSA.

9.1.3 In accordance with the Convention, the status of Recommendations approved is the same whether approval is at a study group meeting or at a WTSA.

9.2 Process

9.2.1 Study groups should apply the process described below for seeking the approval of all draft new and revised Recommendations as soon as they have been developed to a mature state. See Figure 9.1 for the sequence of events.

NOTE – A Regional Tariff Group shall decide on its own to apply this procedure. The Chairman of Study Group 3 shall be informed of the decision to apply this approval procedure and Study Group 3 at its next Plenary Meeting will examine the draft Recommendation in broad terms. If there is no objection as regards principles and methodology, the procedure shall be initiated. Only the Member States of the Regional Tariff Group will be consulted by the Director of TSB for the approval of the draft Recommendation concerned.

9.2.2 Cases where approval of new or revised Recommendations should be deferred for consideration at a WTSA are:

a) for Recommendations of an administrative nature concerning ITU-T as a whole;

b) where the study group concerned considers it desirable that WTSA itself should debate and resolve particularly difficult or delicate issues;

c) where attempts to gain agreement within the study groups have failed due to non-technical issues such as differing views on policy.

9.3 Prerequisites

9.3.1 Upon request of the study group chairman, the Director of TSB shall explicitly announce the intention to apply the approval procedure set out in this Resolution when convening the meeting of the study group. Such request shall be based upon a determination at a study group or working party meeting, or exceptionally, at a WTSA, that work on a draft Recommendation is sufficiently mature for such action. (At this stage the draft Recommendation is considered to be "determined"). The Director shall include the specific intent of the proposal in summarized form. Reference shall be provided to the report or other documents where the text of the draft new or revised

Recommendation to be considered may be found. This information shall also be distributed to all Member States and Sector Members.

9.3.2   Study groups are encouraged to establish an editing group in each study group to review the texts of new and revised Recommendations for suitability in each of the working languages.

9.3.3   The text of the draft new or revised Recommendation must be available to TSB in a final edited form in at least one of the working languages at the time that the Director makes the announcement of the intended application of the approval procedure set out in this Resolution. A summary that reflects the final edited form of the draft Recommendation must also be provided to TSB in accordance with 9.3.4 below. The invitation to the meeting, together with the summary of the draft new or revised Recommendation, announcing the intended application of this approval procedure, should be sent by the Director of TSB to all Member States and Sector Members so as to be received, in the normal course of delivery, at least three months before the meeting. The invitation and the enclosed summary shall be distributed according to normal procedures, which include the use of the appropriate working languages.

9.3.4   Such a summary shall be prepared in accordance with the author's guide for drafting ITU-T Recommendations. This summary is a brief outline of the purpose and content of the new or revised draft Recommendation and, when appropriate, the intent of the revisions. No Recommendation shall be considered as complete and ready for approval without this summary statement.

9.3.5   The text of the draft new or revised Recommendation must have been distributed in the working languages at least one month prior to the announced meeting.

9.3.6   Approval may only be sought for a draft new or revised Recommendation, within the study group's mandate as defined by the Questions allocated to it, in accordance with Article 14, No. 192 of the Convention. Alternatively, or additionally, approval may be sought for amendment of an existing Recommendation within the study group's responsibility and mandate (see Resolution 2).

9.3.7   Where a draft new or revised Recommendation falls within the mandate of more than one study group, the chairman of the study group proposing the approval should consult and take into account the views of any other study group chairmen concerned before proceeding with the application of this approval procedure.

9.3.8   Any ITU Member State or Sector Member aware of a patent held by itself or others, which may fully or partly cover elements of the draft Recommendation(s) proposed for approval, is requested to disclose such information to TSB, in no case later than the date scheduled for approval of the Recommendation(s) in accordance with ITU-T patent policy (see Appendix III).

The ITU-T "Patent Statement and Licensing Declaration" form (or its variant for ITU-T | ISO/IEC common text) available at the ITU-T website should be used.

9.3.9   ITU-T non-member organizations that hold patent(s) or pending patent application(s), the use of which may be required to implement an ITU-T Recommendation, can submit a "Patent Statement and Licensing Declaration" to TSB using the form (or its variant for ITU-T | ISO/IEC common text) available at the ITU-T website.

9.3.10   In the interests of stability, once a new or revised Recommendation has been approved, approval should not normally be sought within a reasonable period of time for any further amendment of the new text or the revised portion, respectively, unless the proposed amendment complements rather than changes the agreement reached in the previous approval process or a significant error or omission is discovered. As a guideline, in this context "a reasonable period of time" would be at least two years in most cases.

9.3.11   Any Member States considering themselves to be adversely affected by a Recommendation approved in the course of a study period may refer their case to the Director of TSB, who shall submit it to the relevant study group for prompt attention.

9.3.12 The Director of TSB shall inform the next competent Assembly of all cases notified in conformity with 9.3.11 above.

9.4 Consultation

9.4.1 Consultation of the Member States encompasses the time period and procedures beginning with the Director's announcement of the intention to apply the approval procedure (9.3.1) up to seven working days before the beginning of the study group meeting. The Director shall request Member States' opinions within this period on whether they assign authority to the study group that the draft new or revised Recommendations should be considered for approval at the study group meeting.

9.4.2 If TSB has received a statement (or statements) indicating that the use of intellectual property, e.g. the existence of a patent, or a copyright claim, may be required in order to implement a draft Recommendation, the Director of TSB shall indicate this situation in the circular announcing the intention to invoke the Resolution 1 approval process (see Appendix II).

9.4.3 The Director of TSB shall advise the Directors of the other two Bureaux, as well as recognized operating agencies, scientific and industrial organizations and international organizations participating in the work of the study group in question, that Member States are being asked to respond to a consultation on a proposed new or revised Recommendation. Only Member States are entitled to respond (but see 9.5.2 below).

9.4.4 Should any Member States be of the opinion that consideration for approval shall not proceed, they should advise their reasons for disapproving and indicate the possible changes that would facilitate further consideration and approval of the draft new or revised Recommendation.

9.4.5 If 70% or more of the replies from Member States support consideration for approval at the study group meeting (or if there are no replies), the Director of TSB should advise the chairman that consideration of the approval may proceed. (With the authorization given by Member States that the study group may proceed with the approval process, they also recognize that the study group may make the necessary technical and editorial changes in accordance with 9.5.2 below.)

9.4.6 If less than 70% of the replies received by the due date support consideration for approval at the study group meeting, the Director of TSB should advise the chairman that consideration of the approval may not proceed at that meeting. (Nevertheless, the study group should consider the information provided under 9.4.4 above.)

9.4.7 Any comments received along with responses to the consultation shall be collected by TSB and submitted as a temporary document to the next meeting of the study group.

9.5 Procedure at study group meetings

9.5.1 The study group should review the text of the draft new or revised Recommendation as referred to in 9.3.1 and 9.3.3 above. The meeting may then accept any editorial corrections or other amendments not affecting the substance of the Recommendation. The study group should assess the summary statement referred to in 9.3.4 in terms of its completeness and ability to concisely convey the intent of the draft new or revised Recommendation to a telecommunication expert who has not participated in the study group work.

9.5.2 Technical and editorial changes may only be made during the meeting as a consequence of written contributions, of results from the consultation process (see 9.4 above) or of liaison statements. Where proposals for such revisions are found to be justified but to have a major impact on the intent of the Recommendation or to depart from points of principle agreed at the previous study group or working party meeting, consideration of this approval procedure should be deferred to another meeting. However, in justified circumstances the approval procedure may still be applied if the chairman of the study group, in consultation with TSB, considers:

–   that the proposed changes are reasonable (in the context of the advice issued under 9.4 above) for those Member States not represented at the meeting, or not represented adequately under the changed circumstances; and

–   that the proposed text is stable.

9.5.3   After debate at the study group meeting the decision of the delegations to approve the Recommendation under this approval procedure must be unopposed (but see 9.5.4 regarding reservations, 9.5.5 and 9.5.6). See Article 19, No. 239 of the Convention.

9.5.4   In cases where a delegation does not elect to oppose approval of a text, but would like to register a degree of reservation on one or more aspects, this shall be noted in the report of the meeting. Such reservations shall be mentioned in a concise note appended to the text of the Recommendation concerned.

9.5.5   A decision must be reached during the meeting upon the basis of a text available in its final form to all participants at the meeting. Exceptionally, but only during the meeting, a delegation may request more time to consider its position. Unless the Director of TSB is advised of formal opposition from the Member State to which the delegation belongs within a period of four weeks from the end of the meeting, the Director shall proceed in accordance with 9.6.1.

9.5.5.1 A Member State which requested more time to consider its position and which then indicates disapproval within the four-week interval specified in 9.5.5 above is requested to advise its reasons and to indicate the possible changes that would facilitate further consideration and future approval of the draft new or revised Recommendation.

9.5.5.2 If the Director is advised of formal opposition, the study group chairman, after consultation with the parties concerned, may proceed according to 9.3.1 above, without further determination at a subsequent working party or study group meeting.

9.5.6   A delegation may advise at the meeting that it is abstaining from the decision to apply the procedure. This delegation's presence shall then be ignored for the purposes of 9.5.3 above. Such an abstention may subsequently be revoked, but only during the course of the meeting.

9.6   Notification

9.6.1   Within four weeks of the closing date of the study group meeting or, exceptionally, four weeks after the period described in 9.5.5, the Director of TSB shall notify whether the text is approved or not, by circular. The Director of TSB shall arrange that this information is also included in the next available ITU Notification. Within this same time period, the Director shall also ensure that any Recommendation agreed to during the study group decision meeting is available online in at least one working language, with an indication that the Recommendation may not be in its final publication form.

9.6.2   Should minor, purely editorial amendments or correction of evident oversights or inconsistencies in the text as presented for approval be necessary, TSB may correct these with the approval of the chairman of the study group.

9.6.3   The Secretary-General shall publish the approved new or revised Recommendations in the working languages as soon as practicable, indicating, as necessary, a date of entry into effect. However, in accordance with ITU-T A.11, minor amendments may be covered by corrigenda rather than a complete reissue. Also, where appropriate, texts may be grouped to suit market needs.

9.6.4   Text shall be added to the cover sheets of all new and revised Recommendations urging users to consult the appropriate TSB databases. Suggested wording is:

"ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property

Rights, whether asserted by ITU Member States and Sector Members or by others outside of the Recommendation development process."

"As of the date of approval of this Recommendation, ITU had/had not received notice of intellectual property, protected by patents/software copyrights, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate TSB databases."

9.6.5 See also ITU-T A.11 concerning the publication of lists of new and revised Recommendations.

9.7 Correction of defects

When a study group identifies the need for implementors to be made aware of defects (e.g. typographical errors, editorial errors, ambiguities, omissions or inconsistencies and technical errors) in a Recommendation, one mechanism that may be employed is an Implementors' Guide. This Guide is an historical document recording all identified defects and their status of correction, from their identification to final resolution, and would be issued in the study group's COM series of documents. Implementors' Guides shall be approved by the study group and made available to the public.

9.8 Deletion of Recommendations

Study groups may decide in each individual case which of the following alternatives is the most appropriate one.

9.8.1 Deletion of Recommendations by WTSA

Upon the decision of the study group, the chairman shall include in his report to WTSA the request to delete a Recommendation. WTSA may approve this request.

9.8.2 Deletion of Recommendations between WTSAs

9.8.2.1 At a study group meeting it may be agreed to delete a Recommendation, i.e. because it has been superseded by another Recommendation or because it has become obsolete. This agreement must be unopposed. Information about this agreement, including an explanatory summary about the reasons for the deletion, shall be provided by a circular. If no objection to the deletion is received within three months, the deletion will come into force. In the case of objection, the matter will be referred back to the study group.

9.8.2.2 Notification of the result will be given in another circular, and TSAG will be informed by a report from the Director. In addition, the Director shall publish a list of deleted Recommendations whenever appropriate, but at least once by the middle of a study period.
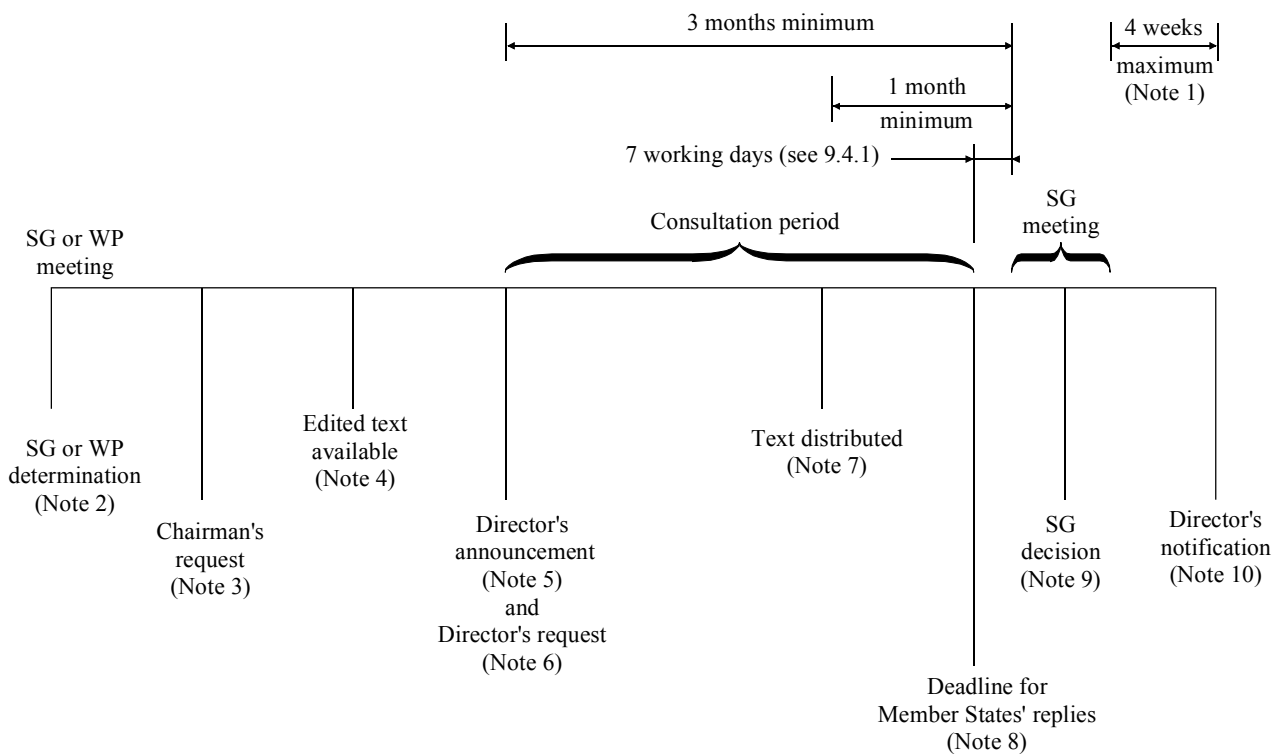
NOTE 1 – Exceptionally, an additional period of up to four weeks would be added if a delegation requested more time under 9.5.5.

NOTE 2 – SG or WP DETERMINATION: The Study Group or Working Party determines that work on a draft Recommendation is sufficiently mature and requests the SG Chairperson to make the request to the Director (9.3.1).

NOTE 3 – CHAIRPERSON'S REQUEST: The SG Chairperson requests that the Director announce the intention to seek approval (9.3.1).

NOTE 4 – EDITED TEXT AVAILABLE: Text of the draft Recommendation, including the required summary, is available to TSB in final edited form in at least one working language (9.3.3).

NOTE 5 – DIRECTOR'S ANNOUNCEMENT: The Director announces the intention to seek approval of the draft Recommendation at the next SG meeting. The invitation to the meeting with the announcement of the intention to apply the approval procedure should be sent to all Member States and Sector Members so as to be received at least three months before the meeting (9.3.1 and 9.3.3).

NOTE 6 – DIRECTOR'S REQUEST: The Director requests Member States to inform the Director whether they approve or do not approve the proposal (9.4.1 and 9.4.2). This request shall contain the summary and reference to the complete final text.

NOTE 7 – TEXT DISTRIBUTED: Text of the draft Recommendation must have been distributed in the available working languages at least one month before the announced meeting (9.3.5).

NOTE 8 – DEADLINE FOR MEMBER STATES' REPLIES: If 70% of replies received during the consultation period indicate approval, the proposal shall be accepted (9.4.1, 9.4.5 and 9.4.7).

NOTE 9 – STUDY GROUP DECISION: After debate, the Study Group reaches unopposed agreement to apply the approval procedure (9.5.3 and 9.5.2). A delegation can register a degree of reservation (9.5.4), can request more time to consider its position (9.5.5) or can abstain from the decision (9.5.6).

NOTE 10 – DIRECTOR'S NOTIFICATION: The Director notifies whether the draft Recommendation is approved or not (9.6.1).

Figure 9.1 – Approval of new and revised Recommendations – Sequence of events

APPENDIX I

(to Resolution 1)

Information for submission of a Question

- Source
- Short title
- Type of Question or proposal[4]
- Reasons or experience motivating the proposed Question or proposal
- Draft text of Question or proposal
- Specific task objective(s) with expected time-frames for completion
- Relationship of this study activity to other:
  - Recommendations
  - Questions
  - Study groups
  - Relevant standardization bodies

APPENDIX II

(to Resolution 1)

Suggested text of the note to be included in the circular

TSB has received a statement(s) indicating that the use of intellectual property, protected by one or more patent(s)/software copyright(s), issued or pending, may be required to implement this draft Recommendation. Available patent information can be accessed at the ITU-T website.

APPENDIX III

(to Resolution 1)

Statement on Telecommunication Standardization Sector (ITU-T) Patent Policy[5]

The following is a "code of practice" regarding intellectual property rights (patents) covering, in varying degrees, the subject matters of ITU-T Recommendations[6]. The rules of the "code of practice" are simple and straightforward. Recommendations are drawn up by telecommunication and not patent experts; thus, they may not necessarily be very familiar with the complex international legal situation of intellectual property rights such as patents, etc.

ITU-T Recommendations are non-binding international standards. Their objective is to ensure compatibility of international telecommunications on a worldwide basis. To meet this objective, which is in the common interests of all those participating in international telecommunications (network and service providers, suppliers and users) it must be ensured that Recommendations, their applications, use, etc. are accessible to everybody. It follows, therefore, that a commercial

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[4] Background Question, task-oriented Question designed to lead to a Recommendation, proposal for a new manual, revised manual, etc.

[5] Consult the ITU-T website for the latest version

[6] Formerly CCITT Recommendations.

(monopolistic) abuse by a holder of a patent embodied fully or partly in a Recommendation must be excluded. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are being left to the parties concerned, as these arrangements might differ from case to case.

This code of practice may be summarized as follows (it should be noted that ISO operates in a very similar way):

1 The Telecommunication Standardization Bureau (TSB) is not in a position to give authoritative or comprehensive information about evidence, validity or scope of patents or similar rights, but it is desirable that the fullest available information should be disclosed. Therefore, any ITU-T member organization putting forward a standardization proposal should, from the outset, draw the attention of the Director of TSB to any known patent or to any known pending patent application, either their own or of other organizations, although TSB is unable to verify the validity of any such information.

2 If an ITU-T Recommendation is developed and such information as referred to in paragraph 1 has been disclosed, three different situations may arise:

2.1 The patent holder waives his rights; hence, the Recommendation is freely accessible to everybody, subject to no particular conditions, no royalties are due, etc.

2.2 The patent holder is not prepared to waive his rights but would be willing to negotiate licences with other parties on a non-discriminatory basis on reasonable terms and conditions. Such negotiations are left to the parties concerned and are performed outside ITU-T.

2.3 The patent holder is not willing to comply with the provisions of either paragraph 2.1 or paragraph 2.2; in such case, no Recommendation can be established.

3 Whatever case applies (2.1, 2.2 or 2.3), the patent holder has to provide a written statement to be filed at TSB using the ITU-T "Patent Statement and Licensing Declaration" form. This statement must not include additional provisions, conditions, or any other exclusion clauses in excess of what is provided for each case in the corresponding boxes of the Patent Statement and Licensing Declaration form.

RESOLUTION 2

Study Group responsibility and mandates

(Helsinki, 1993; Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

that the mandate for each study group needs to be clearly defined in order to avoid duplication of effort between study groups and to ensure the coherence of the overall ITU-T work programme,

decides

1   that the general areas of responsibility of the study groups shall be as defined in Annex A;

2   that the mandate of each study group, which it shall use as the basis for organizing its study programme, shall consist of:

–   a set of Questions related to particular areas of study, which are compatible with the general area of responsibility and which should be results-oriented (refer to Section 7 of Resolution 1);

–   a general area of responsibility (see Annex A) within which the study group may amend existing Recommendations, in collaboration with other groups, as appropriate.

ANNEX A

(to Resolution 2)

PART 1   –   GENERAL AREAS OF STUDY

Study Group 2

Operational aspects of service provision, networks and performance

Responsible for studies relating to:

•   principles of service provision, definition and operational requirements of service emulation;

•   numbering, naming, addressing requirements and resource assignment including criteria and procedures for reservation and assignment;

•   routing and interworking requirements;

•   human factors;

•   operational aspects of networks and associated performance requirements including network traffic management, quality of service (traffic engineering, operational performance and service measurements);

•   operational aspects of interworking between traditional telecommunication networks and evolving networks;

•   evaluation of feedback from operators, manufacturing companies and users on different aspects of network operation.

Study Group 3

Tariff and accounting principles including related telecommunication economic and policy issues

Responsible for studies relating to tariff and accounting principles for international telecommunication services and study of related telecommunication economic and policy issues. To this end, Study Group 3 shall in particular foster collaboration among its Members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis.

Study Group 4

Telecommunication management, including TMN

Responsible for studies regarding the management of telecommunication services, networks, and equipment using the telecommunication management network (TMN) framework. Additionally responsible for other telecommunication management studies relating to designations, transport-related operations procedures, and test and measurement techniques and instrumentation.

Study Group 5

Protection against electromagnetic environment effects

Responsible for studies relating to protection of telecommunication networks and equipment from interference and lightning.

Also responsible for studies related to electromagnetic compatibility (EMC), to safety and to health effects connected with electromagnetic fields produced by telecommunication installations and devices, including cellular phones.

Study Group 6

Outside plant

Responsible for studies relating to outside plant such as the construction, installation, jointing, terminating, protection from corrosion and others forms of damage from environment impact, except electromagnetic processes, of all types of cable for public telecommunications and associated structures.

Study Group 7

Data networks and open system communications

Responsible for studies relating to data communication networks, and for studies relating to the application of open system communications including networking, directory and security.

Study Group 9

Integrated broadband cable networks and television and sound transmission

Responsible for studies relating to:

- Use of cable and hybrid networks, primarily designed for television and sound programme delivery to the home, as integrated broadband networks to also carry voice or other time critical services, video on demand, interactive services, etc.
- Use of telecommunication systems for contribution, primary distribution and secondary distribution of television, sound programmes and similar data services.

Study Group 10

Languages and general software aspects for telecommunication systems

Responsible for technical languages, the methods for their usage and other issues related to the software aspects of telecommunication systems.

Study Group 11

Signalling requirements and protocols

Responsible for studies relating to signalling requirements and protocols for Internet Protocol (IP) related functions, some mobility related functions, multimedia functions and enhancements to existing Recommendations on access and internetwork signalling protocols of ATM, N-ISDN and PSTN.

Study Group 12

End-to-end transmission performance of networks and terminals

Responsible for guidance on the end-to-end transmission performance of networks, terminals and their interactions, in relation to the perceived quality and acceptance by users of text, speech, and image applications. This work includes the related transmission implications of all networks (e.g., those based on PDH, SDH, ATM and IP) and all telecommunications terminals (e.g., handset, hands-free, headset, mobile, audiovisual, and interactive voice response).

Study Group 13

Multi-protocol and IP-based networks and their internetworking

Responsible for studies relating to internetworking of heterogeneous networks encompassing multiple domains, multiple protocols and innovative technologies with a goal to deliver high-quality, reliable networking. Specific aspects are architecture, interworking and adaptation, end-to-end considerations, routing and requirements for transport.

Study Group 15

Optical and other transport networks

Study Group 15 is the focal point in ITU-T for studies on optical and other transport networks, systems and equipment. This encompasses the development of transmission layer related standards for the access, metropolitan and long haul sections of communication networks.

Study Group 16

Multimedia services, systems and terminals

Responsible for studies relating to multimedia service definition and multimedia systems, including the associated terminals, modems, protocols and signal processing.

Special Study Group on IMT-2000 and beyond

IMT-2000 and beyond

Responsible for studies relating to network aspects of International Mobile Telecommunications 2000 (IMT-2000) and beyond, including wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT-2000.

PART 2   –   LEAD STUDY GROUPS IN SPECIFIC AREAS OF STUDY

SG 2   Lead Study Group for service definition, numbering and routing

SG 4   Lead Study Group on TMN

SG 7   Lead Study Group on frame relay and for communication system security

SG 9   Lead Study Group on integrated broadband cable and television networks

SG 10   Lead Study Group on languages and description techniques

SG 11   Lead Study Group on intelligent networks

SG 12   Lead Study Group on Quality of Service and performance

SG 13   Lead Study Group for IP related matters, B-ISDN, Global Information Infrastructure and satellite matters

SG 15   Lead Study Group on access network transport
Lead Study Group and on optical technology

SG 16   Lead Study Group on multimedia services, systems and terminals
Lead Study Group on e-business and e-commerce

SSG IMT Lead Study Group on IMT-2000 and beyond and for mobility

ANNEX B

(to Resolution 2)

**Points of guidance to Study Groups for the development
of the post-2000 work programme**

B.1   This annex provides points of guidance to study groups for the development of the post-2000 study questions in accordance with the proposed structure and general areas of responsibility. The points of guidance are intended to clarify, where appropriate, interaction between study groups in certain areas of common responsibility and are not intended to provide a comprehensive list of such responsibilities.

B.2   This annex will be reviewed by TSAG as necessary to facilitate interaction between study groups, to minimize duplication of effort and to harmonize the overall ITU-T work programme.

Study Group 2

Study Group 2 is the Lead Study Group for service definition (including all types of mobile services) and for numbering and routing. Study Group 2 has a responsibility for creating principles of service and operational requirements including billing and operational quality of service/network performance. Service principles and operational requirements must be developed for current and evolving technologies.

Study Group 2 shall define and describe services from a user's point of view to facilitate global interconnection and interoperation and also ensure compatibility with the International Telecommunication Regulations and related intergovernmental agreements. It should also recommend QoS for each service and interact with other Study Groups (e.g. SG 13) in this respect as required.

Study Group 2 should continue to study service policy aspects including those that may arise in the operation and provision of transborder, global and/or regional services taking due account of national sovereignty.

Study Group 2 is responsible for studying, developing and recommending general principles of numbering and routing for all types of network.

The Chairman of Study Group 2 (or, if needed the chairman's delegated representative) should provide technical advice to the Director of the TSB concerning general principles for numbering and routing and the effect on allocation of international codes.

Study Group 2 should provide the Director of the TSB with advice on technical, functional and operational aspects in the assignment, reassignment and/or reclamation of international numbering and addressing resources in accordance with the relevant E- and F-series Recommendations taking into account the results of any ongoing studies.

Study Group 2 should recommend traffic engineering planning and dimensioning guidance for the implementation and operation of all types of networks and network elements.

Study Group 2 should recommend measures to be taken to assure operational performance of all networks (including network management) in order to meet the in-service network performance and QoS.

Study Group 2 identifies service and operational requirements, which need the support of network capabilities.

Study Group 3

All Study Groups shall notify Study Group 3 at the earliest opportunity of any development which may have an impact on tariff and accounting principles including the related telecommunication economic and policy issues.

Study Group 4

As Lead Study Group for TMN, Study Group 4 has the responsibility of ensuring consistent application of TMN principles by all study groups in their development of TMN-related specifications. This may require that Study Group 4 develop guidelines for developing TMN specifications and/or review the structure and content of new and existing TMN Recommendations.

The TMN studies will emphasize its role as a telecommunication management framework supporting multiple management paradigms and include:

•   the evolution of TMN concepts and technologies to support a mixed circuit-switched and packet/IP-switched network environment;

- the specification of reusable TMN information definitions via protocol-neutral techniques;

- the continuation of TMN information modelling for the major telecommunication technologies, such as SDH, ATM, optical networking, switching, IMT-2000, and IP;

- the extension of TMN management technology choices consistent with market needs, industry-recognized value, and major, emerging technical directions.

Additional studies will also cover:

- designations for interconnections among network operators;

- transport network and service operations procedures for configuration, performance and fault management; and

- test and measurement techniques and instrumentation.

Study Group 6

Responsible for studies involving all physical aspects of outside plant covering construction and installation including internal cabling for termination purposes but excluding optical and digital system design. Cooperates with Study Group 15.

Study Group 7

Responsible for studies concerning data communications, data networks and open system communications.

Study Group 7 is to take the primary role for developing Recommendations in the following areas:
- packet and frame relay, including interworking cases for data communications;
- directory services and systems (F.500- and X.500-series);
- security, including frameworks, mechanisms and protocols (X.800-series);
- abstract syntax notation one (ASN.1) (X.680/X.690-series);

and for ongoing maintenance of Recommendations in the following areas:
- open systems interconnection (OSI) (X.200-, X.600-series, etc.);
- open distributed processing (ODP) (X.900-series).

In addition, Study Group 7 is the Lead Study Group for:
- frame relay;
- communication systems security.

With regard to GII and multimedia, Study Group 7 is responsible for detailed services and protocols in all of the above-listed areas and from the viewpoint of data communications. Direction on what studies need to be undertaken in support of GII and multimedia will come from Study Group 13 and Study Group 16, respectively.

With regard to numbering, routing and network performance:
- Numbering, routing: Study Group 2 is responsible for general principles for numbering and routing applicable to all networks. Study Group 7 is responsible for detailed work on numbering and routing for public data networks, including ITU-T X.110-X.125 and X.353. Ongoing work is to take into account Recommendations on general principles established by Study Group 2.
- Network performance: Study Group 2 is responsible for general principles applicable to all networks. Study Group 7 is responsible for detailed work applicable to data networks, including ITU-T X.130-X.146.

Study Group 9

Within its general area of responsibility, develop and maintain Recommendations on:

- the use of IP, ATM or other appropriate protocols to provide time-critical services, services on demand, or interactive services over cable or hybrid networks, in cooperation with other study groups when necessary;
- procedures for operation of television and sound-programme networks;
- television, and sound-programme systems for contribution and distribution networks;
- transmission systems for television, sound-programmes, and interactive services including internet applications on networks intended primarily for television; and
- the delivery of broadband audio/visual services over home networks.

Study Group 9 is responsible for coordination with ITU-R on broadcasting matters.

Study Group 10

Studies on modelling, specification and description techniques and on other software aspects of telecommunication systems will be developed in line with the requirements of and in cooperation with the relevant study groups such as SG 4, SG 7, SG 11, SG 13 and SG 16.

Work will be synchronized with developments carried out by other internationally accredited standardization bodies, such as ETSI, ISO and IEC. Wherever useful work done in forums and consortia, such as OMG, TMF, SDL Forum Society etc., will also be considered in order to get the maximum synergy and to minimize the efforts in the development of new Recommendations.

The work will concentrate on aspects for which the industry deems it useful to apply ITU-T Recommendations in order to enhance the use of software technology with associated processes and in order to stimulate the market place for such technology.

Study Group 11

There are four groups of questions to be studied by Study Group 11 in the years 2001-2004.

Group 1: Interworking with the Internet and other IP-related studies

Particular attention is drawn to the study on bearer independent call control (BICC) which defines a new protocol to establish a call (e.g. a voice call) to be established on any bearer (e.g. IP connection, becoming a voice over IP call).

Group 2: Signalling between software modules across the application programming interface (API) and the object interface.

The objective is to provide a set of signalling protocols between two application software modules which is applicable to any specific signalling message transport mechanism, such as SS No. 7, TCP/IP, etc.

Group 3: Enhancements to existing Recommendations on access and internetwork signalling protocols of ATM, N-ISDN and PSTN, i.e. SS No. 7, DSS1 and DSS2, etc.

The objective is to satisfy business needs of member organizations who wish to offer new features and services on top of networks based on existing Recommendations.

Group 4: Studies on Virtual Home Environment (VHE) in the fixed network.

Study Group 12

Within its general area of study, a particular focus of Study Group 12 is the end-to-end transmission quality delivered using a path that, with increasing frequency, involves new interactions between terminal types and network technologies (e.g., mobile terminals and networks with IP segments).

As the Lead Study Group on QoS and Performance, Study Group 12 develops roadmaps for ITU-T activities in these areas.

Study Group 13

The mission of Study Group 13 is:

To provide a focal point in ITU for technology-independent network architecture and long-term evolution studies, including IP-network studies, through development of the necessary frameworks and architectures, coordination with the various related studies in the other ITU study groups and collaboration with other standards bodies.

To help ITU-T continue to respond to the changes to studies and priorities necessary to integrate traditional telecommunication networks with IP-based networks in order to provide full integration of services and applications to end users. Also, to give network providers the tools and information to support the market-driven changes to the telecommunication industry.

To conduct IP-related studies focusing on network architecture, network capabilities, network evolution, service and performance aspects, and access arrangements to achieve interoperability in the multi-vendor and multi-network-operator environments. These studies will be performed in cooperation with other study groups and other standards bodies. Particular areas of study key to this evolution are IP-based network architectures, IP-based network performance, IP transfer capabilities, IP-VPN (virtual private network) services, IP-based network resource management and access arrangements.

To conduct the remaining studies in the area of B-ISDN resource management, performance and the ATM Layer and its adaptation and interworking.

To encourage harmonization of IP-related and GII studies across the ITU-T study groups through the evolution and further development of the ITU-T IP and GII projects.

To collaborate with other standardization bodies in identifying gaps in the standardization programmes concerning IP networking and to develop proposals and Recommendations to advance the necessary work.

Study Group 15

Study Group 15 is the focal point in ITU-T for studies on optical and other transport networks, systems and equipment. This encompasses the development of transmission layer related standards for the access, metropolitan and long haul sections of communication networks.

Particular emphasis is given to global standards providing for a high-capacity (Terabit) optical transport network (OTN) infrastructure, and for high-speed (multi-Megabit) network access. This also includes related work on modelling for network management, technology-specific transport network architectures and layer interworking. Special consideration is being given to the changing telecommunication environment towards IP-type networks.

Topics covered include routing, switching, interfaces, multiplexers, cross-connect, add/drop multiplexers, amplifiers, repeaters, regenerators, network protection switching and restoration, gateway equipment, and network signal processing. Many of these topics are addressed for various transport technologies, such as metallic and optical fibre cables, wavelength division multiplexing (WDM), optical transport network (OTN), synchronous digital hierarchy (SDH), asynchronous

transfer mode (ATM), and plesiochronous digital hierarchy (PDH). In its work, Study Group 15 will take into account related activities in other ITU study groups, standards organizations, forums and consortia, and collaborate with them to avoid duplication of effort and identify any gaps in the development of global standards.

Study Group 16

Responsible for studies relating to multimedia service definition and multimedia systems, including the associated terminals (including facsimile terminals), modems, protocols and signal processing.

Study Group 16 shall work on the following items:

- definition of a framework and roadmaps for the harmonized and coordinated development of multimedia communication standardization to provide guidance across all ITU-T and ITU-R study groups, and in close cooperation with other regional and international SDOs and industry forums; these studies will include mobility, IP and interactive broadcasting aspects, close co-operation between ITU-T and ITU-R is encouraged at all levels;

- development and maintenance of a database of existing and planned multimedia standards;

- definition of multimedia architectures;

- operation of multimedia systems and services, including interoperability;

- protocols for multimedia systems and services including facsimile communication;

- media coding and signal processing;

- multimedia terminals including facsimile terminals;

- QoS and end-to-end performance in multimedia systems;

- security of multimedia systems and services;

- accessibility to multimedia systems and services;

- e-commerce and e-business.

Special Study Group on IMT-2000 and beyond

This group has the primary responsibility within ITU-T for overall network aspects of IMT-2000 and beyond. This group is responsible for:

- Developing a work plan for ITU-T activities on IMT-2000 systems and beyond, to ensure that this work is progressed effectively and efficiently with organizations external to ITU and internally with ITU-R and ITU-D, as appropriate.

- Providing a migration path regarding network aspects and mobility from existing IMT-2000 systems towards systems beyond IMT-2000.

- Enhancing an overview road map (Supplement to ITU-T Q.1701) on network aspects and mobility of existing IMT-2000 systems specified by ITU-T and external organizations (e.g., Standards Development Organizations (SDOs), Partnership Projects (PPs), IETF, and relevant external forums, etc.)

- Providing interworking functions as needed and if not provided by other organizations, to allow for global mobility between existing IMT-2000 systems specified by external organizations.

The second point above includes the development of a long term common IP-based network architecture as applicable to IMT-2000. The fourth point above, considering the ongoing evolutionary directions of network infrastructure, includes near term IP-based internetworking.

In addition, this Special Study Group will study:

- Harmonization of different IMT-2000 Family member standards as they evolve beyond IMT-2000 as much as possible in cooperation with relevant bodies.

- Evolution of network aspects of IMT-2000 from the existing fixed network by utilizing the IMT-2000 radio transmission technologies as fixed wireless access.

- Network aspects of the convergence of fixed and wireless networks and ultimately migration to interoperable and harmonized network architectures to provide services transparently to users across different access arrangements.

- Assessment of the need for, and standardization of, IMT-2000 interfaces to provide multi-vendor advantages for operators, if not provided by external organizations.

In order to assist developing countries in the application of IMT-2000 and related wireless technologies, consultations should be held with representatives of ITU-D with a view to identifying how this might best be done through an appropriate activity conducted in conjunction with ITU-D.

This Special Study Group shall be able to develop and approve Recommendations in the same manner as other study groups. In order to enhance its ability to respond to the rapid evolution of the needs of the marketplace, this Special Study Group may make use of Provisional Working Procedures (see ITU-T A.9). In the course of applying these Provisional Working Procedures, this Special Study Group shall:

- investigate and recommend to TSAG modifications to the Provisional Working Procedures assigned to this Special Study Group.

The term "mobility" includes terminal and personal mobility (ITU-T I.114). Terminal mobility is the ability of a terminal to access telecommunication services from different locations and while in motion, and the capability of the network to identify and locate that terminal. Personal mobility is the ability of a user to access telecommunication services at any terminal on the basis of a personal identifier, and the capability of the network to provide those services according to the user's service profile.

This Special Study Group is the lead group for "IMT-2000 and Beyond" and for mobility within ITU-T, and collaborates with ITU-R Working Party 8F on the radio aspects of the terrestrial elements, and with ITU-R Working Party 8D for satellite elements.

The Special Study Group shall liaise with ITU-R and ITU-D on standardization activities of IMT-2000.

The Special Study Group shall maintain strong cooperative relations with external SDOs and 3GPPs and develop a complementary program. The group shall proactively promote communications with external organizations to allow for normative referencing in ITU-T Recommendations of mobile network specifications developed by those organizations.

ANNEX C

(to Resolution 2)

**List of Recommendations under the responsibility of the respective
Study groups in the post-2000 study period**

Study Group 2

E-series, with the exception of those in conjunction with Study Group 7

F-series, with the exception of those under the responsibility of study groups 7 and 16

Recommendation of the I.220-, I.230-, I.240- and I.250-series

Maintenance of the S-series

Study Group 3

D-series

Study Group 4

G.850-series

M-series

O-series

Q.513, Q.800-849 Recommendations, Q.940-series, Q.1831

X.160-, X.170-, X.700-series

Study Group 5

K-series

Study Group 6

L-series

Study Group 7

E.104, E.115 (in conjunction with SG 2)

F.400- and F.600-series; F.500-F.549

Q.933 and Q.933 *bis*

X-series, with the exception of those under the responsibility of study groups 4, 15 and 16

Recommendations of the Y-series having in the X-series a double number that falls under study group 7 responsibility

Study Group 9

J-series

N-series

P.900-series

Study Group 10

Z-series

Study Group 11

Q-series, with the exception of Q.1700-series and those under the responsibility of study groups 4, 7 and 15

Maintenance of the U-series

Study Group 12

G.100-series, except G.160-, G.180- and G.190-series

P-series, except P.900-series

Study Group 13

I-series, with the exception of I.220-, I.230-, I.240- and I.250-series (see Study Group 2) I.326 (see Study Group 15), I.430-series, I.414 and I.700-series (see Study Group 15) and those having double numbering in other series

G.801, G.802, G.805, G.810-series, G.820-series, G.830-series, G.860-series, G.960-series except G.964 and G.965

Y-series except those under the responsibility of study groups 7 and 15

Study Group 15

G-series, with the exception of those under the responsibility of Study Groups 4, 12, 13 and 16

I.326, I.430 Series, I.414 and I.700-series

Q.500-series except Q.513 (see SG4)

Maintenance of the R-series

V.38

X.50 series

Recommendations of the Y-series having in the G-series a double number that falls under study group 15 responsibility

Study Group 16

F.700 Series

G.190-series, G.500-series, G.711, G.720-series and G.760-series

H-series

T-series

V-series with the exception of those under the responsibility of Study Group 15

X.26 (V.10) and X.27 (V.11)

Special Study Group IMT

Q.1700-series

TSAG

A-series Recommendations

RESOLUTION 7

Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC)

(Malaga-Torremolinos, 1984; Helsinki, 1993; Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   the purposes of the Union set forth in Article 1 of the Constitution of the International Telecommunication Union relating to the harmonization of telecommunication facilities;

b)   the duties of the ITU Telecommunication Standardization Sector (ITU-T) (Chapter III of the Constitution of the International Telecommunication Union);

c)   the common interest of ISO and IEC on one hand and ITU-T on the other hand in the development of standards, on telecommunication and information technologies, on cables, wires, optical fibres and on protection measures, which take full account of the needs of manufacturers, users and those responsible for communication systems;

d)   the need for mutual agreements on other areas of standardization activity of common interest,

noting

a)   that the working methods and timing constraints of the organizations concerned are not the same;

b)   the increasing demands on financial and specialized professional experts in both telecommunication technology and operations as well as computer science and terminal manufacturing and testing;

c)   the progress made on the basis of existing procedures in the alignment of technical Recommendations with ISO, IEC and ISO/IEC Joint Technical Committee 1 (JTC 1) in areas of joint interest, thanks to the excellent spirit of cooperation which has prevailed;

d)   the principles of collaboration established between ISO and IEC and particularly with ISO/IEC JTC 1 on information technology as contained in ITU-T A.23 and in the ISO/IEC JTC 1 Directives;

e)   that other standardization activities of a collaborative nature may require coordination;

f)   the increasing cost of developing international standards,

resolves

1   to invite ISO and IEC to examine the ITU-T study programme in the early stages of its studies and vice versa, and to further examine such programmes to take into account ongoing changes, in order to identify subjects where coordination seems desirable, and to so advise the Director of TSB;

2   to request the Director of TSB, after consultation with the study group chairmen concerned, to reply, and to furnish any additional information as it becomes available;

3   to request the Director of TSB and the Telecommunication Standardization Advisory Group (TSAG) to consider and propose further improvements to the procedures for cooperation between the Telecommunication Standardization Sector, and ISO and IEC;

4	that the necessary contacts with ISO and/or IEC should be at the appropriate levels and coordination methods should be mutually agreed and regular coordination events arranged:

•	for work where text should be drawn up mutually and kept aligned, procedures in accordance with ITU-T A.23 and the Guidelines for Cooperation therein apply;

•	for other activities where coordination between ITU-T and ISO and IEC is required (for example in relation to any mutual agreements, such as the Memorandum of Understanding on standardization in the field of electronic business), clear means of coordination shall be established and regular coordination contacts made;

5	to request the chairmen of study groups to take into account the related work programmes and the progress of projects in ISO, IEC and ISO/IEC JTC 1; further, to cooperate with these organizations as widely as possible and by appropriate means, in order to:

•	ensure that the specifications which have been jointly drawn up remain aligned;

•	collaborate in drawing up other specifications in fields of joint interest;

6	that, for reasons of economy, any necessary collaborative meetings take place as far as possible in association with other meetings;

7	that the report concerning such coordination indicate the status of alignment and compatibility of draft texts on points of common concern, in particular identifying any subject which could be dealt within a single organization, and cases where cross-referencing would be helpful to users of published International Standards and Recommendations;

8	that Administrations can contribute significantly to the coordination between ITU-T on one hand and ISO and IEC on the other by ensuring adequate coordination of national activities associated with the three organizations.

RESOLUTION 11

Collaboration with the Postal Operations Council (POC) of the Universal Postal Union (UPU) in the study of services concerning both the postal and the telecommunication sectors

(Malaga-Torremolinos, 1984; Helsinki, 1993; Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

recalling

a)   Resolution 42 of the ITU Plenipotentiary Conference (Nairobi, 1982) on the Electronic Mail/Message Service;

b)   Resolution 911 of the 39th session of the ITU Administrative Council on relations between the CCITT and the Consultative Council for Postal Studies (CCPS);

c)   Resolution CCEP 1/1983 of the CCPS of the UPU on relations between the CCITT and the CCPS,

considering

d)   that postal and telecommunication Administrations and the relevant ROAs and service providers need to keep themselves informed of technical progress liable to improve or to harmonize existing services and that it is useful for them to examine jointly the implications of any new Recommendations or modifications to current Recommendations made in this connection;

e)   that the VIth CCITT Plenary Assembly resolved to create a "CCPS/CCITT Contact Committee" to consider questions of joint interest to both organs in order:

–   to identify complementary activities to assist both organs in coordinating time-scales of results;

–   to identify overlapping activities to minimize duplication of work;

f)   that this Committee has fulfilled its purpose well, providing a sound basis for ongoing fruitful collaboration at the working level between the POC (the successor to the CCPS in 1995) and ITU-T (the successor to the CCITT in 1993),

resolves

1   that the relevant ITU-T Study Groups should continue to collaborate with the POC committees as necessary, on a reciprocal basis and with a minimum of formality;

2   that, for the ITU-T, Study Group 2 continue to act as the main point of contact for POC/ITU-T collaborative studies;

3   that the Director of the TSB should encourage and assist this collaboration between the two organs.

RESOLUTION 17

Telecommunication standardization in relation to the interests of developing countries

(Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

the broad range of studies performed by the Telecommunication Standardization Sector in developing technical, operational and tariff Recommendations,

noting

the multifarious difficulties encountered by the developing countries, in particular African countries and least developed countries (LDCs), in ensuring their effective and efficient participation in the work of ITU-T,

recognizing

that the harmonious and balanced development of the worldwide telecommunication network is of mutual advantage to the developed and the developing countries, and the need to identify a mechanism for developing countries to participate in and contribute to the work of the ITU-T study groups,

recalling

that one of the purposes of the Union is to promote international cooperation through the harmoniously integrated development of the worldwide telecommunication network for the benefit of mankind as a whole,

taking account of

Nos. 190 and 196 of the Convention, Resolution 25 (Rev. Minneapolis, 1998) and § 41 of Annex 1 to Resolution 71 (Minneapolis, 1998),

resolves

1   to request the Director of TSB to cooperate with the ITU regional offices, including the possibility of holding ITU-T meetings in the regions;

2   to request the Director of TSB to strengthen cooperation and coordination with the relevant regional organizations;

3   pending approval by the Council, to provide Administrations of developing countries and those of LDCs with free electronic access to the Recommendations and publications posted on the ITU-T website,

instructs the Director of TSB

to provide BDT with all the necessary support with a view to:

•   encouraging and increasing the participation of the developing countries in telecommunication standardization activities;

•   assisting and advising in the organization and holding of information meetings concerning the work of the ITU-T study groups;

•   assisting developing countries with studies in respect of priority questions, such as VoIP, mobile technology, multimedia, etc.;

• encourage the establishment and operation of groups regarding the above questions,

further instructs the study groups

1   to take appropriate steps to have studies carried out on questions connected with standardization which are identified by the world telecommunication development conferences;

2   to take account of the specific characteristics of the telecommunication environment of the developing countries in the process of establishing standards in the fields of planning, services, systems, operation, tariffs and maintenance.

RESOLUTION 18

Principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors

(Helsinki, 1993; Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   the responsibilities of the Radiocommunication Sector (ITU-R) and the Telecommunication Standardization Sector (ITU-T) according to the principles laid down in the ITU Constitution and Convention, i.e.:

•   that the ITU-R study groups are charged (Nos. 151 to 154 of the Convention) to focus on the following in the study of Questions assigned to them:

   i)   use of the radio-frequency spectrum in terrestrial and space radiocommunication (and of the geostationary-satellite orbit);

   ii) characteristics and performance of radio systems;

   iii) operation of radio stations;

   iv) radiocommunication aspects of distress and safety matters;

•   that the ITU-T study groups are charged (No. 193 of the Convention) to study technical, operating and tariff questions and prepare recommendations on them with a view to standardizing telecommunications on a worldwide basis, including recommendations on interconnection of radio systems in public telecommunication networks and on the performance required for these interconnections;

b)   that joint meetings of the Radiocommunication (RAG) and Telecommunication Standardization (TSAG) Advisory Groups shall review the distribution of new and existing work between the Sectors, subject to confirmation by the applicable procedures of each Sector, the objective being to:

•   minimize the duplication of activities of the Sectors;

•   group the standardization activities in order to foster cooperation and coordination of the work of ITU-T with regional standardization bodies,

resolves

1   that TSAG and RAG, meeting jointly as necessary, shall continue the review of new and existing work and its distribution between ITU-T and ITU-R, for approval in accordance with the procedures laid down for the approval of new and/or revised Questions;

2   that, if considerable responsibilities in both Sectors in a particular subject are identified:

a)   the procedure as given in Annex A should be applied; or

b)   a joint group should be established; or

c)   the matter should be studied by relevant study groups of both Sectors with appropriate coordination (see Annex B).

ANNEX A

(to Resolution 18)

Procedural method of cooperation

With respect to *resolves* 2 a), the following procedure should be applied:

a)   The joint meeting, as indicated in *resolves* 1, will nominate the Sector which will lead the work and will finally approve the deliverable.

b)   The lead Sector will request the other Sector to indicate those requirements which it considers essential for integration in the deliverable.

c)   The lead Sector will base its work on these essential requirements and integrate them in its draft deliverable.

d)   During the process of development of the required deliverable the lead Sector shall consult with the other Sector in case it has difficulties with these essential requirements. In case of agreement on revised essential requirements the revised requirements shall be the basis for further work.

e)   When the deliverable concerned comes to maturity, the lead Sector shall once more seek the views of the other Sector.

ANNEX B

(to Resolution 18)

Coordination of radiocommunication and standardization activities through Intersector Coordination Groups

With respect to *resolves* 2 c), the following procedure shall be applied:

a)   The joint meeting of the Advisory Groups as indicated in *resolves* 1, may, in exceptional cases, establish an Intersector Coordination Group (ICG) to coordinate the work of both Sectors and to assist the Advisory Groups in coordinating the related activity of their respective study groups.

b)   The joint meeting shall, at the same time, nominate the Sector which will lead the work.

c)   The mandate of each ICG shall be clearly defined by the joint meeting, based on the particular circumstances and issues at the time the group is established; the joint meeting shall also establish a target date for termination of the ICG.

d)   The ICG shall designate a chairman and a vice-chairman, one representing each Sector.

e)   The ICG shall be open to members of both Sectors in accordance with Nos. 86 and 110 of the Constitution.

f)   The ICG shall not develop Recommendations.

g)   The ICG shall prepare reports on its coordinating activities to be presented to each Sector's Advisory Group; these reports shall be submitted by the Directors to the two Sectors.

h)   An ICG may also be established by the World Telecommunication Standardization Assembly or by the Radiocommunication Assembly following a recommendation by the Advisory Group of the other Sector.

i)   The cost of an ICG shall be supported by the two Sectors on an equal basis and each Director shall include in the budget of their Sector, budgetary provisions for such meetings.

RESOLUTION 20

Procedures for allocation and management of international numbering resources

(*Helsinki, 1993; Geneva, 1996; Montreal, 2000*)

The World Telecommunication Standardization Assembly (Montreal, 2000),

noting

a) that the procedures governing the allocation and management of international numbering and addressing resources and related codes (e.g. new telephone ISDN country codes, telex destination codes, signalling area/network codes, data country codes) are laid down in the relevant E-, F-, Q- and X-Series ITU-T Recommendations;

b) that the principles concerning future numbering and addressing plans to deal with emerging services and relevant number allocation procedures to meet international telecommunication needs will be studied in accordance with the ongoing work programme approved by this Conference for ITU-T Study Groups;

c) Articles 14 and 15 of the Convention concerning the activities of ITU-T Study Groups and the responsibilities of the Director of the TSB, respectively,

considering

that the assignment of international numbering and addressing resources is a responsibility of the Director of the TSB and the relevant Administrations,

instructs

1 the Director of the TSB before assigning, reassigning and/or reclaiming international numbering and addressing resources, to consult:

i) the Chairman of the relevant Study Group or if needed the Chairman's delegated representative; and

ii) the relevant Administration(s); and/or

iii) the applicant/assignee when direct communication with the TSB is required in order to perform its responsibilities.

In the Director's deliberations and consultation the Director will consider the general principles for numbering and addressing resource allocation, and the provisions of the relevant E-, F-, Q- and X-Series of ITU-T Recommendations.

2 the relevant Study Groups to provide the Director of the TSB with advice on technical, functional and operational aspects in the assignment, reassignment and/or reclamation of international numbering and addressing resources in accordance with the relevant Recommendations, taking into account the results of any ongoing studies.

RESOLUTION 22

Authorization for TSAG to act between WTSAs

(Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that, under the provisions of Article 14A of the Convention adopted by the Plenipotentiary Conference (Minneapolis, 1998), TSAG is to provide guidelines for the work of study groups and recommend measures to foster coordination and cooperation with other standards bodies;

b)   that the rapid pace of change in the telecommunication environment and in industry groups dealing with telecommunications demands that ITU-T make decisions on matters such as work priorities, study group structure and meeting schedules, in shorter periods of time, between WTSAs, to maintain its pre-eminence;

c)   that TSAG has made proposals for enhancing the operational efficiency of ITU-T, for improving the quality of ITU-T Recommendations and for methods of coordination and cooperation;

d)   that TSAG can help improve coordination of the study process and provide improved decision-making processes for the important areas of ITU-T activities;

e)   that flexible administrative procedures, including those related to budgetary considerations, are needed in order to adapt to rapid changes in the telecommunication environment;

f)   that it is desirable for TSAG to act in the four years between WTSAs in order to meet the needs of the marketplace in a timely manner,

noting

a)   that Article 13 of the Convention states that a WTSA may assign specific matters within its competence to TSAG indicating the action required on those matters;

b)   that the duties of WTSA are specified in the Convention ;

c)   that the current four-year cycle for WTSAs effectively precludes the possibility of addressing unforeseen issues requiring urgent action in the interim period between Assemblies;

d)   that TSAG meets at least on a yearly basis;

e)   that TSAG has already exhibited the capability to act effectively, on matters assigned to it by WTSA,

resolves

1   to assign to TSAG the following specific matters within its competence between this Assembly and the next Assembly to act in the following areas in consultation with the Director of TSB, as appropriate:

a)   maintain up-to-date, efficient and flexible working guidelines;

b)   assume responsibility, including the development and submission for approval under appropriate procedures, for the A-series Recommendations (Organization of the work of ITU-T);

c)   consider appropriate proposals made by coordination groups and implement those that are agreed;

d)   create groups with short lifetimes to address items that require rapid reactions;

e)   restructure and establish ITU-T study groups and assign chairmen and vice-chairmen to act until the next WTSA in response to changes in the telecommunication marketplace;

f)   issue advice on study group schedules to meet standardization priorities;

g)   advise the Director on financial and other matters;

h)   approve the programme of work arising from the review of existing and new Questions and determine the priority, urgency, estimated financial implications and time-scale for the completion of their study;

i)   group, as far as practicable, Questions of interest to developing countries to facilitate their participation in these studies;

j)   other areas within the competence of WTSA, subject to agreement of the Member States at TSAG;

2   that TSAG consider establishing two new permanent groups: a strategy group to develop a policy and strategy for the work of the Sector; and an operational group to develop working methods and ensure coordination of the work; working as necessary throughout the year, and reporting to short annual meetings of TSAG in order to respond to Resolutions 71 and 72 (Minneapolis, 1998);

3   that TSAG provide liaison on its activities to organizations outside ITU in consultation with the Director of TSB, as appropriate;

4   that a report on TSAG activities included above shall be submitted to the next WTSA.

RESOLUTION 26

Assistance to the Regional Tariff Groups

(Geneva, 1996, Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that the Regional Tariff Groups have been established within Study Group 3;

b)   that the activities of most of these groups have become increasingly important;

c)   that the study of accounting rates and the study of most of the economic aspects of telecommunication services call for human and financial resources which are not always available to the least developed countries;

d)   that, for determining accounting rates, national network costs at both ends of the relation are the most important component;

e)   that ITU-D Study Group 1 has been instructed to study, *inter alia*, the question of balanced tariff structures in the developing countries;

f)   that the existing regional tariff groups (TAF, TAL, TAS) are developing their cost methodology;

g)   that there is a need to quickly implement those existing cost methodologies while adapting them to evolution,

calls upon

the Director of TSB to cooperate with the Director of BDT in order:

1   to continue to provide specific assistance to the Regional Tariff Group for Africa (TAF Group) as well as, if necessary, to other existing or newly created regional tariff groups for pursuing the study of the methods and/or methodologies and criteria to be used in setting rates and collection charges;

2   to encourage the development by the members of the regional groups of computerized application tools related to their cost methodology;

3   to take appropriate steps to facilitate meetings of the TAF Group as well as, if necessary, to other existing or newly created regional tariff groups and promote the necessary synergies between the two Sectors.

RESOLUTION 29

Alternative calling procedures on international telecommunication networks

(Geneva, 1996; Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

recalling

a)   Resolution 1099 of the Council (Geneva, 1996) concerning alternative calling procedures on international telecommunication networks which urged ITU-T to develop, as soon as possible, the appropriate recommendations concerning alternative calling procedures;

b)   Resolution 22 of the World Telecommunication Development Conference (Valletta, 1998), which resolved:

i)   to encourage Administrations and ROAs to enhance the effectiveness of ITU's role and to give effect to its recommendations in order to promote a new and more effective basis for the accounting regime which would help limit the negative effects of alternative calling procedures on developing countries;

ii)   to request the Telecommunication Development Sector (ITU-D) and ITU-T to collaborate so as to avoid any duplication of work, and achieve an outcome based on the spirit of Resolution 21 (Kyoto, 1994) of the Plenipotentiary Conference;

iii)   to request Administrations and ROAs of countries which permit the use of alternative calling procedures to respect the decisions of other Administrations and ROAs whose regulations do not permit such services;

c)   Resolution 21(Rev. Minneapolis, 1998) of the Plenipotentiary Conference concerning alternative calling procedures on telecommunication networks, which

i)   urged Member States and Sector Members to continue to cooperate among themselves on the effective application of the Resolutions adopted by ITU;

ii)   resolved to urge ITU-T, in close communication with ITU-D to coordinate activities in order to avoid duplication;

d)   ITU-T D.201 of ITU-T which sets out principles for Administrations to follow while providing or permitting the provision of call-back practices;

e)   the purposes of the Union to foster collaboration among Members for the harmonious development of telecommunications and to enable offering of services at lowest cost,

recognizing

a)   that call-back is permitted in some countries and not in others;

b)   that call-back offers alternative calling procedures which may be attractive for users;

c)   that call-back affects the revenue of ROAs which may seriously hamper, in particular, the efforts of the developing countries for the sound development of their telecommunication networks and services;

d)   that distortion in traffic patterns resulting from call-back may impact traffic management and network planning;

e)   that some forms of call-back seriously degrade the performance and quality of the Public Switched Telephone Network (PSTN),

reaffirming

that it is the sovereign right of each country to regulate its telecommunications and as such it may permit, prohibit or otherwise regulate call-back in its territory,

noting

that in order to minimize the effect of alternative calling procedures

a)   ROAs should, within their national law, make their best efforts to establish the level of collection charges on a cost orientated basis taking into account Article 6.1.1 of the International Telecommunication Regulations and ITU-T D.5;

b)   Administrations and ROAs should vigorously pursue the implementation of ITU-T D.140 and the principle of cost orientated accounting rates and accounting rate shares;

resolves

1   that Administrations and ROAs should take all reasonable measures, within the constraints of their national law, to suspend the methods and practices of call-back which seriously degrade the quality and the performance of the PSTN, such as constant calling (or bombardment or polling) and answer suppression;

2   that Administrations and ROAs should take a cooperative and reasonable approach to respecting the national sovereignty of others and suggested guidelines for this collaboration are attached;

3   to continue developing appropriate recommendations concerning alternative calling procedures and, in particular, the technical aspects of the methods and practices of call-back which seriously degrade the quality and the performance of the PSTN, such as constant calling (or bombardment or polling) and answer suppression;

4   to continue consideration of other aspects of alternative calling procedures.

calls upon

the Director of TSB to cooperate with the Director of BDT in order to facilitate the participation of developing countries in these studies as well as in caring for such studies.

ATTACHMENT

(to Resolution 29)

**Suggested guidelines for administrations and ROAs for
consultation on call-back**

In the interest of global development of international telecommunication, it is desirable for Administrations and ROAs to cooperate with others and to take a collaborative and reasonable approach. Any cooperation and any subsequent actions would have to take account of the constraints of national laws. The following guidelines are recommended to be applied in country X (the location of the call-back user) and country Y (the location of the call-back provider) regarding call-back. When call-back traffic is destined to a country other than countries X or Y, the sovereignty and the regulatory status of the destination country should be respected.

Country X (location of call-back user)	Country Y (location of call-back provider)
A generally collaborative and reasonable approach is desirable	A generally collaborative and reasonable approach is desirable
Administration X, wishing to restrict or prohibit call-back, should establish a clear policy position	
Administration X should make known its national position	Administration Y should bring this information to the attention of ROAs and call-back providers in its territory using whatever official means are available
Administration X should instruct ROAs operating in its territory as to the policy position, and those ROAs should take steps to ensure that their international operating agreements comply with that position	ROAs in Y should cooperate in considering any necessary modifications to international operating agreements
	Administration Y and/or ROAs in Y should seek to ensure that call-back providers establishing an operation in their territory are aware that: a) call-back should not be provided in a country where it is expressly prohibited, and b) the call-back configuration must be of a type which will not degrade the quality and performance of the international PSTN
Administration X should take all reasonable steps within its jurisdiction and responsibility to stop the offering and/or usage of call-back in its territory which is: a) prohibited; and/or b) harmful to the network. ROAs in country X will cooperate in the implementation of such steps.	Administration Y and ROAs in Y should take all reasonable measures to stop call-back providers in its territory offering call-back: a) in other countries where it is prohibited; and/or b) which is harmful to the networks involved.

NOTE – For relations between countries who regard call-back as an "international telecommunication service" as defined in the International Telecommunication Regulations, bilateral operating agreements should be required between the ROAs concerned as to the conditions under which call-back will be operated.

RESOLUTION 31

Admission of entities or organizations to participate as
Associates in the work of ITU-T

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that the rapid pace of change in the telecommunication environment and in industry groups dealing with telecommunications demand the increased participation of interested entities and organizations in the standard-making process of ITU;

b)   that entities or organizations with highly focused areas of activity may be interested only in a small part of the standardization work of ITU-T and, therefore, do not intend to apply for membership in the Sector, but would be willing to join if simpler conditions existed;

c)   that Article 19 of the Convention (see: ADD 241A) enables the Sectors to admit participation of entities or organizations in the work of a given study group as an Associate;

d)   that Articles 19, 20 and 33 of the Convention (see: ADD 241A, ADD 248B and ADD 483A, respectively) describe the principles for the participation of Associates,

resolves

1   that an interested entity or organization may join the ITU-T as an Associate and be entitled to take part in the work of a selected single study group;

2   that Associates are limited to the study group roles described below and excluded from all others:

•   Associates may take part in the process of preparing Recommendations within a study group, including the following roles: meeting participant, contribution submitter, Recommendation editor, and during the alternate approval process, provider of comments during the Last Call period;

•   Associates may have access to documentation required for their work;

•   an Associate may serve as rapporteur, responsible for directing the studies for the relevant study Question within the selected study group, except for liaison activities which are to be handled separately,

3   that the amount of the financial contribution for Associate membership be based upon the contributory unit for Sector Members as determined by Council for any particular biennial budgetary period.

requests

1   the Secretary-General to admit entities or organizations to participate as Associates in the work of a given study group or subgroups thereof following the principles set in CV/Art.19, 241B, 241C, 241D, 241E (PP-98);

2   TSAG to review on an ongoing basis the conditions governing the participation (including financial impact on the sector budget) of Associates based on the experience gained within ITU-T;

instructs

the Director of TSB to prepare the necessary logistics for the participation of Associates in the work of ITU-T, including possible impacts of study group reorganization.

RESOLUTION 32

Strengthening the use of electronic document handling for the work of ITU-T

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   the rapid pace of technology change and the consequent need for improved and more rapid standards development;

b)   that electronic document handling (EDH) is a tool for open, rapid and easy collaboration between participants in the activities of ITU-T;

c)   that the implementation of EDH capabilities and associated arrangements will have significant benefits for the ITU-T membership, including resource-limited individuals, organizations and states, by allowing them timely and effective access to standards information and the standards-making and approval process;

d)   that EDH will be advantageous towards improving communication among members of ITU-T and between other relevant standardization organizations and ITU, towards globally harmonized standards;

e)   the key role of the Telecommunication Standardization Bureau (TSB) in providing support to EDH services, such as facilitating access to documentation through EDH;

f)   the decisions contained in Resolution 65 (Kyoto, 1994), Resolution 66 (Rev. Minneapolis, 1998) and Resolution 104 (Minneapolis, 1998) of the ITU Plenipotentiary Conference,

noting

a)   the desire of members to receive documents in electronic format and the need to reduce the increasing amount of hard copy documentation generated during meetings and dispatched by mail;

b)   the desire of ITU-T members to conduct electronic meetings;

c)   the increasing use of personal computers by members during meetings;

d)   the advantage to the membership of facilitating greater electronic participation in the development and approval of Recommendations, in particular by members unable to participate in study group meetings in Geneva and elsewhere;

e)   the economies possible from enhancing ITU-T EDH capabilities (e.g. reduced costs for distribution of paper documentation, etc.);

f)   that collaboration using EDH with other telecommunication standardization organizations should be encouraged,

decides

1   that the principal EDH objectives of ITU-T are:

•   that contributors should submit all meeting documents to TSB in electronic format;

•   that collaboration between members on development of Recommendations should be by electronic means;

•   that ITU-T should provide EDH facilities and services at meetings;

- that TSB should provide all members of ITU-T with appropriate and ready access to electronic documentation for their work; and

- that TSB should provide appropriate systems and facilities to support the conduct of ITU-T's work by electronic means;

2   that these objectives should be systematically addressed in an EDH Action Plan including individual action items identified by the ITU-T membership or TSB, and prioritized and managed by TSB with the advice of TSAG,

instructs

1   the Director of TSB to:

- maintain the EDH Action Plan to address the practical and physical aspects of increasing the EDH capability of ITU-T;

- identify and review costs and benefits of the action items on a regular basis;

- report to each meeting of TSAG the status of the Action Plan, including the results of the cost and benefit reviews described above;

- provide the executive authority, budget within TSB, and resources to execute the Action Plan with all possible speed;

- develop and disseminate guidelines for the use of ITU-T EDH facilities;

2   the TSAG EDH Working Party to continue to:

- act as the point of contact between ITU-T membership and TSB on EDH matters, in particular providing feedback and advice on the contents, prioritization and implementation of the Action Plan;

- identify user needs and plan the introduction of suitable measures through appropriate subgroups and pilot programmes;

- request study group chairmen to identify EDH liaisons;

- encourage participation by all participants in the work of ITU-T, especially EDH experts from TSAG, the study groups, TSB and appropriate ITU Bureaux and Departments;

- continue its work electronically outside TSAG meetings as necessary to carry out its objectives.

RESOLUTION 33

Guidelines for ITU-T strategic activities

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

noting

a)   that, in accordance with No. 197C in Article 14A of the Convention, the duties of TSAG shall include*, inter alia,* to review strategies and priorities for activities in the Telecommunication Standardization Sector;

b)   that, in accordance with Resolutions 71 and 72 adopted by the Plenipotentiary Conference (Minneapolis, 1998) concerning strategic issues, TSAG will provide advice on the Strategic Plan and the goals, strategies and priorities for the Sector, including recommendations to adjust the plan in light of changes in the telecommunication environment,

recognizing

that the Union, and ITU-T in particular, is faced with the challenge to remain an active and effective international forum where Member States, Sector Members and Associates work together to encourage the development of global telecommunications and to facilitate universal access to telecommunication and information services in order to provide to people everywhere the opportunity to participate in and benefit from the global information society and economy,

invites Member States and Sector Members

to continue to contribute their insights on the strategic plan and priorities of ITU-T to the TSAG strategic planning process,

instructs TSAG

1   to monitor the Sector's work during the current study period in light of the current Strategic Plan, Resolution 71 (Minneapolis, 1998) and the evolution of the telecommunication environment, including:

•   setting appropriate milestones during the course of the study period against which the performance of the Sector can be measured;

•   gaining regular reports from study group chairmen and other responsible entities as to the achievement of such milestones;

•   implement appropriate action to enable milestones and strategic objectives to be amended in light of changes in the telecommunication environment, or non-achievement of anticipated events;

•   evaluating the continuing relevance and applicability of the plan, and proposing changes as needed;

2   to prepare proposals to assist in preparation of the Union's draft Strategic Plan for the coming study period that duly reflect:

•   that clauses of the current Strategic Plan continue to be relevant;

•   new and converging technologies and the need to develop, rapidly and reliably, appropriate global standards;

•   changes in the telecommunication environment, both continuing and new, including:

a) the increasing number of standardization bodies, multilateral meetings and forums that are actively developing global standards;

b) the impact of the WTO agreement on basic telecommunications, increasing competition, liberalization, globalization and convergence;

c) the ongoing transformation of telecommunications into a globally competitive business;

d) the entry of new entities into telecommunications from areas with very different cultures and traditions (including convergent industries, user communities and financial institutions);

• pursuant to Resolution 72 (Minneapolis, 1998), the establishment and maintenance of linkage between the strategic, financial and operational planning of the Sector;

• the need to define clearly, and establish broadly, formal relationships with the broadest practicable population of regional and other standardization bodies, based on guidelines already agreed;

• the consideration of an evolution in the role of ITU-T to an increasingly inclusive and market-oriented organization that coordinates and cooperates with, and draws upon the work of, other relevant entities, in the rapid and efficient development of internationally useful standards.

RESOLUTION 34

Voluntary contributions

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   Resolution 71 (Minneapolis, 1998) on the Strategic Plan for the Union 1999-2003 targeting ambitious strategic objectives in ITU-T activities;

b)   Decision 5 (Minneapolis, 1998) limiting expenditure of the Union for the period 2000 to 2003,

recalling

a)   that the Constitution, Convention and Financial Regulations of the International Telecommunication Union stipulate that the Secretary-General of the Union may accept voluntary financial contributions in cash or in kind, in addition to the regular contributions from the Member States and Sectors Members of the Union;

b)   that expenditure under voluntary contributions are outside the limits of expenditure set by ITU Plenipotentiary Conferences;

c)   that important voluntary contributions made to ITU-T in the past permitted ITU-T to make significant progress in its work,

further considering

that voluntary contributions are valuable, rapid and efficient instruments in the financing of extra activities for the Sector,

resolves

1   to encourage the financing of specific projects, focus groups or other new initiatives by voluntary contributions;

2   to invite Member States and Sector Members to submit to the Director of TSB projects of interest for the ITU-T Sector to be financed under voluntary contributions.

RESOLUTION 35

Appointment and maximum term of office
for chairmen and vice-chairmen of ITU-T Study Groups
and of the Telecommunication Standardization Advisory Group (TSAG)

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that No. 189 of the Convention provides for the establishment of ITU-T study groups;

b)   that No. 192 of the Convention and other related provisions indicate the nature of the work of the study groups;

c)   that provisions for TSAG have been incorporated into Article 14A of the ITU Convention;

d)   that No. 242 of the Convention requires the WTSA to appoint chairmen and vice-chairmen of study groups, taking account of competence and equitable geographical distribution;

e)   that 1.3 of Section 1 of Resolution 1 indicates that WTSA shall appoint the chairmen and vice-chairmen of study groups and of TSAG;

f)   that Section 3 of Resolution 1 contains guidelines regarding the appointment of study group chairmen and vice-chairmen at WTSAs;

g)   that procedures and qualifications for the chairman and vice-chairmen of TSAG should generally follow those for the appointment of study group chairman and vice-chairmen;

h)   that experience of ITU in general and of the Telecommunication Standardization Sector (ITU-T) in particular would be of particular value for the chairman and vice-chairmen of TSAG;

i)   that No. 244 of the Convention describes the procedure for replacing a study group chairman or vice-chairman who is unable to carry out his duties at some time in the interval between two WTSAs;

j)   that No. 197G of the Convention states that TSAG shall "adopt its own working procedures compatible with those adopted by the world telecommunication standardization assembly";

k)   that a specific time-limit on the term of office would permit the introduction of new ideas on a periodic basis, while at the same time give an opportunity for study group chairmen and vice-chairmen and the chairman and vice-chairmen of TSAG to be appointed from different Member States and Sector Members;

taking into account

a)   that a maximum time in office of approximately eight years for study group and TSAG chairmen and vice-chairmen provides for a reasonable amount of stability while providing the opportunity for different individuals to serve in these capacities,

resolves

1   that candidates for the posts of chairmen and vice-chairmen of the ITU-T study groups and candidates for the posts of chairman and vice-chairmen of TSAG should be appointed according to procedures given in Annex A and to qualifications given in Annex B;

2   that candidates for the posts of study group chairmen and vice-chairmen and candidates for the posts of chairman and vice-chairmen of TSAG should be identified, taking into account that, for

each study group and for TSAG, the WTSA will appoint the chairman and those vice-chairmen deemed necessary;

3   that nominations for the posts of study group chairmen and vice-chairmen or for a post of chairman and vice-chairmen of TSAG should be accompanied by a biographical profile highlighting the qualifications of the individuals proposed; the Director of TSB will circulate the profiles to the heads of delegation present at the WTSA;

4   that the term of office for both chairmen and vice-chairmen should be limited so as to terminate at the end of the WTSA at which they will have served for a period of more than seven years;

5   that the term of office in one appointment does not count towards the term of office for another appointment and that steps should be taken to provide some continuity between chairmen and vice-chairmen;

6   that the counting of term of office is effective from WTSA-2000 and is not retrospective.

ANNEX A

(to Resolution 35)

**Procedure for the appointment of chairmen
and vice-chairmen of the ITU-T study groups
and of the Telecommunication Standardization Advisory Group (TSAG)**

1   Typically, the positions of chairmen and vice-chairmen to be filled are known in advance of the WTSA.

a)   In order to help the WTSA appoint chairmen/vice-chairmen, Member States, ITU-T Sector Members and the concerned study group or TSAG should be encouraged to indicate to the Director of TSB suitable candidates at least three months before the opening of the WTSA.

b)   On the basis of received proposals, the Director of TSB will circulate to Member States and Sector Members the list of candidates. The list of candidates should be accompanied by an indication of the qualifications of each candidate as given in Annex B.

c)   On the basis of this document and any relevant received comments, the heads of delegation, at a suitable time during WTSA, should be invited to prepare, in consultation with the Director of TSB, a consolidated list of designated study group chairmen and vice-chairmen to be submitted in a document to WTSA for final approval.

2   Situations which cannot be considered with the above will be dealt with on a case-by-case basis at WTSA.

For example, if a merger of two existing study groups is envisaged, the proposals pertaining to the relevant study groups can be considered. Therefore the procedure outlined in § 1 can still be applied.

However, if WTSA decides to set up a completely new study group, discussions will have to be held at WTSA and appointments made.

3   These procedures can be applied for appointments made by TSAG under delegated authority (see Resolution 22).

4   Vacant positions of chairmen and vice-chairmen that occur in mid-term between WTSAs are filled in accordance with No. 244 of the Convention.

ANNEX B

(to Resolution 35)

Qualifications of the chairmen and vice-chairmen

No. 242 of the Convention (as modified by PP-98) states that:

"… In appointing chairmen and vice-chairmen, particular consideration shall be given to the requirements of competence and equitable geographical distribution, and to the need to promote more efficient participation by the developing countries."

As regards competence, the following qualifications, *inter alia*, appear to be of paramount importance when appointing study group chairmen and vice-chairmen:

– knowledge and experience;

– continuity in participation in the relevant study group;

– managerial skills;

– availability;

and the following qualifications, *inter alia*, appear to be of paramount importance when appointing the chairmen and vice-chairmen of TSAG:

– knowledge and experience;

– continuity in the activities of the ITU in general and of ITU-T in particular;

– managerial skills;

– availability;

Particular reference to the above qualifications should be included in the biographical profile to be circulated by the Director of TSB.

RESOLUTION 36

ITU Reform

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a) the content and intent of Resolution 74 (Minneapolis 1998);

b) the improvements and gains made in the standardization activities of ITU through the decisions and resolutions of this Assembly,

recognizing

a) that the Council has established a Working Group on ITU Reform (WGR) which has recognized that the reform of the standardization area is a priority item;

b) that WGR has standardization issues at the heart of its considerations, notably in "ITU Role, Products and Services, Strengths and Weaknesses";

c) that WGR has also, amongst other things, established an "ad hoc Group to focus on the issue of a new global standardization entity under the umbrella of ITU" which will report on its progress to the third meeting of WGR in November 2000;

d) that WTSA-2000 has before it multiple issues, including improvements in management and procedures within the Telecommunication Standardization Sector, which will also have a bearing on the future role of ITU-T,

noting

a) the rapid changes in the telecommunication environment which mean that preparation of market-driven and timely produced standards is of key importance in fostering and furthering the growth of telecommunications in the world;

b) that ITU has recognized core competence in many areas of standardization;

c) that ITU regional offices should promote ITU standardization activities;

d) that ITU plays a major role in developing standards for global telecommunication service;

e) that standards produced by ITU play a global harmonizing and cohesive role and are recognized and respected in both developing and developed countries,

recalling

a) that WTSA-2000 is WTSA's sole opportunity to provide its views on the fundamental attributes of standardization functions within ITU;

b) that the attributes of any body undertaking such activities, whether a new entity or an improved ITU-T, are of major importance to the future role of ITU in global standards development;

c) that such a global standardization body should not only address the weaknesses of the current standardization process in ITU, but also continue and enhance its strengths,

invites the Working Group on ITU Reform

1   to take into account the following fundamental attributes of a global standardization body:

•   appropriate recognition of the key role of the private sector in the development and approval of technical Recommendations;

•   provision of a forum for the private sector to develop technical Recommendations with the participation of governments;

•   provision of a forum for governments to develop Recommendations having policy and/or regulatory implications with the participation of the private sector;

•   provision of an efficient and fair forum and process that provides for rapid development of high-quality standards and for consideration and accommodation of minority views and concerns;

•   maintenance of the current role of ITU as the focus for cooperation and coordination with other bodies developing standards for global application, and harmonization of those standards;

•   continuation of the leadership role of ITU in the development of standards in areas in which it has recognized core competencies;

•   maintenance of strong relationships with the other Sectors of the ITU, and of solidarity of the Union;

•   maintenance of the current role of ITU as a forum for development of telecommunication standards that take into account the needs of both developing and developed countries;

•   development of its own working methods focusing on a project-oriented approach, and establishment of its own management structure;

•   establishment of a sufficient resource-allocation base to progress its work efficiently and in a way that reflects commercial realities;

2   to take into account the following principles under which global standardization activities should be organized and operate:

•   openness - shall be open to participation by relevant interested parties;

•   transparency - shall be transparent in working methods, management and financial processes;

•   visibility - shall maximize the visibility of the results;

•   consensus-based - shall use consensus as the basic operating principle;

•   responsiveness – to the needs of developing countries;

3   to consider the following questions:

•   whether the two types of work - industry-led and government-led - require development of different approaches, processes and even bodies;

•   if created, whether a new standardization body should identify or select its own leadership;

•   the need to make clear distinctions between Questions/Recommendations having policy or regulatory implications and those having no such implications. The criteria to make distinctions between these two types of Questions/Recommendations should be addressed;

•   whether some form of voting should be developed for use in case of failure to reach consensus, and if so, what revisions to the ITU Constitution and Convention would be needed;

•   whether all members should be equal in any such voting;

•   whether any body related to ITU should provide for "appeals" by any member to ITU;

- whether any body should be empowered to produce a class of technical document (e.g. specification) different from ITU Recommendations, and, if so, in what cases and by what process such document might be changed to become a Recommendation;

- which appropriate financial procedures and processes would be applicable;

- if created, how a new standardization entity under the umbrella of ITU would impact ITU-T and the Union as a whole;

- if created, to what extent a new standardization entity under the umbrella of ITU would be expected to meet requirements and expectations, legal and otherwise, of ITU;

- the extent to which the changes and reforms being undertaken within the current ITU-T - by this Assembly, by TSAG and within the various Study Groups - accomplish the desired progress in improvement of efficiency, responsiveness and recognition, and the extent to which more extensive reform is called for;

- if created, how a new standardization body would offer information on implementation of standards for developing countries.

resolves

1   that the ongoing work in the Working Group on Reform, including its "ad hoc Group to focus on the issue of a new global standardization entity under the umbrella of ITU," should be actively supported by TSAG;

2   that special care should be taken to establish a proper relationship between the technical standardization work and ITU development of Recommendations having policy and/or regulatory implications,

instructs

1   the Director of TSB to invite the Working Group on ITU Reform and the Member States to submit contributions to the 2002 Plenipotentiary Conference to develop the most appropriate and most efficient standardization body possible without detracting from the strength and value of ITU as a whole;

invites

1   the members of ITU-T to participate in and provide contributions to the work of the Working Group on ITU Reform;

2   TSAG to continue to progress the work of reform, specifically the development of advice to the Director of TSB regarding the needs and requirements of the Telecommunication Standardization Sector.

RESOLUTION 37

Alternative approval process for ITU-T

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that the ITU Convention (Minneapolis, 1998) specifies that Member States and Sector Members shall adopt questions to be studied in accordance with procedures established by the relevant assembly, including the indication whether or not a resulting recommendation shall be the subject of a formal consultation of Member States;

b)   that procedures for adopting questions and the indication noted in a) above are found in WTSA Resolution 1;

c)   that the Convention further specifies that recommendations adopted by a study group in accordance with procedures established by the relevant assembly which do not require formal consultation of Member States for their approval shall be considered as approved;

d)   that Resolution 82 (Minneapolis, 1998) of the Plenipotentiary Conference invites each Sector to develop its own procedures for approving questions and recommendations using an alternative approval process;

e)   that such procedures have been developed by TSAG in order to allow ITU-T to respond more quickly to the needs of the telecommunication marketplace for ITU-T Recommendations,

further considering

that these procedures may need to be modified between WTSAs as experience is gained in their application,

resolves

1   that the alternative approval process for ITU-T shall be found in ITU-T A.8, which shall be in force as of the conclusion of this WTSA;

2   that revisions to the relevant procedures for adoption of questions and recommendations may be initiated by TSAG for approval by Member States between WTSAs, using the approval procedure found in Resolution 1.

RESOLUTION 38

Coordination among ITU-T, ITU-R and ITU-D for IMT-2000 activities

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that ITU-T has undergone a reorganization at WTSA-2000 in response to the rapidly progressing worldwide telecommunication standardization environment;

b)   that ITU-T will form a new appropriate group on mobility and overall network aspects of IMT-2000 and beyond;

c)   that Study Group 8 of ITU-R has established a new group, Working Party 8F, with the ITU-R responsibility for the further development of IMT-2000 and beyond;

d)   that the ITU-T study groups involved in IMT-2000 standardization and Task Group 8/1 of ITU-R in the past, and now Working Party 8F, have had, and continue to have, effective informal coordination via liaison activity with respect to development of IMT-2000 recommendations for both Sectors;

e)   that RAG has advised the Director of BR that this coordination at the working level between ITU-R and ITU-T on an informal basis be encouraged and continued;

f)   that Working Party 8F has proposed to ITU-T study groups the development of a roadmap for each Sector to independently manage and advance their work on IMT-2000 and beyond within a complementary framework as an efficient means of effecting progress in both Sectors;

g)   that Working Party 8F is also of the view that the roadmap concept of *considering* f) facilitates the communication of IMT-2000 issues with organizations external to ITU,

noting

a)   ITU-T Resolution 18 on principles and procedures for the allocation of work to, and coordination between the ITU-R and ITU-T Sectors;

b)   ITU-T A.4 on the communication process between ITU-T and forums and consortia;

c)   ITU-T A.5 on generic procedures for including references to documents of other organizations in ITU-T Recommendations;

d)   ITU-T A.6 on cooperation and exchange of information between ITU-T and national and regional standards development organizations;

e)   Resolution ITU-R 50 on the role of the Radiocommunication Sector in the ongoing development of IMT-2000,

resolves

1   that ITU-T establish a roadmap for all of its IMT-2000 standardization activities;

2   that the effective coordination currently established between ITU-T and ITU-R for IMT-2000 activities be continued to ensure full alignment and harmonization of the work programmes, including the roadmaps, of both ITU-T and ITU-R,

instructs

the Director of TSB to bring this Resolution to the attention of the Directors of BR and BDT,

encourages

the Directors of BR, TSB and BDT to investigate new ways to improve the efficiency of ITU work on IMT-2000.

RESOLUTION 39

The changing role of the World Telecommunication Standardization Assembly

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that the Telecommunication Standardization Sector shall work through a structure which includes WTSA (Article 17 of the Constitution);

b)   that a WTSA shall be convened at least on a four-year cycle (Article 18 of the Constitution);

c)   that WTSA shall be convened to consider specific matters related to telecommunication standardization (Article 13 of the Convention),

recognizing

a)   that the rapid changes in technology and the corresponding need for global standards requires that the ITU-T work structure and program be reviewed more frequently than foreseen by WTSA;

b)   that TSAG has been authorized by WTSA to take action in the areas mentioned above;

c)   the leading role of Sector Members in telecommunication standardization and the partnership role of Member States and Sector Members within ITU-T;

d)   that the four-year cycle of change to ITU-T has been supplemented by provisions of Resolution 22;

e)   that WTSAs however, will still be required to meet to address among other things:

−   future work direction from a high-level perspective;

−   reports from TSAG, the Study Groups and the Director of TSB;

−   approval of Recommendations on an exceptional basis;

−   matters of common interest to the Sector;

f)   that future WTSAs may be of shorter duration to address the points in *recognizing* e),

recognizing also

Council Resolution 1132 to establish a Working Group on ITU Reform (WGR),

noting

efforts to enhance the participation of developing countries in the activities of the Union, through a strengthened regional presence;

resolves

1)   to encourage Member States to make proposals to the next Plenipotentiary Conference for amendments to appropriate provisions of the Constitution and Convention in order to reflect the changing role and duties of future WTSAs as reflected in the above *recognizing*,

2)   to ask the Director of TSB to convey the views of WTSA on this issue to the Working Group on ITU Reform

RESOLUTION 40

Regulatory aspects of ITU-T work

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

considering

a)   that the tasks undertaken in the Telecommunication Standardization Sector cover both technical matters and matters having policy or regulatory implications;

b)   that rules pertaining to certain aspects of the Sector's work are being framed in terms that will rely upon clear and certain identification of the boundary between technical matters and matters having policy or regulatory implications;

c)   that administrations have agreed to encourage a larger role for Sector Members in the work of the Standardization Sector, particularly on technical matters;

d)   that the demarcation between technical matters and matters having policy or regulatory implications is being considered by Council's Working Group on ITU Reform;

e)   that in June 2000, TSAG established an ad hoc group to consider matters including the demarcation issue for input to the Working Group on ITU Reform;

f)   that many matters having policy or regulatory implications may involve technical implementation and therefore need to be considered in appropriate technical study groups;

g)   that Resolution 82 (Minneapolis, 1998) refers to the approval of some questions and recommendations using an alternative approval process;

h)   that Resolution 82 (Minneapolis, 1998) provides some examples of matters having policy or regulatory implications,

noting

a)   that the ITU Member States have identified significant policy responsibilities in Chapter 6 of the Constitution Articles 33-43 and in the Convention Chapter 5, Articles 36-40 and in relevant resolutions of plenipotentiary conferences;

b)   that the International Telecommunication Regulations further describe policy and regulatory obligations undertaken by Member States;

c)   that the Convention Chapter 1, Article 13, paragraph 191 a) empowers WTSA to assign matters within its competence to the Telecommunication Standardization Advisory Group indicating the action required on those matters,

resolves

that further to the examples provided in Resolution 82 (Minneapolis, 1998), when determining whether a Question/Recommendation has policy or regulatory implications, study groups should more generally consider possible issues such as:

–   the right of the public to correspond;

–   protection of telecommunication channels and installations;

–   use of limited natural resources such as unique numbering and addressing;

–   secrecy and authenticity of telecommunications;

–   safety of life;

–   practices applicable to competitive markets; and

–   any other relevant matters, including those identified by a decision of Member States, or recommended by TSAG.

RESOLUTION 41

Accounting rate principles for
international telephone services

(Montreal, 2000)

The World Telecommunication Standardization Assembly (Montreal, 2000),

noting

That it adopted Annex E to ITU-T D.140.

considering

That the indicative target rates in Annex E to ITU-T D.140 were calculated using 1998 data

instructs Study Group 3 to

publish updated indicative target rates calculated on the basis of the latest data as a supplement to ITU-T D.140, in accordance with ITU-T A.13 of the Assembly.

PART 2

ITU-T series A Recommendations: organization of the work of the ITU Telecommunication Standardization Sector

CONTENTS

ITU-T Recommendation A.1

Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)

(Geneva, 1956 and 1958; New Delhi, 1960; Geneva, 1964; Mar del Plata, 1968; Geneva, 1972, 1976 and 1980; Malaga-Torremolinos, 1984; Melbourne, 1988; Helsinki, 1993; Geneva, 1996; Montreal, 2000)

1 Study groups and other groups

1.1 Frequency of meetings

1.1.1 Study groups meet to facilitate the approval of Recommendations. Such meetings shall only be held with the approval of the Director of TSB, and with due consideration of the physical and budgetary capabilities of ITU-T. To minimize the number of meetings required, every effort should be made to resolve questions by correspondence (No. 245 of the Convention).

1.1.2 In the establishment of the work programme, the timetable of meetings must take into account the time required for participating bodies (Administrations of Member States and other duly authorized entities) to react and prepare contributions. Meetings should not be held more frequently than is necessary to make effective progress and should take into account the TSB's capabilities to provide the necessary documentation. A meeting scheduled so that its separation from a preceding meeting, upon which it depends, is less than six months may incur the possibility of full documentation from the previous meeting not being available.

1.1.3 Meetings of study groups having common interests or dealing with problems possessing affinities should, if possible, be arranged so as to enable participating bodies to send one delegate or representative to cover several meetings. As far as possible, the arrangement chosen should enable the study groups meeting during the period to exchange any information they may require without delay. Furthermore, it should enable specialists from all over the world in the same or related subjects to have direct contacts with each other of benefit to their organizations. It should likewise enable the specialists concerned to avoid leaving their home countries too often.

1.1.4 The timetable of meetings shall be prepared and communicated to participating bodies well in advance (one year), to give time to study problems and submit contributions within the prescribed time-limits and to give TSB time to distribute the contributions. In this way, study group chairmen and delegates will be given the opportunity to consider the contributions in advance, thus helping to make meetings more efficient and reduce their length. A study group chairman, in conjunction with the Director, may schedule short additional study group or working party meetings for the purpose of making the determination or decision, as appropriate, on a draft new or revised Recommendation.

1.1.5 Subject to physical and budgetary limitations and in consultation with the Director of TSB, the work of the study groups should be on a continuous basis and dissociated from the interval between WTSAs.

1.2 Coordination of work

1.2.1 A Joint Coordination Group may be formed to coordinate work relating to more than one study group. Its primary role is to harmonize planned work effort in terms of subject matter, time-frames for meetings and publication goals (see clause 2).

1.3 Preparation of studies and meetings

1.3.1 At the beginning of each study period, an organization proposal and an action plan for the study period shall be prepared by each study group chairman with the help of TSB. The plan should take into account any priorities and coordination arrangements, recommended by TSAG or decided by WTSA.

How the proposed action plan is implemented will depend upon the contributions received from the members of ITU-T and the views expressed by participants in the meetings.

1.3.2 A collective letter with an agenda of the meeting, a draft work plan and a listing of the Questions or proposals under the general areas of responsibility to be examined, shall be prepared by TSB with the help of the chairman.

The work plan should state which items are to be studied on each day, but it must be regarded as subject to change in the light of the rate at which work proceeds. Chairmen should try to follow it as far as possible.

This collective letter should be received by bodies participating in the activities of particular ITU-T study groups, as far as practicable, two months before the beginning of the meeting. The collective letter shall include a registration form for these bodies to indicate participation in the meeting. Each Administration of Member State, Sector Member and regional or international organization should send to TSB a list of its participants together with a registration form completed for each delegate or representative, at least one month before the start of the meeting. In the event that names cannot be provided, the expected number of participants should be indicated. Such information will facilitate the registration process and the timely preparation of registration materials. Individuals who attend the meeting without pre-registration may experience a delay in receiving their documents.

If the meeting in question has not been previously planned and scheduled a collective letter should be received at least three months before the meeting.

1.3.3 If an insufficient number of contributions or notification of delayed contributions has been submitted, no meeting should be held. The decision whether to cancel a meeting or not shall be taken by the Director of TSB, in agreement with the chairman of the study group or working party concerned.

1.4 Conduct of meetings

1.4.1 The chairman shall direct the debates during the meeting, with the assistance of TSB.

1.4.2 The chairman is authorized to decide that there shall be no discussion on Questions on which insufficient contributions have been received.

1.4.3 Questions which have not elicited any contributions should not be placed on the final agenda of the meeting, and according to provisions of 7.4.2 of Resolution 1, may be deleted if no contributions have been received for the previous two study group meetings.

1.4.4 Study groups and working parties may set up working teams (which should be as small as possible and are subject to the normal rules of the study group or working party) during their meetings, to study Questions allocated to those study groups and working parties.

1.4.5 The following information shall be included in liaison statements prepared at study group, working party, or rapporteur group meetings:

– List the appropriate Question numbers of the originating and destination study groups.

– Identify the study group or working party or rapporteur group meeting at which the liaison statement was prepared.

–   Include a concise title appropriate to the subject matter. If this is in reply to a liaison statement, make this clear, e.g. "Reply to liaison statement from *(source and date)* concerning ...".

–   Identify the study group(s) and working party(s) *(if known)* or other standards organizations to which it has been sent. *(A liaison statement can be sent to more than one organization).*

–   Indicate the level of approval, e.g. study group or working party, or state that the liaison statement has been agreed at a rapporteur group meeting.

–   Indicate if the liaison statement is sent for action *or* comment *or* information. *(If sent to more than one organization, indicate this for each one.)*

–   If action is requested, indicate the date by which a reply is required.

–   Include the name and address of the contact person.

The text of the liaison statement should be concise and clear, using a minimum of jargon.

An example of the information required in a liaison statement is shown in Figure 1-1.

QUESTIONS: 45/15, 3/4, 8/ITU-R SG 11

SOURCE: ITU-T SG 15, Rapporteur group for Q.45/15 (London, 2-6 October 1997)

TITLE: Object Identifier Registration - Reply to liaison statement from WP 5/4 (Geneva, 5-9 February 1997)

_____

LIAISON STATEMENT

TO: ITU-T SG 4 – WP 5/4, ITU-R SG 11, ISO/IEC JTC 1/SC 6

APPROVAL: Agreed to at the rapporteur group meeting

FOR: WP 5/4 for action; others for information

DEADLINE: Deadline for reply - 22 January 1998

CONTACT: John Jones, rapporteur for Q.45/15   Tel: +1 576 980 9987
ABC Company   Fax: +1 576 980 9956
Anytown, CA USA   email: jj@abcco.com

Figure 1-1/A.1 – Example of the information required in a liaison statement

1.4.6   Liaison statements should be forwarded to the appropriate destinations as soon after the meeting as possible. Copies of all liaison statements should also be sent to the chairmen of the involved study groups and working parties and to TSB, for information.

1.4.7   For projects involving more than one study group, baseline documents may be prepared in order to provide the basis for coordinated study among the various study groups. The term "baseline document" refers to a document which contains the elements of common agreement at a given point in time.

1.4.8   Chairmen will ask, at the beginning of each meeting, whether anyone has knowledge of patents or software copyrights, the use of which may be required to implement the Recommendation being considered. The fact that the question was asked will be recorded in the working party or study group meeting report, along with any affirmative responses.

1.5 Preparation of reports of study groups, working parties or joint working parties, Recommendations and new Questions

1.5.1 A report on the work done during a meeting of a study group, working party or joint working party shall be prepared by TSB. Reports of meetings not attended by TSB should be prepared under the responsibility of the chairman of the meeting. This report should set out the results of the meeting and the agreements reached in a condensed form and should identify the points left to the next meeting for further study. The number of annexes to the report should be kept to a strict minimum by means of cross-references to contributions, reports, etc., and references to material in the documentation of a study group or working party. It would be desirable to have a concise summary of delayed contributions (or equivalent) considered by the meeting.

The report should consist of two parts:

Part I – Organization of work, references to and possible summary of contributions and/or documents issued during a meeting, main results, directive for future work, planned meetings of working parties, sub-working parties and rapporteur groups, and condensed liaison statements endorsed at the study group or working party level

Part II – Draft Recommendations or modified Recommendations accepted by the meeting as mature.

1.5.2 To assist TSB in this task, the study group or working party may arrange for delegates to draft some parts of the report. TSB should coordinate this drafting work. If necessary, the meeting will set up an editorial group to improve the texts of draft Recommendations in the three working languages.

1.5.3 If possible, the report shall be submitted for approval before the end of the meeting; otherwise, it shall be submitted to the chairman of the meeting for approval.

1.5.4 When existing and already translated ITU-T texts have been used for some parts of the report, a copy of the report annotated with references to the original sources should also be sent to TSB. If the report contains ITU-T figures, the ITU-T reference number should not be deleted even if the figure has been modified.

1.5.5 Individual reports of meetings should be accessible online to appropriate users as soon as electronic versions of these documents are available to TSB.

1.5.6 ITU-T participating bodies are authorized to transmit study group or working party reports and documents to any experts they consider it expedient to consult, except where the study group or working party concerned has specifically decided that its report, or a document, is to be treated as confidential.

1.5.7 The report of a study group's first meeting in the study period shall include a list of all the rapporteurs appointed. This list shall be updated, as required, in subsequent reports.

2 Study group management

2.1 Study group Structure and Distribution of Work

2.1.1 Study group chairmen shall be responsible for the establishment of an appropriate structure for the distribution of work, the selection of an appropriate team of working party chairmen and shall take into account the advice provided by the members of the study group as well as the proven competence, both technical and managerial, of the candidates.

2.1.2 A study group may entrust a Question, a group of Questions or the maintenance of some existing Recommendations within its general area of responsibility to a working party.

2.1.3   Where the scope of the work is considerable, a study group may decide to further divide the tasks assigned to a working party to sub-working parties.

2.1.4   Working parties and sub-working parties should be set up only after thorough consideration of the Questions. Proliferation of working parties, sub-working parties or any other subgroups should be avoided.

2.1.5   A study group may exceptionally, by agreement with other relevant study group(s) and taking account of any advice from TSAG and the Director of TSB, entrust a joint working party with Questions or parts of Questions of common interest to the study groups concerned. This study group shall act as the lead study group for the joint working party and shall coordinate and have responsibility for the work concerned. The contributions used as a basis for discussion in the joint working party shall be sent exclusively to those registered in the joint working party. Only the reports shall be sent to all participating bodies of the study groups concerned.

2.1.6   As the promotion of study group activities is an essential element in any ITU-T marketing plan, each study group chairman, supported by other study group leaders and subject matter experts, is encouraged to establish, maintain, and participate in a promotion plan, coordinated with TSB, whose emphasis is the dissemination of study group information to the telecommunication community. Such study group information dissemination should cover, but is not limited to, new work initiatives and significant accomplishments regarding technologies and technical solutions.

2.2   Joint Coordination Groups

2.2.1   When a broad subject is studied in more than one study group, it may require coordination of planned work effort in terms of subject matter, time-frames for meetings and publication goals. When such a broad study can profit from such coordination, it may be accomplished by the establishment of a Joint Coordination Group in consultation with TSAG. Joint Coordination Groups should be considered only if other, less formal, mechanisms, e.g. a joint meeting of rapporteurs and/or working party chairmen, have been considered and were not deemed to be effective. The work itself will be conducted in the relevant study groups and the results subject to the normal approval processes within each study group. The Joint Coordination Group may identify technical problems but will not perform technical studies nor write Recommendations.

2.2.2   Any study group may propose a joint coordination effort, seek approval to act as the lead study group and provide one of its working party chairmen, or exceptionally, one of its rapporteurs, as the chairman of the Joint Coordination Group. Any study group may also propose that another study group take the lead study group role with a liaison message to that study group copied to the Director of TSB, the Chairman of TSAG and the chairman of that study group.

2.2.3   The proposal to establish a Joint Coordination Group and take the responsibility of lead study group should first be discussed informally among the relevant chairmen to seek agreement, and then be approved by consensus at a meeting of the study group which proposes to take the lead. TSAG should be so advised by such study group to permit TSAG to monitor such work programme activities and carry out its advisory role.

2.2.4   TSAG may also propose a Joint Coordination Group and recommend that a particular study group chairman assume the lead.

2.2.5   A Joint Coordination Group shall also coordinate with bodies outside ITU-T concerning the programme effort. Its chairman, or someone the chairman designates, shall act as the point of contact concerning the activities of the Joint Coordination Group to supplement Resolution 1 (Montreal, 2000) and Resolution 7 (Montreal, 2000) as well as the A-series Recommendations concerning cooperation and collaboration with other bodies. For subjects studied also in the Radiocommunication Sector, the JCG should invite and encourage participation by members of that Sector.

2.2.6 The role of a Joint Coordination Group does not confer any authority upon its members not already provided by the study groups involved. A Joint Coordination Group may in exceptional circumstances recommend to TSAG the reallocation of relevant Questions for involved study groups. The decision to make such a recommendation shall be approved by consensus at a Joint Coordination Group meeting to which the relevant study group chairmen must be invited.

2.2.7 Joint Coordination Groups are open, but (to restrict their size) should, in principle, be limited to designated representatives from the various study groups which are responsible for following up actions from the Joint Coordination Group activities within their study groups. Others may also attend. All participants should confine contributions to the purpose of the Joint Coordination Group and not discuss technical issues, which are outside the scope of the coordination activity of the group.

2.2.8 The initial meeting of a Joint Coordination Group in a study period should be announced in a collective letter of the lead study group. Joint Coordination Groups should work primarily by correspondence.

2.2.9 Meetings should be convened by the chairman of the Joint Coordination Group.

2.2.10 Inputs to the work of a Joint Coordination Group should be sent to the Joint Coordination Group chairman, the Director of TSB and the relevant, affected study group representatives. Procedures for the distribution of materials for work conducted via a correspondence group shall be determined by the Joint Coordination Group.

2.2.11 Joint Coordination Groups should submit proposals to study groups to achieve alignment in the development of related Recommendations by the respective study groups.

2.2.12 Joint Coordination Group reports are issued after each meeting and will be included in the Report series of the lead study group. TSAG may monitor Joint Coordination Group activities through these reports.

2.2.13 TSB will provide support for a Joint Coordination Group, within available resource limits, at the request of the lead study group chairman.

2.2.14 A Joint Coordination Group may be terminated at any time. A proposal to do so, including adequate reasons, may be submitted by any study group involved or by TSAG. The chairman of the lead study group should first informally discuss this proposal among the relevant chairmen to inform them of the proposal and to seek their views. The decision shall be made by the lead study group, taking into consideration a report of the Joint Coordination Group itself. Termination must be agreed by consensus at a meeting of the lead study group. TSAG should be advised of any decision resulting from the discussion in that meeting.

2.3   The roles of rapporteurs

2.3.1 The chairmen of study groups and working parties (including joint working parties) are encouraged to make most effective use of the limited resources available by delegating responsibility to rapporteurs for the detailed study of individual Questions or small groups of related Questions, parts of Questions, terminology, or amendment of existing Recommendations. Review and approval of the results resides with the study group or working party.

2.3.2 Liaison between ITU-T study groups or with other organizations can be facilitated by the rapporteurs or by the appointment of liaison rapporteurs.

2.3.3 The following guidelines should be used as a basis within each study group or working party to define the roles of rapporteurs, associate rapporteurs and liaison rapporteurs; however, they may be adjusted following careful deliberation of the need for change and with the approval of the relevant study group or working party.

2.3.3.1 Specific persons should be appointed as rapporteurs to be responsible for progressing the study of those Questions, or specific study topics, that are felt to be likely to benefit from such appointments. The same person may be appointed as the rapporteur for more than one Question, or topic, particularly if the Questions, parts of Questions, terminology, or amendment of existing Recommendations concerned are closely related.

2.3.3.2 Rapporteurs may be appointed (and their appointments may be terminated) at any time with the agreement of the competent working party, or of the study group, where the Question(s) are not allocated to a working party. The term of the appointment relates to the work that needs to be done rather than to the interval between WTSAs. If the related Question is modified by WTSA, for continuity purposes, the rapporteur may, at the discretion of the new study group chairman, continue to progress the relevant work until the next meeting of the study group.

2.3.3.3 Where the work requires it, a rapporteur may propose the appointment of one or more associate rapporteurs, liaison rapporteurs or editors, whose appointments should then be endorsed by the relevant working party (or study group). Again these appointments may be made or terminated at any time in accordance with the work requirements. An associate rapporteur assists the rapporteur, either in general or to deal with a particular point or area of study in a Question. A liaison rapporteur assists the rapporteur by ensuring there is effective liaison with other groups, by attending meetings of other designated groups to advise and assist in an official capacity, by correspondence with such groups or by any other means considered appropriate by the rapporteur. In the event that a liaison rapporteur is not appointed, the responsibility to ensure effective liaison resides with the rapporteur. The editor assists the rapporteur in the preparation of the text of draft Recommendations or other publications.

2.3.3.4 Rapporteurs, and their associate and liaison rapporteurs as well as the editors, play an indispensable role in coordinating increasingly detailed and often highly technical study. Consequently, their appointment should be primarily based on their expertise in the subject to be studied.

2.3.3.5 As a general principle, work by correspondence (including electronic messaging and telephone communications) is preferred and the number of meetings should be kept to a strict minimum, consistent with the scale and milestones agreed by the parent group. Where possible, meetings in related areas of study or within a work area being managed by a JCG, should be coordinated. In any case this work should proceed in a continuous fashion between meetings of the parent group.

2.3.3.6 The rapporteur's responsibilities are:

− to coordinate the detailed study in accordance with guidelines established at working party (or study group) level;

− to the extent authorized by the study group, to act as a contact point and source of expertise for the allocated study topic with other ITU-T and Radiocommunication Sector study groups, other rapporteurs, other international organizations and other standards organizations (where appropriate) and TSB;

− to adopt methods of work (correspondence including the use of the TSB EDH system, meetings of experts, etc.) as considered appropriate for the task;

− in consultation with the collaborators for the study topic, to establish a work programme, which should be approved and reviewed periodically by the parent group and which lists the tasks to be done, the results anticipated (e.g. titles of possible draft Recommendations), liaison required with other groups and specific milestones, including proposed meetings, for each stage of the work to be completed (see Appendix I for model format);

− to ensure that the parent working party (or study group) is kept well informed of the progress of the study, particularly of work proceeding by correspondence or otherwise outside of the normal study group and working party meetings;

– in particular, to submit a progress report to each of the parent group's meetings (see suggested format in Appendix II), where possible this report should be submitted as a contribution when substantial progress has been made and where draft new or revised Recommendations are concerned; however, where little or no progress has been made, or the relative timing of meetings requires it, the report may take the form of a Temporary Document available on the first day of the meeting;

– to give the parent working party or study group and TSB adequate advance notice of the intention to hold any meetings of experts (see 2.3.3.10 below) particularly where such meetings are not included in the original programme of work;

– to establish a group of active "collaborators" from the working party (or study group) where appropriate, with an updated list of those collaborators being given to TSB at each working party meeting;

– to delegate the relevant functions from the list above to associate rapporteurs and/or liaison rapporteurs as necessary.

2.3.3.7 The basic goal of each rapporteur is to assist the study group or working party in developing new and revised Recommendations to meet changing requirements in telecommunication techniques and services. However, it must be clearly understood that rapporteurs should not feel under any obligation to produce such texts unless a thorough study of the Question reveals a clear need for them. If it turns out that this is not the case, the work should be concluded with a simple report to the parent group establishing that fact.

2.3.3.8 Rapporteurs are responsible for the quality of their texts, submitted by the study group for publication. They shall be involved in the final review of that text prior to it being submitted to the publication process. This responsibility extends only to text in the original language and should take into account applicable time constraints. (See ITU-T A.11 on Publication of ITU-T Recommendations.)

2.3.3.9 Rapporteurs should normally base any draft new or substantially revised Recommendations on written contribution(s) from ITU-T members.

2.3.3.10 In conjunction with their work planning, rapporteurs must give advance notice of any meetings they arrange, not only to the collaborators on their Question or project, but also to the study group (see 2.3.3.11) and to TSB. TSB is not required to circulate convening letters for meetings below working party level. TSB will post a notice of rapporteur meetings on the study group web page, as provided by the study group.

2.3.3.11 The intention to hold meetings should be agreed in principle and publicized with as much notice as possible (normally at least two months) at study group or working party meetings (for inclusion in their reports) and via the study group web page, for example. Confirmation of the date and place of any meeting should be provided to the collaborators (and any other ITU-T members who have indicated an interest in attending or submitting a contribution to the meeting), to the relevant working party chairman and to TSB at least three weeks prior to the meeting.

2.3.3.12 Rapporteurs should prepare a meeting report for each rapporteur meeting held and submit it as a Contribution, or if the relative timing requires it as a Temporary Document, to the next study group or working party meeting. This report should include the date, venue and chairman, an attendance list with affiliations, the agenda of the meeting, a summary of technical inputs, a summary of results and the liaison statements sent to other organizations.

2.3.3.13 Rapporteur meetings as such, should not be held during working party or study group meetings. However, rapporteurs may be called upon to chair those portions of working party or study group meetings that deal with their particular area of expertise. In these cases rapporteurs must recognize that the rules of the working party and study group meetings then apply and the more relaxed rules described above, particularly those that relate to document approvals and submission deadlines, would not apply.

2.3.3.14 The parent working party (or study group) must define clear terms of reference for each rapporteur. The general direction to be followed in the study should be discussed, reviewed as necessary and agreed periodically by the parent group.

2.3.3.15 When meetings are arranged to be held outside ITU premises, participants should not be charged for meeting facilities, unless agreed in advance by the study group. Meeting charges should be an exceptional case and only done if, for example, the study group is of the opinion that a meeting charge is necessary for the work to proceed properly. However, no participant should be excluded from participation if he or she is unwilling to pay the charge. Additional services offered by the host shall be voluntary and there shall be no obligation on any of the participants resulting from these additional services.

3   Submission and processing of contributions

3.1   Submission of contributions

3.1.1   Member States and other duly authorized entities registered with a study group or other group and the chairmen and vice-chairmen of study groups and working parties should submit their contributions to current studies via electronic means in accordance with guidance from the Director of TSB (see ITU-T A.2, clause 2).

3.1.2   These contributions shall contain comments or results of experiments and proposals designed to further the studies to which they relate.

3.1.3   Contributors are reminded, when submitting contributions, that early disclosure of patent information is desired, as contained in the Statement on ITU-T Patent Policy (available at the ITU-T website). Patent declarations should be made using the forms available at the ITU-T website. See also clause 3.1.4 below.

3.1.4   General Patent Statement and Licensing Declaration: Any ITU Member State or Sector Member may submit a General Patent Statement and Licensing Declaration using the format available at the ITU-T website. The purpose of this form is to give patent holders the voluntary option of making a general licensing declaration relative to patented material contained in any of their contributions. Specifically, the licensing declaration declares the willingness to license in case part(s) or all of any proposals contained in contributions submitted by the organization are included in ITU-T Recommendation(s) and the included part(s) contain items that have been patented or for which patent applications have been filed and whose use would be required to implement ITU-T Recommendation(s).

The General Patent Statement and Licensing Declaration is not a replacement for the individual (per Recommendation) Patent Statement and Licensing Declaration (see 9.3.8 of Resolution 1) but is expected to improve responsiveness and early disclosure of the patent holder's compliance with the ITU-T Patent Policy.

The General Patent Statement and Licensing Declaration remains in force as long as it has not been withdrawn. It can be overruled by the individual (per Recommendation) Patent Statement and Licensing Declaration from the same patent holder for any particular Recommendation.

3.1.5   Material such as text, diagrams, etc., submitted as a contribution to the work of ITU-T is presumed by ITU to have no restrictions in order to permit the normal distribution of this material for discussions within the appropriate groups and possible use, in whole or in part, in any resulting ITU-T Recommendations which are published. By submitting a contribution to ITU-T, authors acknowledge this condition of submission. In addition, authors may state any specific conditions on other uses of their contribution.

3.2 Processing of contributions

3.2.1 Contributions received at least two months before a meeting shall be published in the normal way and the abstracts posted on the ITU-T website. As far as possible, the Director of TSB shall group the contributions received Question by Question, have the necessary translations made and send them to participants in the working language they desire, before the date laid down for the opening of the study group or working party meeting which has the Question or Recommendation concerned on its agenda.

3.2.2 If a chairman, in agreement with the participants of his study group (or working party), states that his study group (or working party) is willing to use documents in the original working language, the Director of TSB shall send out the documents, grouped as specified in 3.2.1 above, without having them translated.

3.2.3 Contributions received by the Director of TSB less than two months but not less than seven working days before the date set for the opening of a meeting cannot be handled under the procedure outlined in 3.2.1 above and shall be published as "delayed contributions" in the form in which they are received, in their original language only and (where applicable) in the second working language into which they have been translated by the sender. They shall be distributed at the beginning of the meeting only to the concerned participants present. If these delayed contributions contain draft amendments to Recommendations or draft new Recommendations, and if they are received by the Director of TSB one month before the date of the meeting, they shall be translated for distribution at the beginning of the meeting.

3.2.4 As far as possible, participating bodies should advise TSB about any forthcoming delayed contribution and its contents, at least two months before the meeting.

3.2.5 Delayed contributions should be available from TSB at least one full working day before the meeting.

3.2.6 Contributions received by the Director of TSB less than seven working days before the meeting will not appear on the agenda of the meeting, will not be distributed and will be held for the next meeting. Contributions judged to be of extreme importance may be admitted by the Director of TSB at shorter notice.

3.2.7 The Director of TSB should insist that participating bodies follow the rules established for the presentation, form and timing of documents, set out in Recommendation A.2. A reminder circular should be sent out by the Director of TSB whenever appropriate.

3.2.8 The Director of TSB, with the agreement of the study group chairman, may return to the contributor any document which does not comply with the general directives set out in Recommendation A.2, so that it may be brought into line with those directives.

3.2.9 TSB shall not reissue delayed contributions as normal contributions, unless otherwise decided by the study group or working party in cases of special interest and importance. Normal or delayed contributions shall not be included in reports as annexes.

3.2.10 Contributions should, as far as possible, be submitted to a single study group. If, however, a participating body submits a contribution which it believes is of interest to several study groups, it should identify the study group primarily concerned; a single sheet giving the title of the contribution, its source and a summary of its contents will be issued to the other study groups. This single sheet will be numbered in the series of contributions of each study group to which it is issued.

3.3 Temporary documents

3.3.1 Temporary documents should be provided to TSB in electronic format. TSB shall post electronically those temporary documents submitted as electronic files as soon as they become available; those submitted as paper copies will be posted as soon as practicable.

3.3.2   Extracts from reports of other study group meetings or from reports of chairmen, rapporteurs or drafting groups received less than two months before the meeting shall be published as temporary documents and distributed during the meeting to participants.

3.3.3   Temporary documents input before the start of the study group or working party meeting should be submitted as soon as possible and should normally respect the same submission deadlines as for delayed contributions.

3.3.4   Temporary documents containing extracts from reports of other study group or working party meetings shall not be reissued by TSB as normal contributions, since they have usually served their purpose at the meeting and some relevant parts may already have been included in the report of the meeting.

3.3.5   Temporary documents may be produced during the meeting.

3.4   Electronic access

3.4.1   TSB will post electronically all input documents (e.g. contributions, temporary documents, and liaison statements) as soon as electronic versions of these documents are available.

APPENDIX I

Rapporteur proposed work programme format

The following format is recommended for a work programme proposed by a rapporteur in accordance with 2.3.3.6:

a)   parent group and known scheduled meeting dates of parent group;

b)   starting point and goal including references to existing documents;

c)   anticipated results in terms of possible draft new or revised Recommendations (list titles or provide descriptions);

d)   specific tasks involved and milestone schedules;

e)   liaison required with other groups and schedules for transmitting liaisons and receiving replies;

f)   proposed rapporteur meetings, if any, for each stage of the work to be completed.

APPENDIX II

Rapporteur Progress Report format

The following format is recommended for the Progress Reports of rapporteurs to enable a maximum transfer of information to all concerned:

a)   brief summary of contents of report;

b)   conclusions or Recommendations sought to be endorsed;

c)   status of work with reference to work plan including baseline document if available;

d)   draft new or draft revised Recommendations;

e)   draft liaison in response to or requesting action by other study groups or organizations;

f)   reference to normal or delayed contributions considered part of assigned study and summary of contributions considered at rapporteur group meetings (see Note);

g)   reference to submissions attributed to collaborators of other organizations;

h)   major issues remaining for resolution and draft agenda of future approved meeting, if any;

i)   list of attendees at all meetings held since last progress report.

A Progress Report shall not be used as a vehicle to violate the rules concerning the submission of contributions that are inappropriate to the assigned study task.

NOTE – The Progress Report may make reference to the meeting reports (see 2.3.3.12) in order to avoid duplication of information.

ITU-T Recommendation A.2

Presentation of contributions relative to the study
of Questions assigned to ITU-T

(Malaga-Torremolinos, 1984; Melbourne, 1988; Helsinki, 1993; Geneva, 1996; Montreal, 2000)

1 With regard to the presentation of contributions to the study of Questions assigned to ITU-T, the following general directives should be applied:

a) Contributions should be concisely drafted, avoiding unnecessary details, tables or statistics that make no direct contribution to the study of a Question. They should be clearly written with a view to being universally understood, i.e. they should be as codified as possible, use international terminology and avoid the technical jargon peculiar to the author's country. Contributors should use the units, letter symbols and graphical symbols of the international system of units (SI) as supported by the ISO and IEC. In addition, Coordinated Universal Time (UTC) should be used to designate time. When a contribution deals with several Questions, these should be separated so that the text relating to each one begins on a fresh sheet of paper (not on the back of a page).

b) A contribution should not as a rule exceed about 2500 words (five pages), nor should it include more than three pages of figures (making eight pages in all). It should be accompanied by an abstract which is no more than 150-200 words, and which summarizes the aim of the contribution and its technical content. Whenever possible, a section with the heading Rationale (or Discussion), should be used for the main text which sets forth the essential information required for justifying the proposals or conclusions of the contribution. The contribution should end with a Proposal or, if not feasible, a Conclusion (both if required). For self-explanatory proposals, the rationale section may be omitted. These directives do not apply to draft Recommendations or to contributions submitted by rapporteurs.

c) Documents of purely theoretical interest which are not directly related to the Questions under study should not be submitted.

d) Articles which have been or are to be published in the technical press should not be submitted to ITU-T, unless they relate directly to Questions under study.

e) Passages of an unduly commercial nature included in a contribution may be deleted by the Director of TSB in agreement with the chairman; the author of the contribution shall be advised of any such deletions.

Detailed guidelines recommended for the preparation of contributions are provided in Appendix I. Details on the presentation of ITU-T texts can be found in the "Author's Guide for drafting ITU-T Recommendations "(referred to as "Guide" in the following).

2 With regard to the submission of contributions, all contributions to ITU-T meetings (normal, delayed, temporary documents, and liaison statements) should – as far as possible – be sent using electronic means; if no such facilities are available to the contributor, submission of paper only copies is acceptable.

Electronic submission facilities include e-mail, FTP via drop box or Web, and the ITU web-based interface. Detailed information and instructions for these methods are maintained by TSB on the ITU-T website and disseminated periodically via TSB circular. Electronic submissions shall be backed up by paper submissions sent via facsimile (or by mail if facsimile is not available), in order to verify that originator's formatting is retained.

Contributions shall be addressed to TSB and copied to the SG chairman and vice-chairman, working party chairmen and concerned rapporteur(s).

3 Contributions should be printable in A4 format, as far as possible. The first page must have the standard layout of ITU-T contributions. Drafts must be in one or more of the official languages of the Union. When existing ITU-T texts already translated have been used in some parts of a contribution, a copy of the contribution with a precise reference to the original sources also should be sent to TSB. If ITU-T figures are used in the contributions, the ITU-T number must not be deleted, but if the figure has been modified, the abbreviation "mod" should be added after the number. If not required by further development of the text, use of colours in the text of contributions or other submitted documents should be avoided.

4 If a contribution contains electronic material (software, test data, etc., referred to herein as "software"), it should be attached to the text sent to TSB.

Contributors are encouraged to submit formal language descriptions as electronic attachments.

5 The first page of each contribution should follow the example shown in Figure I.1.

6 Normal contributions which are to be considered at a study group or working party meeting shall reach TSB at least two months before the date fixed for the opening of the meeting. Delayed contributions shall arrive in TSB at least seven working days before the meeting.

APPENDIX I

**Detailed guidelines for the preparation of contributions
relative to the study of ITU-T Questions**

NOTE – These guidelines will be updated by TSB as necessary. The updated version will be maintained on the ITU-T website and issued in a TSB circular.

The guidelines in this appendix supplement the general directives set out in Recommendation A.2. For ease of reference, they are organized under relevant headings in two categories: one deals with the contents of the contribution and the other the mechanics of its presentation.

I.1 Contents of contribution

A contribution should be clear, concise and comprehensive in itself. It should start with the Heading and the Abstract which are independent sections. The main text of the contribution should contain two sections: Rationale (or Discussion) and Proposal (or Conclusion). Supplementary sections such as annexes, if necessary, should follow the main text. The guidelines for the structure of the main text do not apply to draft Recommendations or to submission by rapporteurs.

I.1.1 *Heading* – The heading of a contribution should provide:
– language in which the contribution is originated;
– study group Question number(s) which the contribution is addressing;
– date of the contribution;
– name of the study group to which the contribution should be submitted;
– source of the contribution: originating country and/or organization and as a footnote, author or contact person with address, telephone, fax and e-mail numbers;
– title of the contribution.

An example of the recommended format is given in Figure I.1.

**TELECOMMUNICATION
STANDARDIZATION SECTOR**

STUDY PERIOD 2001 - 2004

**COM 12-<no>-E
mmm/yyy
Original: English**

Question(s):

STUDY GROUP 12 - CONTRIBUTION <no>

SOURCE*:

TITLE:

————

* **Contact:**

Tel:
Fax:
E-mail:

Figure I.1/A.2

I.1.2 *Abstract* – The abstract should outline clearly and concisely the aim (for example, proposal for a new Recommendation) and the content (proposals and/or conclusions of the contribution). In addition, it should enable prospective readers to determine quickly whether the contribution contains information in their area of interest, and often which working party(ies) should review the contribution. This is a very important part of the document and would normally be prepared after the other sections are written. An abstract should not exceed 150-200 words. It should be understandable by other study groups and not just the intended readers of the contribution.

I.1.3 *Rationale (Discussion)* – This section should provide discussion, reasons and justification for the proposals or conclusions. It develops the theme, describing the methods used and the observations or findings, and comments on their significance.

I.1.4 *Proposal (Conclusion)* – The main text should end with a conclusion which, whenever possible, should be in the form of a concrete proposal indicating the intended disposition of the contribution. It would be useful to make the following distinction between Proposal and Conclusion, so that a standard approach to their application may be adopted. The heading Proposal should be used when the section offers suggestions for acceptance (such as solutions, plans and changes the contributor expects to be implemented) and when decisions or actions are requested. The heading Conclusion should be used when it is merely informational, such as summarizing observations; and

no decision about a course of action is expected. If both appear in a contribution, the proposals should follow the conclusions.

I.1.5 *Supplementary Sections* – Supporting or more detailed information which might interrupt the flow of ideas in the main text should be placed in the sections containing annexes, appendices, references and attachments. A solid line can be used to separate such sections from the main text. "The Guide" describes the distinction between the uses of Annex and Appendix.

I.2 Mechanics and presentation

I.2.1 *Clause numbering* – The contribution should be structured logically and, whenever clarity and flow demand, hierarchically with discrete clauses and subclauses for presenting different levels of detail. Different clauses and subclauses in the main text should be designated with decimal numbers, adhering as much as possible to the hierarchical numbering system recommended for ITU-T texts (see "Guide"); for example, 1.1, 1.2.3. Examples for numbering the supplementary sections are A.1.1 of Annex A and VI.3.4 of Appendix VI.

I.2.2 *Page numbering* – The title page should be left unnumbered. All the following pages should be numbered consecutively from page 2, including tables, annexes, appendices or attachments. Page numbers should normally be centered at the top of the page. Each page should include the document number (if available) immediately below the page number. It is useful to show the total number of pages with the page number, e.g. 2 of 10.

I.2.3 *Figures and diagrams* – Figures and diagrams must be clear and legible when printed in A4 format.

I.2.4 *Formulae* – Mathematical formulae should only be presented for explaining texts. Details of how they are derived should be avoided.

I.2.5 *Quotations* – Simple reference to the document number or paragraph number of an existing text or key phrase should be used instead of lengthy quotes. Material available elsewhere in ITU-T should not be reproduced or quoted at length. Excerpts or brief summaries may be included in the contribution when it is known that the members of the ITU-T study group do not have ready access to such material.

I.2.6 *References* – Reference to other ITU-T contributions or Recommendations should be made by using the official document number, e.g. COM 14-10. If the referenced contribution belongs to a previous study period, this fact should be noted as well.

References to standards other than ITU or ISO/IEC publications or standards should conform to the requirements of Recommendation A.5. Other publications not covered by Recommendation A.5 may be referenced in a Bibliography.

(See "Guide" for more information on references and bibliographies.)

I.2.7 *Revision to existing text* – If a contribution proposes modifications to an existing text, e.g. draft Recommendation, the portions of the text to be modified should be clearly shown with revision marks. Adequate indications shall also be given to identify any changes proposed with regard to the previous version of the same text.

Such change indications could be made for example by strikethrough, underlining and by vertical revision bars (|) appearing at the margin of the page.

ITU-T Recommendation A.4

Communication process between ITU-T and forums and consortia

(Geneva, 1996; Montreal, 2000)

1 Introduction

The purposes of the International Telecommunication Union are contained in Article 1 of the Constitution. These include the aim "to promote, at the international level, the adoption of a broader approach to the issues of telecommunications in the global information economy and society, by cooperating with other world and regional intergovernmental organizations, and those non-governmental organizations concerned with telecommunications".

Also noted are the challenges faced by the Union in achieving its purposes in the changing telecommunication environment, both in the period covered by the Strategic Plan for the Union for 1995-1999 and in the following period, as stated in Resolution 1 (Plenipotentiary Conference, Kyoto, 1994). The Annex to Resolution 1 elaborates the Strategic Plan. For the Standardization Sector, its strategy includes recognition of the growing influence of industry forums, and a specific goal to develop appropriate agreements and cooperative relationships with other organizations including forums. Among the priorities identified for the Sector is the objective "to continue to cooperate with other global and regional standardization organizations and industry forums to harmonize the development and implementation of global telecommunication standards".

In order to facilitate the development of cooperative relationships with forums, and to encourage information exchange, it is deemed necessary to provide guidance on the means of communication. In particular, it is of benefit to establish procedures for use when structuring the communications process between ITU-T and forums and consortia.

WTSA decides that the following procedures be applied.

2 Procedures

Study group chairmen are encouraged to engage in two-way communication, where appropriate, with representatives of forums/consortia, and to invite presentation to their study groups of the work of the forums/consortia, as identified by the study group.

In addition, procedures have been introduced for a formal communication process between ITU-T (or one or more of the study groups) and forums/consortia that qualify according to the criteria in Annex A. The communication process permits document exchange between ITU-T and qualified forums/consortia.

2.1 Establishment of the communication process

Establishment of a communication process with a forum/consortium should be considered on a case-by-case basis, and should be evaluated with due care and diligence using the set of criteria in Annex A. Normally, the process is established at the study group level. In the case of groups associated with one or more study groups, the evaluation and decision to proceed should be carried out by the lead study group. To avoid multiple requests to a forum/consortium for information pertaining to the criteria in Annex A, and to facilitate evaluation by study groups, the Director of TSB should make the request to the forum/consortium and subsequently make a preliminary analysis of the response. A schematic diagram of the communication process is provided in Appendix I.

2.1.1 Communication process initiated by an ITU-T study group

If a study group considers that it is beneficial to establish a communication process with a forum/consortium, the study group should first check the A.4-qualified organizations list (see 2.3) and obtain the Director's analysis. The study group shall review the analysis and make a decision whether or not to communicate with the forum/consortium. If the forum/consortium in question is not in the list, the study group chairman asks the Director to request the forum/consortium to provide the information and fill in the questionnaire relating to the qualifying criteria set forth in Annex A. The Director performs a preliminary analysis of the forum/consortium and transmits it to the affected study group(s) which shall review the analysis and make a decision whether or not to communicate. Any areas of concern should be immediately shared with other interested study group chairmen and the Director. If the study group decides to approve, the study group chairman shall establish the communication process. The study group chairman should facilitate the process as described in 2.2.

2.1.2 Communication process initiated by a forum/consortium

If a forum/consortium wishes to establish a communication process with a study group, that study group should first check the A.4-qualified organizations list (see 2.3) and obtain the Director's analysis. The study group shall review the analysis and make a decision whether or not to communicate with the forum/consortium. If the forum/consortium is not in the list, the procedure described for this case in 2.1.1 is applied. Any areas of concern should be immediately shared with other interested study group chairmen and the Director. If the study group decides to approve, the communication process can be established. The study group chairman should facilitate the process as described in 2.2.

If a forum/consortium contacts the Director of TSB to establish a communication process with ITU-T, the Director should first determine whether it is appropriate for:

a)   ITU-T (for related policy issues); or

b)   one or more study groups (for topics relating to their work).

In case (a), the Director evaluates the forum/consortium according to the criteria in Annex A. If the Director decides to approve, he shall establish the communication process and inform TSAG and all study groups.

In case (b), the Director performs a preliminary analysis and transmits it to the affected study group(s) which shall proceed as outlined in the first paragraph of 2.1.2. If multiple study groups are involved, the decision of each study group should be communicated to the others, to TSAG and to the Director of TSB.

2.2   Communication process once established

2.2.1   Documents sent to A.4-qualified forums/consortia

The decision to send documentation (referred to as "communication statement", including requests for documentation) to an A.4-qualified forum/consortium should be made by a study group chairman with the agreement of the study group. The documentation is sent to the forum/consortium by TSB on behalf of the study group.

2.2.2   Documents received from A.4-qualified forums/consortia

Documents submitted to ITU-T by qualified forums/consortia should conform to criterion 8 in Annex A. These documents are not issued as Contributions. They are issued by the study group concerned as Temporary Documents with a reference to the originating forum/consortium.

2.3   A.4-qualified organizations list

The Director of TSB is requested to maintain an up-to-date A.4-qualified list of the forums/consortia which are under evaluation and/or have been approved for the communication process, including identification of the study groups concerned and make it available on-line.

2.4   Copyright arrangements

The subject of modifications to texts and arrangements for royalty-free copyright licenses, including the right to sub-license, for texts accepted by either ITU-T or by forums/consortia and their publishers and others, is a matter to be agreed upon between TSB and the particular forums/consortia. However, the originating organization retains the copyright for its texts.

ANNEX A

Qualifying criteria for forums/consortia communication process

NOTE – An Administration may require that "communications" to ITU-T or its study groups, from a forum/consortium within that Administration's jurisdiction, follow its established national procedures.

Forum/consortium attributes	Desired characteristics
1 Objectives/relationship of work to ITU-T work	Objectives should refer to use of International Standards/Recommendations, or to the provision of input into international standards organizations, especially ITU-T
2 Organization: – legal status – geographic scope – secretariat – nominated representative	– should indicate in which country/countries it has legal status – should be global (i.e. should involve more than oneregion of the world) – permanent secretariat should exist – should be willing to nominate a representative
3 Membership (openness)	– forums/consortia membership criteria should not preclude any party with material interest, especially ITU Member States and Sector Members – membership should comprise a significant representation of telecommunications interests
4 Technical subject areas	Should be relevant to a particular study group(s) or ITU-T as a whole
5 IPR Policy: – patent – software copyright – copyright – trademark	– should be consistent with ITU-T Patent policy – should be consistent with ITU-T Software copyright Policy – ITU and ITU Member States and Sector Members should have right to copy for standardization related purposes (see also ITU-T A.1 with regard to copying and distribution)
6 Working methods/processes	– should be well-documented – should be open and fair – should support competition – should explicitly consider anti-trust issues

Forum/consortium attributes	Desired characteristics
7 Outputs	– outputs available to ITU-T should be identified
	– process for ITU-T to obtain outputs should be identified
8 Documents submitted to ITU-T	– should contain no proprietary information (no distribution restriction)
	– should indicate source within the forum/consortium (e.g. committee, subcommittee, etc.)
	– should indicate degree of stability of the document (e.g. preliminary, mature, stable, proposed date of adoption, etc.)
	– should indicate degree of approval of document (i.e. per cent of total forum membership involved and per cent of total forum membership that approved the document)

APPENDIX I

Establishment of a process for cooperation and exchange of information under ITU-T A.4

	1 **Initiation** (includes questionnaire in Annex A)	2 **Evaluation** according to the criteria	3 **Decision**	4 **Process once Established** = implementation
2.1.1	initiation of the request by an SG	the SG checks the A.4-qualified list and reviews the analysis; if not in the list, see 2.1.2 b)	the SG decides to communicate	communication process put into practice by the SG
2.1.2	initiation of the request by a forum to an SG	the SG checks the A.4-qualified list and reviews the analysis; if not in the list, see 2.1.2 b)	the SG makes a decision to approve communication	communication process put into practice by the SG
2.1.2 a)	initiation of the request by a forum to the Director for related policy issues	evaluation by the Director	the Director decides to approve and informs TSAG + SGs	communication process put into practice by the Director
2.1.2 b)	initiation of the request by a forum to the Director for SG issues	the Director performs a preliminary analysis, the SG reviews the analysis	the SG decides to communicate, the SG informs other SGs, TSAG and the Director	communication process put into practice by the SG
		Director adds forum under evaluation to the list	Director indicates in the list that forum is A.4-qualified	

ITU-T Recommendation A.5

**Generic procedures for including references to documents of other organizations
in ITU-T Recommendations**

(Montreal, 2000)

1 Scope

This Recommendation provides generic procedures for referencing the documents of other organizations in ITU-T Recommendations. Clause 1 outlines the Scope, clauses 2 and 3 describe the procedures in detail. Annexes A through F each provide information specific to an organization. It is intended that future versions of this Recommendation will include further annexes containing information regarding additional organizations. Appendix I provides the format for documenting a study group decision with respect to making the reference.

NOTE – These generic procedures do not apply to references to standards produced by ISO and IEC. The long-standing ability to make such references continues unchanged.

2 Generic procedures for including references to documents of other organizations in ITU-T Recommendations

2.1 A member of an ITU-T study group identifies the need to make a specific reference (either normative or non-normative) to a document from another organization (referred to as the "referenced organization") within a specific draft Recommendation. It is preferred that, rather than making reference to an entire document from an outside organization, reference be made to only the specific section(s) concerned.

Two types of reference are considered in this Recommendation:

i) **Normative reference –** The whole, or parts of a document to which it is necessary to conform in order to claim compliance to the Recommendation containing the reference.

ii) **Non-normative reference** – The whole, or parts of a document where the referenced document has been used as supplementary information in the preparation of the Recommendation or to assist the understanding or use of the Recommendation and to which conformance is not necessary.

> NOTE – The term "document" refers to output (such as Standards, Recommendations, Specifications, Implementation Agreements, etc.) of other organizations (such as forums/consortia, standards development organizations, etc.).

The requirements of 2.2 and 2.3 do not apply for non-normative references since such referenced documents are not considered to be an integral part of an ITU-T Recommendation. They are documents that add to the reader's understanding but are not essential to the implementation of or compliance with the Recommendation.

2.2 For normative references, the member submits a contribution to the study group providing information as outlined in 2.2.1 to 2.2.10.

The study group evaluates this information and decides whether to make the reference. The preferred format for documenting the study group decision is given in Appendix I.

Specific details for referencing ISOC/IETF documents are provided in Annex A, those for referencing The ATM Forum documents are contained in Annex B, those for referencing Committee T1 documents are in Annex C, those for referencing Telecommunications Industry Association (TIA) documents are in Annex D, those for referencing Institute of Electrical and Electronics Engineers (IEEE) documents are in Annex E, and those referencing Telecommunication Technology Committee (TTC) documents are in Annex F. It is intended that future versions of this

Recommendation will include further annexes containing information regarding additional organizations.

2.2.1 A clear description of the document considered for reference (type of document, title, number, version, date, etc.).

2.2.2 Status of approval. Referencing a document that has not yet been approved by the referenced organization can lead to confusion; thus normative referencing is usually limited to approved documents. If absolutely necessary, such a reference can be made where cooperative work requiring cross-references is being approved by ITU-T and another organization in approximately the same time frame.

2.2.3 Justification for the specific reference, including why it is inappropriate to incorporate the full text in the Recommendation.

2.2.4 Current information, if any, about IPR issues (patents, copyrights, trademarks).

2.2.5 Other information that might be useful in describing the "Quality" of the document (e.g. length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

2.2.6 The degree of stability or maturity of the document.

2.2.7 Relationship with other existing or emerging documents.

2.2.8 When a document is to be referenced in an ITU-T Recommendation, all explicit references within the referenced document should also be listed.

2.2.9 Qualification of referenced organization (per clause 3). This need only be done the first time a document from the referenced organization is being considered for referencing and only if such qualification information has not been documented already.

2.2.10 A full copy of the existing document. No reformatting is necessary. The objective is to have referenced documents available via the Web at no cost so that the study group members may proceed with their evaluation. Accordingly, if a document to be referenced is available in this manner, it is sufficient for the contributing member to provide its exact location on the Web. On the other hand, if the document is not available in this manner, a full copy must be provided (in electronic format if permissible by the referenced organization, otherwise in paper format).

2.3 For normative references only, the study group evaluates the above information and comes to its conclusions based on the usual consensus process. The decision of the study group shall be documented using the format in Appendix I. This requirement must be completed, at the latest, at the time the Recommendation is approved.

The study group report may simply note that the procedures of Recommendation A.5 have been satisfied and provide a pointer to the document where the full details reside.

2.4 If the study group decides to make the reference, it should be introduced with the standard text provided in 2.9 of Appendix I/A.3 (1996). Additionally, a note shall be added stating: "NOTE – The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation."

NOTE – In the case of texts produced jointly by ITU-T and ISO/IEC JTC 1, it is recognized that Recommendation A.23 applies [see 6.6 of Appendix II of Annex A/A.23 (1996)].

2.5 If instead of referencing the study group decides to incorporate the text of another organization into the text of a Recommendation, then permission of that organization must be obtained. At the earliest possible moment, upon the request of the study group, TSB should request from the organization a written statement that it agrees to the incorporation of the specific text in ITU-T Recommendations. An applicable prior written statement may be used instead. Should the organization decline to provide such a statement, the incorporation shall not be made.

3 Qualification of referenced organization

To ensure the continued quality of ITU-T Recommendations, not only is it necessary to evaluate the document being proposed for reference, it is also necessary to consider the referenced organization according to the criteria set out in 3.1, 3.2 and 3.3:

3.1 The criteria used for qualifying organizations, as documented in items 1 to 6 of Annex A/A.4 or items 1 to 6 of Annex A/A.6, should be used. If the referenced organization has already been qualified according to Recommendations A.4 or A.6, the evaluation need not be repeated, and only a note of the result is required.

3.2 In addition, the referenced organization should have a process by which its output documents are published and regularly maintained (i.e. reaffirmed, revised, withdrawn, etc.).

3.3 The referenced organization should also have a document change control process, including a clear, unambiguous document numbering scheme. In particular, a feature to look for is that updated versions of a given document be distinguishable from the earlier versions.

ANNEX A

Referencing ISOC/IETF documents

The documents of the Internet Society (ISOC)/Internet Engineering Task Force (IETF) are referred to as RFCs (Requests For Comment). The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes items 1-10 below:

1 A clear description of the RFC (standards document or not, title, number, version, date, etc.).

2 Status of approval.

3 Justification for the specific reference to the RFC.

4 Current information, if any, about IPR issues (some information may be available in the IETF IPR archives at **http://www.ietf.org/ipr.html**).

5/6 The degree of maturity and "Quality" of the RFC, i.e.:

   i) For a standards document, whether it is:

- **Best Current Practice**

  (defines procedures and operational issues; considered the recommended way to perform a certain function; not required to describe actual current practice).

- **Proposed Standard**

  (generally stable and well-understood; real implementation desirable but not necessary; no known technical flaws; considered immature; may be changed if problems are found or better solutions are identified; deploying implementation of such standards into a disruption-sensitive environment is not recommended).

- **Draft Standard**

  (at least two independent, interoperable implementations and sufficient successful operational experience exist; if IPR issues are known, then independent implementations must be based on at least two separate exercises of the licensing process; considered mature and final form of specification).

- **Internet Standard**

  (significant implementation and successful operational experience has been obtained).

   ii) For a non-standards document, whether it is:

- **Informational**; or

- **Experimental**.

7   Relationship of the RFC with other existing or emerging documents.

8   When a document is referenced in an ITU-T Recommendation, all explicit references within the referenced document should also be listed.

9   Qualification of ISOC/IETF:

9.1-9.6 Decisions of ITU Council to admit ISOC to participate in the work of the Sector (June 1995 and June 1996).

9.7   The Internet Engineering Steering Group (IESG) is responsible for ongoing maintenance of the RFCs when the need arises. Comments on RFCs and corresponding changes are accommodated through the existing standardization process.

9.8   Each revision of a given RFC has a different RFC number, so no confusion is possible. All RFCs always remain available on-line. An index of RFCs and their status may be found in the IETF archives at **http://www.rfc-editor.org/rfc.html**.

10   Other: If the study group decides to make the reference to the RFC, the reference should always be made by RFC number (and not by other designations such as STD, BCP, etc.). References should not be made to documents referred to as "Internet Drafts" or RFCs categorized as "Historic". Normative references should not be made to RFCs that are not standards, for example, "Informational" and "Experimental" RFCs.

ANNEX B

Referencing The ATM Forum documents

The output documents of The ATM Forum are referred to as Implementation Agreements or, in some cases, as Specifications. The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes items 1-9 below:

1   A clear description of The ATM Forum Specification or Implementation Agreement (identification number, date of approval, title).

2   Status of approval.

3   Justification for the specific reference, including a statement that "The ATM Forum prefers that its approved documents be referenced rather than reproduced within ITU-T Recommendations".

4   Current information, if any, about Intellectual Property Rights issues, including a statement that "An on-line identification of patent declarations is available at the following URL: **http://www.atmforum.com/specs/patent_decl.html**".

5/6   Only approved Implementation Agreements or Specifications of The ATM Forum should be referenced in published ITU-T Recommendations.

7   Relationship of The ATM Forum Implementation Agreement or Specification with other existing or emerging documents.

8   When a document is referenced in an ITU-T Recommendation, all explicit references within the referenced document should also be listed.

9   Qualification of The ATM Forum:

9.1-9.6 Qualification decision was made by ITU-T in 1995 and is reflected in the Director's Action List.

9.7   The ATM Forum is responsible for ongoing maintenance of its Specifications and Implementation Agreements when the need arises. Comments on those documents,

reflecting implementation experience, may be captured in Implementation Tip Sheets or in clearly identified new versions of the Specifications that are posted on the public web site of The ATM Forum. The procedures for withdrawal of Specifications are documented in the Membership Guidelines of The ATM Forum.

9.8 Each revision of a given Specification or Implementation Agreement has a different identification number, so no confusion is possible. All approved documents always remain available on-line. An index of the approved documents may be found on the public web site of The ATM Forum **http://www.atmforum.com/atmforum/specs/approved.html**.

A "Spec Watch", providing the current work plan including status of draft documents, is maintained on-line also **http://www.atmforum.com/atmforum/specs/specwatch.html**.

ANNEX C

Referencing Committee T1 documents

The output documents of Committee T1 are referred to as American National Standards (ANSs). Technical Requirements (TRQs), or Technical Reports (TRs). The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes items 1-10 below. A template is available at **<http://www.t1.org/html/a5.htm>**

1 A clear description of Committee T1 document (identification number, date of approval, title).

2 Status of approval.

3 Justification for the specific reference (including why incorporation of the full text in the Recommendation is inappropriate).

4 Current information, if any, about Intellectual Property Rights.

5 Other useful information describing the "quality" of the document (for example, the length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

6 The degree of stability or maturity of the document; i.e. "Approved", since only approved documents are acceptable references.

7 Relationship of the Committee T1 document with other existing or emerging documents.

8 Nested references: When a document is referenced in an ITU-T Recommendation, all explicit references within that referenced document should also be listed. Normally, copying the list of references from an electronic copy of the text is sufficient.

9 Qualification of Committee T1: Committee T1 and, on its behalf, its sponsoring organization, the Alliance for Telecommunications Industry Solutions (ATIS), were recognized under the provisions of ITU-T Recommendation A.5 on 1 November 1999. Qualifying information is on file in TSB.

10 Other (for any supplementary information).

ANNEX D

Referencing TIA documents

The output documents of the Telecommunications Industry Association (TIA) are referred to as American National Standards, Interim Standards (IS) or Telecommunications Systems Bulletins

(TSBs). The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes items 1-10 below:

1   A clear description of the TIA document (including identification number, date of approval, title).

2   Status of approval.

3   Justification for the specific reference (including why incorporation of the full text in the Recommendation is inappropriate).

4   Current information, if any, about Intellectual Property Rights (TIA IPR information is available at: **http://www.tiaonline.org/standards/sfg/advisories/adv11c.cfm**).

5   Other useful information describing the "quality" of the document (e.g. the length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

6   The degree of stability or maturity of the document; i.e. "Approved", since only approved documents are acceptable references.

7   Relationship of the TIA document(s) to other existing or emerging documents.

8   Nested references: When a document is referenced in an ITU-T Recommendation, all nested references within that referenced document should also be listed. Normally, copying the list of references from an electronic copy of the text is sufficient.

9   Qualification of the TIA: The TIA was recognized under the provisions of ITU-T Recommendation A.5 on 1 November 1999. Qualifying information is on file in TSB.

10   Other (for any supplementary information).

ANNEX E

Referencing IEEE documents

The output documents of the Institute of Electrical and Electronics Engineers (IEEE) are referred to as standards. Some of these standards are approved by ISO/IEC JTC 1 in which case they are joint IEEE and ISO/IEC JTC 1 Standards. Some of these standards are recognized by the American National Standards Institute in the United States as well as by appropriate processes in other countries. The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes items 1-10 below:

1   A clear description of the IEEE document (identification number, date of approval, title).

2   Status of approval.

3   Justification for the specific reference (including why incorporation of the full text in the Recommendation is inappropriate).

4   Current information, if any, about Intellectual Property Rights.

5   Other useful information describing the "quality" of the document (e.g. length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

6   The degree of stability or maturity of the documents; i.e. "Approved", since only approved documents are acceptable references.

7   Relationship of IEEE standards with other existing or emerging documents.

8   When a document is referenced in an ITU-T Recommendation, all explicit references within the reference document should also be listed.

9   Qualification of the IEEE: The IEEE was recognized under the provisions of ITU-T Recommendation A.5 on 1 November 1999. Qualifying information is on file with TSB.

10 Other (for any supplementary information).

ANNEX F

Referencing TTC documents

The output documents of the Telecommunication Technology Committee (TTC) are referred to as TTC standards. The information that should be included in the ITU-T member contribution, following the format in Appendix I, includes 1-10 below:

1 A clear description of the TTC document (including identification number, date of approval, title).

2 Status of approval.

3 Justification for the specific reference (including why incorporation of the full text in the Recommendation is inappropriate).

4 Current information, if any, about Intellectual Property Rights (TTC IPR information is available at **http://www.ttc.or.jp/e/intro/rules/ru6/index.html**).

5 Other useful information describing the "quality" of the document (e.g. the length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

6 The degree of stability or maturity of the document; i.e. "Approved", since only approved documents are acceptable references.

7 Relationship of the TTC document(s) to other existing or emerging documents.

8 Nested references: When a document is referenced in an ITU-T Recommendation, all nested references within that referenced document should also be listed. Normally, copying the list of references from an electronic copy of the text is sufficient.

9 Qualification of the TTC: TTC was recognized under the provisions of ITU-T Recommendations A.5 and A.6 on 29 November 1999. Qualifying information is on file in TSB.

10 Others (for any supplementary information).

APPENDIX I

Format for documenting a study group decision

The decision of the Study Group with respect to making the normative reference must be documented in the meeting record using the following format:

1 Clear description of the document.

 (type of document, title, number, version, date, etc.).

2 Status of approval.

3 Justification for the specific reference:

 (including why incorporation of the full text in the Recommendation is inappropriate).

4 Current information, if any, about IPR issues:

 (including patents, copyrights, trademarks).

5 Other useful information describing the "Quality" of the document:

(e.g. length of time it has existed, whether products have been implemented using it, whether conformance requirements are clear, whether the specification is readily and widely available).

6   The degree of stability or maturity of the document.

7   Relationship with other existing or emerging documents.

8   When a document is referenced in an ITU-T Recommendation, all explicit references within that referenced document should also be listed.

9   Qualification of referenced organization:

(This need only be done the first time that a document from the referenced organization is being considered for referencing and only if such qualification information has not been documented already).

9.1   Objectives.

9.2   Organization: legal status and secretariat.

9.3   Membership.

9.4   Technical subject area.

9.5   IPR Policy.

9.6   Working methods/processes.

9.7   Document publication and maintenance process.

9.8   Document change control process.

10   Other (for any supplementary information).

ITU-T Recommendation A.6

Cooperation and exchange of information between ITU-T and national and regional standards development organizations

(Geneva, 1998; Montreal, 2000)

1 Scope

In order to facilitate the development of cooperative relationships with national and regional standards development organizations, and to encourage cooperation and information exchange, procedures are provided, founded on the basis of reciprocity, for use when structuring the cooperation and information exchange process.

"National and regional standards development organizations", referred to as "standards development organizations" (SDO) in the text that follows, are those organizations that develop standards recognized and implemented at the national and/or regional level. In this Recommendation, the term "approved document" refers to an official output of a standards development organization which has been formally approved. The term "draft document" refers to an output, which is still in draft form.

2 Procedures

Study groups are encouraged to make use of documents, both approved and in draft form, provided by standards development organizations as appropriate. Similarly, standards development organizations are encouraged to make use of draft or approved ITU-T Recommendations. This Recommendation contains procedures for formal cooperation and exchange of information between ITU-T study groups and standards development organizations that qualify according to the criteria in Annex A. In particular, this Recommendation addresses the case of an organization accepting texts, in part or in whole, from another organization. The case of normative referencing is addressed in ITU-T A.5.

2.1 Establishment of the process for cooperation and exchange of information

Establishment of a process for cooperation and exchange of information between ITU-T study groups and standards development organizations should be considered on a case-by-case basis, and should be evaluated with due care and diligence using the set of criteria in Annex A. For ITU-T, the process is established at the study group level; for standards development organizations, the process is established at the appropriate level. To avoid multiple requests to a standards development organization for information pertaining to the criteria in Annex A, and to facilitate evaluation by study groups, the Director of TSB makes such requests, and subsequently makes an analysis of the responses to verify that the organizations meet the relevant criteria. A schematic diagram of the process is provided in Appendix I.

2.1.1 Exchange of information initiated by an ITU-T study group

If a study group considers that it is beneficial to establish an exchange of information or documents with a standards development organization, the study group should first consult the A.6-qualified organizations list (see 2.3) and obtain an analysis of that standards development organization from the Director. The study group reviews the analysis and decides whether or not to communicate with the standards development organization. If the standards development organization in question is not in the list, the study group chairman asks the Director to request the standards development organization to provide the information and fill in the questionnaire relating to the qualifying criteria set forth in Annex A. The Director performs a preliminary analysis of the standards development

organization and transmits it to the affected study group(s) which shall review the analysis and make a decision whether or not to communicate. Any areas of concern should be immediately shared with other interested study group chairmen and the Director. If the study group decides to approve, the study group chairman establishes the cooperation document acceptance and exchange processes in accordance with 2.2.

2.1.2 Exchange of information initiated by a national or regional standards development organization

If a standards development organization contacts the Director of TSB to establish an exchange of information or documents with ITU-T, the Director should first determine whether the exchange of information or documents is relevant to:

a)   the ITU-T Sector (for related policy issues); or

b)   one or more study groups (for topics relating to their work).

In case (a), the Director evaluates the standards development organization according to the criteria in Annex A. If the Director decides to approve, he establishes the exchange and informs TSAG and all ITU-T study groups.

In case (b), the Director performs an analysis and transmits it to the affected study group(s) which shall review the analysis and make a decision whether or not to communicate. If multiple study groups are involved, the decision of each study group should be communicated to the others, to the TSAG and to the Director of TSB.

2.2 Process for cooperation and exchange of information once the process is established

2.2.1 Documents sent to A.6-qualified national and regional standards development organizations

A standards development organization may accept, in whole or in part, the text of a draft or approved ITU-T Recommendation, as all or part of the text of its draft document, with or without modification to the ITU-T text.

When a standards development organization decides to accept ITU-T texts, it notifies TSB about the actions taken concerning those texts. The use, acceptance or reproduction of such texts by the standards development organization is subject to the copyright arrangements set out in 2.4.

The decision to send a text to an A.6-qualified standards development organization should be made by a study group chairman with the agreement of the study group. The text is sent to the standards development organization by the TSB on behalf of the study group.

2.2.2 Documents received from A.6-qualified national and regional standards development organizations

An ITU-T study group may accept from a A.6-qualified standards development organization, in whole or in part, the text of a draft document, or an approved document, as all or part of the text of a draft ITU-T Recommendation, with or without modification to the text.

When an ITU-T study group decides to accept texts from a A.6-qualified standards development organization, it notifies the organization about the actions taken concerning those texts. The use, acceptance or reproduction of such texts by the ITU-T study group is subject to the copyright arrangements set out in 2.4.

Documents submitted to the ITU-T study groups by A.6-qualified standards development organizations should conform to criterion 8 in Annex A.

These documents are not issued as Contributions. They are issued by the study group concerned as Temporary Documents with a reference to the originating standards development organization.

2.3   A.6-qualified organizations list

The Director of TSB is requested to maintain an up-to-date A.6-qualified organizations list and associated analyses of the national and regional standards development organizations which are under evaluation and/or have been approved for cooperation and exchange of information, including identification of the study groups concerned, and make it available on-line.

2.4   Copyright arrangements

The subject of modifications to texts and arrangements for royalty-free copyright licenses, including the right to sub-license, for texts accepted by either ITU-T or by A.6-qualified standards development organizations and their publishers and others, is a matter to be agreed upon between TSB and the particular standards development organization. However, the originating organization retains the copyright for its texts.

2.5   Electronic document exchange

Where possible, the exchange of documents will be in electronic format. Questions of electronic links to enable document exchange is to be agreed upon by the Secretariats of the organizations concerned.

ANNEX A

**Qualifying criteria for cooperation and exchange of information process
with national and regional standards development organizations**

NOTE – An Administration may require that cooperation and exchange of information with ITU-T or its study groups, by a national or regional standards development organization within that Administration's jurisdiction, follow its established national procedures.

National or regional standards development organization attributes	Desired characteristics
1 Objectives/relationship of work to ITU-T work	Objectives should be the development, adoption and implementation of Standards and the provision of input into international standards organizations, especially ITU-T.
2 Organization: – legal status – accreditation – secretariat – nominated representative	 – should indicate in which country/countries it has legal status; – should indicate the accrediting entity; – should identify the permanent secretariat; – should identify a representative.
3 Membership (openness)	– national or regional standards development organization membership criteria should not preclude any party with material interest; – membership should comprise a significant representation of telecommunications interests.
4 Technical subject areas	Should be relevant to a particular study group(s) or ITU-T as a whole.
5 IPR Policy:	

National or regional standards development organization attributes	Desired characteristics
– patents – software copyright – copyright – trademark	– should be consistent with ITU-T Patent policy; – should be consistent with ITU-T software copyright policy – as per agreement between ITU-T and the organization (see also ITU-T A.1 with regard to copying and distribution)
6 Working methods/processes	– should be well-documented; – should be open and fair; – should support competition; – should explicitly consider anti-trust issues.
7 Outputs	– outputs available to ITU-T should be identified; – process for ITU-T to obtain outputs should be identified.
8 Documents submitted to ITU-T	– should indicate source within the national or regional standards development organization (e.g. committee, subcommittee, etc.); – should indicate degree of stability of the document (e.g. preliminary, mature, stable, proposed date of adoption, etc.); – should indicate status of document (i.e. working document, draft, interim or approved standard).

APPENDIX I

Establishment of a process for cooperation and exchange of information under ITU-T A.6

	1 **Initiation** (includes questionnaire in Annex A)	2 **Evaluation** according to the criteria	3 **Decision**	4 **Process once Established** = implementation
2.1.1	initiation of the request by an SG	the SG checks the A.6-qualified list and reviews the analysis, if not in the list, see 2.1.2 b)	the SG decides to communicate	communication process put into practice by the SG
2.1.2 a)	initiation of the request by an SDO to the Director for related policy issues	evaluation by the Director	the Director decides to approve and informs TSAG + SGs	communication process put into practice by the Director
2.1.2 b)	initiation of the request by an SDO to the Director for SG issues	the Director performs a preliminary analysis, the SG reviews the analysis	the SG decides to communicate, the SG informs other SGs TSAG and the Director	communication process put into practice by the SG
		Director adds the SDO under evaluation to the list	Director indicates in the list that the SDO is A.6-qualified	

ITU-T Recommendation A.7

Focus Groups: Working methods and procedures

(Montreal, 2000)

1 Scope

The objective of focus groups is to help advance the work of the ITU-T parent study group and to encourage the participation of members of other standards organizations, including experts and individuals who may not be members of ITU. Procedures and working methods are established to facilitate the financing of focus groups, the completion of work on a well-defined topic and the documentation of the results.

The role of the parent study group is clearly defined, together with a checklist (see Annex A) which is to be used when determining whether or not to form a focus group.

2 Establishment, terms of reference and leadership

2.1 Establishment

A focus group may be established to help advance the work of ITU-T study groups.

A proposal, including terms of reference, to set up a focus group on a specific topic can come from study groups (initiated by ITU-T membership) or from TSAG.

A study group shall have the necessary authority to approve the formation of a focus group and becomes its parent study group. Criteria for establishing a focus group are summarized in Annex A.

The Director of TSB and the Chairman of TSAG shall be advised accordingly.

2.1.1 Initiation and establishment of focus groups to address technical issues between study group meetings

Exceptionally, in response to urgent marketplace needs, a focus group for the purpose of studying technical issues (i.e. those which have no regulatory or policy implications) may be established between study group meetings.

A proposal, including terms of reference, to set up a focus group on a specific technical topic (within the mandate of the parent study group) may be submitted by any member to a focus group review committee for their consideration. This review committee will consist of the parent study group leadership (chairmen/vice-chairmen/working party chairmen), the TSAG Chairman and the Director of TSB.

Following agreement by the review committee to initiate the focus group, the proposal will be posted on the ITU-T Web Site and the study group membership and other study group chairmen notified by e-mail. Following the posting, the focus group may proceed.

The establishment of the focus group shall be considered for approval by the next meeting of the study group.

2.2 Terms of reference

The specific topic for a particular focus group is to be well defined (prior to approval) and the terms of reference must include a plan of action with a clear indication of the expected deliverables and the time schedules for completion.

The relationship of this work to that of the parent study group must be indicated, in addition to relationships with other ITU study groups, standards organisations, forums and consortia, etc., and the degree of urgency of the specific topic.

It is intended that a focus group will complete its work in a short period of time, typically 9-12 months, following approval of its formation.

2.3   Leadership

A chairman and vice-chairman are initially appointed by the parent study group. If needed, after the initial formation of the focus group, subsequent management appointments will be made by the focus group.

3   Participation

Participation is open to any individual from a country which is a member of ITU who wishes to contribute to the work. This includes individuals who are also members of international, regional and national organisations.

Participation in focus groups should not be used as an alternative to ITU membership.

A list of participants is to be maintained for reference purposes.

4   General financing of focus groups

Each focus group will determine its own method of financing.

Focus groups will not draw on ITU-T funds or resources except for the use of TIES and for those situations where deliverables and progress reports are made available to ITU-T, as in clause 10.

Non-ITU members must pay a fee, determined by the TSB, for the use of TIES.

4.1   Financing of meetings

It is suggested that financing of meetings and their preparation be accomplished by volunteer hosting in a similar manner to rapporteur groups, or on the basis of financial arrangements determined by the focus group.

5   Administrative support

Focus groups can establish their own method of providing and financing administrative support between meetings.

Where administrative services are requested from TSB, the costs, except costs for the use of TIES, are to be covered by the focus group concerned.

6   Meeting logistics

The frequency and location of meetings is decided by each focus group. Electronic Document Handling methods should be used as much as possible to advance the work rapidly, e.g. by using electronic conferences, World Wide Web.

7   Working language

The language to be used will be mutually agreed by the focus group participants.

8 Technical contributions

Any participant may submit a technical contribution directly to the focus group in accordance with the time schedule adopted. Electronic document transfer methods should be used whenever possible.

9 Patent policy

The TSB patent policy shall be used.

10 Deliverables

Deliverables can be in the form of technical specifications, reports, etc. and are expected to form input to the work of the parent study group.

10.1 Approval of deliverables

Focus groups can establish their own rules of approval. However, it is expected generally that approval shall be obtained by consensus in which each focus group participant can express an opinion.

10.2 Printing and distribution of deliverables

Focus groups may select the method of printing and distribution of deliverables, including the target audience. Deliverables to the parent study group should be in the form of contributions.

The use of the World Wide Web is encouraged.

All costs must be covered by individual focus groups. ITU-T will not be expected to offer any printing and distribution services free of charge, except for progress reports submitted according to clause 11, and deliverables to study groups.

11 Progress reports

Focus group progress reports are to be provided to the parent study group meeting.

These progress reports to the parent study group should include the following information:

– an updated work plan, including a schedule of planned meetings;
– status of work with reference to the work plan, including a list of outputs and the study groups for which they are intended;
– summary of contributions considered by the focus group;
– list of attendees at all meetings held since the last progress report.

The parent study group chairman should keep TSAG advised of the progress of the focus group.

12 Meeting announcements

The formation of a focus group will be announced in co-operation with the parent study group and TSAG via ITU publications and other means, including communication with other organizations and/or experts, technical journals and the World Wide Web.

The process of announcing subsequent meetings can be decided by the focus group.

13 Working guidelines

Focus groups may develop additional internal working guidelines as required.

ANNEX A

Checklist criteria

The following checklist criteria are to be used as a guide by the parent study group when determining whether or not to form a focus group:

–   the output of the focus group will help advance (e.g. time and/or content) existing or planned work of an ITU study group;

–   a parent study group has been determined;

–   the focus group has clear terms of reference with defined deliverables and time schedule;

–   deliverables are planned to be completed within the time period (generally 9-12 months) prior to the next parent study group meeting;

–   the focus group has a realistic plan for financing its activities, either through volunteer hosting, special funds, or a combination of both.

ITU-T Recommendation A.8

Alternative approval process for new and revised Recommendations

(Montreal, 2000)

1 General

1.1 ITU-T Recommendations will be approved using this alternative approval process (AAP), except Recommendations that have policy or regulatory implications, which will be approved using the traditional approval process (TAP) found in WTSA Resolution 1.

The competent study group may also seek approval at a WTSA.

1.2 In accordance with the Convention, the status of Recommendations approved is the same for both AAP and TAP methods of approval.

2 Process

2.1 Study groups should apply the AAP described below for seeking the approval of draft new and revised Recommendations as soon as they have been developed to a sufficiently mature state. See Figure 1 for the sequence of events.

3 Prerequisites

3.1 Upon request of the study group chairman, the Director of TSB shall announce the intention to apply the AAP and to initiate the last call set out in this Recommendation (see clause 4 below). Such action shall be based upon consent at a study group or working party meeting or, exceptionally, at a WTSA, that a draft Recommendation is sufficiently mature for such action. (At this stage the draft Recommendation is considered to have "CONSENT".) The Director shall include a summary of the draft Recommendation in the announcement. Reference shall be provided to the documentation where the text of the draft new or revised Recommendation to be considered may be found. This information shall be made available to all Member States and Sector Members.

3.2 The text of the draft new or revised Recommendation must be available to TSB in a final edited form at the time that the Director makes the announcement of the intended application of the AAP set out in this Recommendation. A summary that reflects the final edited text of the draft Recommendation must also be provided to TSB in accordance with 3.3 below.

3.3 Such a summary should be prepared in accordance with Author's Guide for drafting ITU-T Recommendations. This summary is a brief outline of the purpose and content of the new or revised draft Recommendation and, where appropriate, the intent of the revisions. No Recommendation shall be considered as complete and ready for approval without this summary statement.

3.4 Approval may only be sought for a draft new or revised Recommendation within the study group's mandate as defined by the Questions allocated to it, in accordance with Article 14, No. 192 of the ITU Convention. Alternatively, or additionally, approval may be sought for amendment of an existing Recommendation within the study group's responsibility and mandate.

3.5 Where a draft new or revised Recommendation falls within the mandate of more than one study group, the chairman of the study group proposing the approval should consult and take into account the views of any other study group chairmen concerned before proceeding with the application of this approval procedure.

3.6 Any ITU Member State or Sector Member aware of a patent held by itself or others, which may fully or partly cover elements of the draft Recommendation(s) proposed for approval, is requested to disclose such information to TSB, in no case later than the date scheduled for approval of the Recommendation(s) in accordance with ITU-T patent policy. The ITU-T "Patent Statement and Licensing Declaration" form (or its variant for ITU-T | ISO/IEC common text), available at the ITU-T website, should be used.

3.7 ITU-T non-member organizations that hold patent(s) or pending patent application(s) the use of which would be required in order to implement an ITU-T Recommendation can submit a "Patent Statement and Licensing Declaration" to TSB using the form (or its variant for ITU-T | ISO/IEC common text) available at the ITU-T website.

3.8 In the interests of stability, once a new or revised Recommendation has been approved, approval should not normally be sought within a reasonable period of time for any further amendment of that new text or that revised portion, respectively, unless the proposed amendment complements rather than changes the agreement reached in the previous approval process or a significant error or omission is discovered. As a guideline, in this context "a reasonable period of time" would be at least two years in most cases.

Amendments which correct defects may be approved in accordance with 7.1.

4   Last call and additional review

4.1 The last call encompasses the four-week time period and procedures beginning with the Director's announcement of the intention to apply the alternative approval procedure (3.1)

4.2 If TSB has received a statement(s) indicating that the use of intellectual property, protected by one or more copyright(s) or patent(s), issued or pending, may be required in order to implement a draft Recommendation, the Director of TSB shall post this information on the ITU-T website.

4.3 The Director of TSB shall advise the Directors of the other two Bureaux that Member States and Sector Members are being asked to comment on approval of a proposed new or revised Recommendation.

4.4 During the last call, should any Member State or Sector Member be of the opinion that the draft new or revised Recommendation should not be approved, they should advise their reasons for disapproving and indicate the possible changes that would facilitate further consideration and approval of the draft new or revised Recommendation. TSB will make the comments available to the membership of ITU-T.

4.4.1 If no comments other than comments indicating typographical error(s) (misspelling, syntactical and punctuation mistakes, etc.) are received by the end of the last call, the draft new or revised Recommendation is considered as approved, and the typographical errors are corrected.

4.4.2 If comments, other than those indicating typographical errors, are received by the end of the last call, the study group chairman, in consultation with TSB, makes the judgement whether:

1)   a planned study group meeting is sufficiently close to consider the draft Recommendation for approval, in which case the procedures in 4.6 regarding approval at a study group meeting are applied; or

2)   to save time and/or because of the nature and maturity of the work, comment resolution should be initiated under the direction of the study group chairman. This will be accomplished by appropriate study group experts, via electronic correspondence or at meetings. Revised, edited draft text is prepared as appropriate and the procedures beginning in 4.4.3 are applied.

4.4.3 After comment resolution is completed and revised and edited draft text is available, the study group chairman, in consultation with TSB, makes the judgement whether:

a)   a planned study group meeting is sufficiently close to consider the draft Recommendation for approval, in which case the procedures in 4.6 are applied; or

b)   to save time and/or because of the nature and maturity of the work, an additional review should be initiated, in which case the procedures in 4.5 are applied.

4.5   The additional review encompasses a three-week time period and will be announced by the Director of TSB. The text (including any revisions as a result of comment resolution) of the draft Recommendation in a final edited form and comments from the last call must be made available to TSB at the time that the Director makes the announcement of the additional review. Reference shall be provided to the documentation where the text of the draft Recommendation and last call comments to be considered may be found.

4.5.1   If no comments other than comments indicating typographical error(s) (misspelling, syntactical and punctuation mistakes, etc.) are received by the end of the additional review, the Recommendation is considered as approved, and the typographical errors are corrected by TSB.

4.5.2   If comments other than comments indicating typographical errors(s) are received by the end of the additional review, then the procedures in 4.6 regarding approval at a study group meeting are applied.

4.6   The Director of TSB shall explicitly announce the intention to approve the draft Recommendation at least three weeks prior to the study group meeting. The Director shall include the specific intent of the proposal in summarized form. Reference shall be provided to the documentation where the draft text and comments from the last call (and additional review, if relevant) may be found. The edited text of the draft Recommendation from the additional review (or last call if there is no additional review) is submitted for approval by the study group meeting in accordance with clause 5 below.

5   Procedure at study group meetings

5.1   The study group should review the text of the draft new or revised Recommendation and the associated comments referred to in 4.6 above. The meeting may then accept any corrections or amendments to the draft new or revised Recommendation. The study group should reassess the summary statement in terms of its completeness.

5.2   Changes may only be made during the meeting as a consequence of written comments as a result of the last call, additional review, contributions, or liaison statements. Where proposals for such revisions are found to be justified but to have a major impact on the intent of the Recommendation or to depart from points of principle agreed at the previous study group or working party meeting, consideration of this approval procedure should not be applied at this meeting. However, in justified circumstances the approval procedure may still be applied if the chairman of the study group, in consultation with TSB, considers:

–   that the proposed changes are reasonable (in the context of the documentation described in this clause) for those Member States and Sector Members not represented at the meeting, or not represented adequately under the changed circumstances; and

–   that the proposed text is stable.

5.3   After debate at the study group meeting, the decision of the meeting to approve the Recommendation under this approval procedure must be unopposed (but see 5.5, 5.7 and 5.8). Every effort should be made to reach unopposed agreement.

5.4   If despite these attempts, unopposed agreement has not been reached, the Recommendation is considered as approved if, following consultation with their Sector Members present, there is unopposed agreement of the Member States present in the meeting (but see 5.5, 5.6 and 5.8). Otherwise, the study group may authorize additional work to address the remaining issues.

5.5 In cases where a Member State or Sector Member does not elect to oppose approval of a text, but would like to register a degree of concern on one or more aspects, this shall be noted in the report of the meeting. Such concerns shall be mentioned in a concise note appended to the text of the Recommendation concerned.

5.6 A decision must be reached during the meeting on the basis of a text available in its final form to all participants at the meeting. Exceptionally, but only during the meeting, a Member State may request more time to consider its position for 5.4 above. Unless the Director of TSB is advised of their opposition within a period of four weeks from the end of the meeting, the Recommendation is approved and the Director shall proceed in accordance with 6.1.

5.6.1 A Member State which requested more time to consider its position and which then indicates disapproval within the four-week interval specified in 5.6 above is requested to include its reasons and to indicate the possible changes that would facilitate further consideration, if required, for future approval of the draft new or revised Recommendation.

5.7 A Member State or Sector Member may advise at the meeting that it is abstaining from the application of the procedure. Their presence shall then be ignored for the purposes of 5.3 above. Such an abstention may subsequently be revoked, but only during the course of the meeting.

5.8 If the draft new or revised Recommendation is not approved, the study group chairman, after consultation with the parties concerned, may proceed according to 3.1 above, without further CONSENT at a subsequent working party or study group meeting.

6 Notification

6.1 The Director of TSB shall promptly notify the membership of the results (indicating approval or non-approval) of the last call and additional review.

6.2 Within two weeks of the closing date of the study group meeting described in 5.3 to 5.5 above or, exceptionally, two weeks after the period described in 5.6, the Director of TSB shall notify whether the text is approved or not by a circular. The Director of TSB shall arrange for this information to also be included in the next available ITU Operational Bulletin. Within this same time period, the Director shall also ensure that any Recommendation agreed to is available online, with an indication that the Recommendation may not be in its final publication form.

6.3 Should minor, purely editorial amendments or correction of evident oversights or inconsistencies in the text as presented for approval be necessary, TSB may correct these with the approval of the chairman of the study group.

6.4 The Secretary-General shall publish the approved new or revised Recommendations as soon as practicable, indicating, as necessary, a date of entry into effect. However, in accordance with ITU-T A.11, minor amendments may be covered by corrigenda rather than a complete reissue. Also, where appropriate, texts may be grouped to suit market needs.

6.5 Text shall be added to the cover sheets of all new and revised Recommendations urging users to consult the ITU-T Patent database. Suggested wording is:

> "ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU Member States and Sector Members or by others outside of the Recommendation development process."

> "As of the date of approval of this Recommendation, ITU had/had not received notice of intellectual property, protected by patents/software copyrights, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate TSB databases."

6.6   See ITU-T A.11 concerning the publication of new and revised Recommendations.

7   Correction of defects

7.1   When a study group identifies the need for implementors to be made aware of defects (e.g. typographical errors, editorial errors, ambiguities, omissions or inconsistencies and technical errors) in a Recommendation, one mechanism that may be employed is an Implementors' Guide. This Guide is a historical document recording all identified defects and their status of correction, from their identification to final resolution, and would be issued in the study group's COM series of documents. Implementors' Guides shall be approved by the study group and made available to the public.

8   Deletion of Recommendations

Study groups may decide in each individual case which of the following alternatives is the most appropriate one.

8.1   Deletion of Recommendations by WTSA

Upon the decision of the study group, the chairman shall include in his report to WTSA the request to delete a Recommendation. WTSA may approve this request.

8.2   Deletion of Recommendations between WTSAs

8.2.1   At a study group meeting it may be agreed to delete a Recommendation, i.e. because it has been superseded by another Recommendation or because it has become obsolete. This agreement by the Member States and Sector Members present at the meeting must be unopposed. If unopposed agreement has not been reached, the same criteria as in 5.4 above are applied. Information about this agreement, including an explanatory summary about the reasons for the deletion, shall be provided by a circular. If no objection to the deletion is received from a Member State or a Sector Member within three months, the deletion will come into force. In the case of objection, the matter will be referred back to the study group.

8.2.2   Notification of the result will be given in another circular, and TSAG will be informed by a report from the Director. In addition, the Director shall publish a list of deleted Recommendations whenever appropriate, but at least once by the middle of a study period
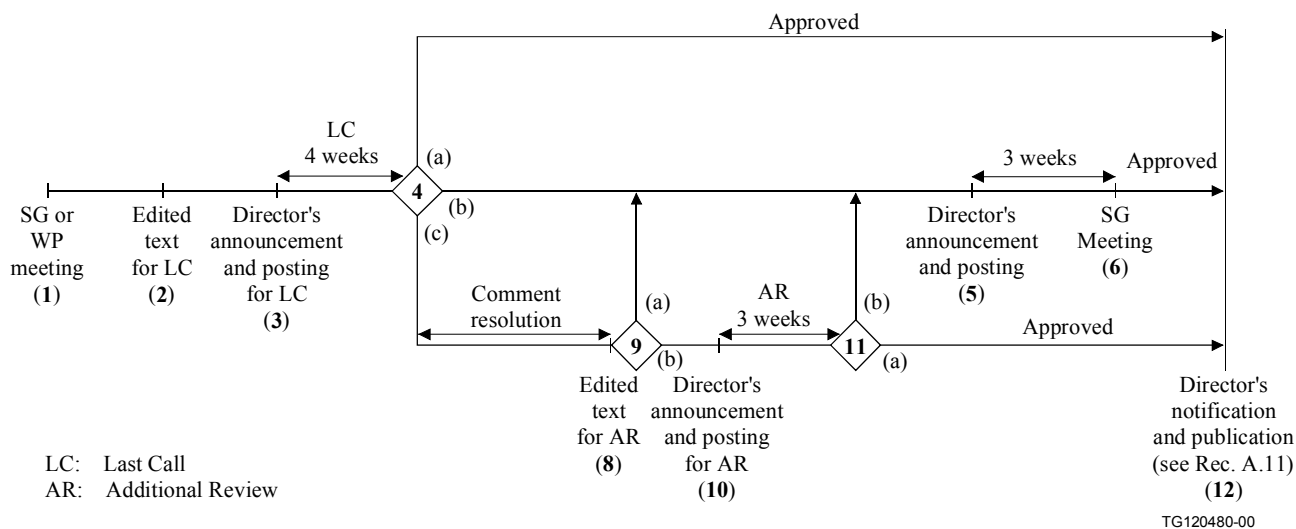
Figure 1/A.8 – Sequence of events

Notes to Figure 1 – AAP sequence of events

1) *SG or WP consent* – The study group or working party concludes that the work on a draft Recommendation is sufficiently mature to begin the alternative approval process and to initiate the last call (clause 3.1).

2) *Edited text available* – The final, edited, draft text, including summary, is provided to TSB, and the study group chairman requests the Director to initiate the last call (clause 3.2).

3) *Director's last call announcement and posting* – The Director announces the beginning of the last call to all Member States and Sector Members with reference to the summary and complete text. If the draft Recommendation has not already been electronically posted, it is done at this time (clause 3.1).

4) *Last call judgement* – The study group chairman, in consultation with TSB, makes the judgement whether:

 a) no comments other than comments indicating typographical errors have been received. In this case the Recommendation is considered as approved (clause 4.4.1);

 b) a planned study group meeting is sufficiently close to consider the comments received (clause 4.4.2); or

 c) to save time and/or because of the nature and maturity of the work, comment resolution should be initiated leading to the preparation of edited texts (clause 4.4.2).

5) *Director's study group announcement and posting* – The Director announces that the next study group meeting will consider the draft Recommendation for approval and will include reference to either:

 a) the draft Recommendation (the edited text (LC) version) plus the comments received from the last call (clause 4.6); or

 b) if comment resolution has been carried out, the revised draft Recommendation text. If the revised draft Recommendation has not already been electronically posted, it is done at this time (clause 4.6).

6) *Study group decision meeting* – The study group meeting reviews and addresses all written comments and either:

 a) approves the draft Recommendation (clause 5.3 or 5.4); or

b) does not approve the draft Recommendation. If it is concluded that a further attempt at addressing comments received is appropriate then additional work should be done and the process returns to step 2 (without further CONSENT at a working party or study group meeting) (clause 5.8).

7) *Comment resolution* – The study group chairman, with assistance from TSB and experts, including electronic correspondence and Rapporteur and working party meetings, where appropriate, addresses the comments and prepares a new edited draft Recommendation text (clause 4.4.2).

8) *Edited text available* – The revised edited text, including summary, is provided to TSB (clause 4.4.2).

9) *Next step judgement* – The study group Chairman, in consultation with TSB, makes the judgement whether:

a) a planned study group meeting is sufficiently close to consider the draft Recommendation for approval (clause 4.4.3 a); or

b) to save time and/or because of the nature and maturity of the work an additional review should be initiated (clause 4.4.3 b).

10) *Director's additional review announcement and posting* – The Director announces the beginning of the additional review to all Member States and Sector Members with reference to the summary and complete text of the revised draft Recommendation. If the revised draft Recommendation has not already been electronically posted, it is done at this time (clause 4.5).

11) *Additional review judgement* – The study group chairman, in consultation with TSB, makes the judgement whether:

a) no comments other than those indicating typographical errors have been received. In this case the Recommendation is considered approved (clause 4.5.1); or

b) comments other than those indicating typographical errors have been received. In this case the process proceeds to the study group meeting (clause 4.5.2).

12) *Director's notification* – The Director notifies the members that the draft Recommendation has been approved (clause 6.1 or 6.2).

ITU-T Recommendation A.9

Provisional working procedures for the special study group on IMT-2000 and beyond

(Montreal, 2000)

1 General

1.1 The provisional working procedures described below are applicable only to this Special Study Group. On the points not explicitly referred to by this Recommendation, the procedures that apply to other regular study groups shall apply.

1.2 The working procedures described here are intended to be applied on an initial basis, to support the improvement of working procedures within the Special Study Group with a view to increasing the effectiveness and responsiveness of ITU to marketplace needs.

1.3 The provisional working procedures described below shall take effect as soon as practicable. Additions or modifications to the working procedures, if any, should be proposed by this Special Study Group to TSAG and approved by TSAG until the next WTSA.

2 Reporting to TSAG

2.1 The Special Study Group shall report on its activities and progress to each TSAG meeting, including indication of any Recommendations that the Special Study Group has approved, together with observations on its working methods and their effectiveness.

3 Working methods other than for approving Recommendations

3.1 The Special Study Group and subgroups shall work electronically to the maximum extent possible, with paper copies of documents provided only on request. The Special Study Group should appoint a Working Methods Coordinator to assist the TSB in managing incompatibilities that may arise in various forms of documentation submitted by the participating Members. The Special Study Group should explore new electronic methods to test their effectiveness for conducting the work.

3.2 The Special Study Group and its subgroups shall not be bound by the rules governing the regular Study Groups concerning the frequency of physical meetings. The Special Study Group shall hold the minimum number of physical meetings necessary to meet its objectives in a timely manner. If it is necessary for more than one subgroup to hold a physical meeting, the dates and venue should be aligned as far as possible, to assist in the participation and coordination of the work. Physical meetings may be announced electronically with a minimum of one month notice through a specific e-mail reflector maintained by TSB for the Special Study Group.

3.3 Rapporteurs meetings may be held on request of the Rapporteur in consultation with the Special Study Group management team and after confirming their approval by electronic means. The Working Methods Coordinator shall work closely with TSB in order to optimize this process.

3.4 In addition to physical meetings, Subgroups of the Special Study Group are encouraged to hold teleconferences as much as possible.

3.5 The Special Study Group shall agree a simple process for the handling of input contributions to its work. For SSG or WP meetings, documents must be submitted a minimum of five working days before the meeting starts, be posted in an informal area of the ITU-T website – irrespective of meeting venue, be accessible to all Members, and meeting reports must be made available quickly.

The Working Methods Coordinator shall work closely with TSB to ensure maximum accessibility and timely notice of electronic documents to all Members.

4   Output

4.1   The normative output of the Special Study Group shall be Recommendations. The Special Study Group shall apply approval procedures as in other regular study groups.

4.2   The Special Study Group may also produce other forms of output as specified for other study groups, such as Implementors' Guides, Supplements, etc.

4.3   The Special Study Group may investigate alternative types of output of a lesser status than ITU Recommendations, e.g. normative technical specifications or interim Recommendations, and may make proposals for such types of output and associated approval procedures to TSAG to consider for approval.

ITU-T Recommendation A.11

Publication of ITU-T Recommendations and WTSA proceedings
(Montreal, 2000)

1   Introduction

Article 5 (No. 98) of the ITU Convention charges the Secretary-General with the task of publishing Recommendations, and Recommendation A.12 sets out the identification and layout of ITU-T Recommendations. In addition to the publication of ITU-T Recommendations, the procedures for publishing the proceedings of the world telecommunication standardization assembly (WTSA) are specified below.

It should be noted that although the designation "CCITT" has not been applied to new publications for some time, references to CCITT and ITU-T Recommendations are contained in numerous legal documents throughout the world.

2   Publication of Recommendations

2.1   Each new and revised Recommendation should be made available to the public as soon as practicable after it has been approved and in each language as soon as it is available (see Annex A).

2.2   Each new and revised Recommendation should be added to a directly accessible database of ITU-T Recommendations.

2.3   Where appropriate, these Recommendations should also be published in booklet form using A4 format[1].

2.4   Instructions (see Recommendation C.3) may be published in a different format, e.g. an A5 booklet, where appropriate.

2.5   The collection of approved Recommendations should also be published on an appropriate distribution medium.

2.6   Adequate indexing should be provided on all media.

2.7   The current status of each Recommendation in the complete range of Recommendations, including those approved by CCITT prior to 1993, should be accessible online.

2.8   At regular intervals (in principle every six months), a list of the titles of all new and revised Recommendations approved during that time should be published and made available together with a summary giving a brief outline of the purpose and content of each Recommendation.

3   Publication of WTSA proceedings

3.1   To provide a record of the proceedings of this Assembly, an ITU-T *Orange Book* should be published with the contents restricted to the following in principle:

–   Resolutions and Opinions adopted by this Assembly;

_____

[1] Where appropriate, texts may be grouped together in these booklets to suit market needs, as noted in Resolution 1, in which case publications may be delayed in agreement with the chairman of the study group concerned, to allow grouping of texts. A few Recommendations are not appropriate for paper publication (e.g. test suites, image files).

–   Recommendations on the organization of the work of ITU-T (A-series);

–   a list of the study groups, the Advisory Group and any other groups established or maintained by this Assembly, with their titles and general areas of work;

–   titles of the Questions (continuing or newly approved for study) and their allocation;

–   minutes and summary records of the meetings of this Assembly;

–   reports of the committees of this Assembly;

–   list of participants and list of documents at this Assembly.

3.2   Resolutions and A-series Recommendations should also be published individually in electronic form.

3.3   The colour of the cover of the ITU-T Book recording the results of WTSA will rotate successively through the colours of previous Books in their chronological order, i.e. white, green, orange, yellow, red and blue.

4   Associated activities

4.1   The Director of TSB should observe the annexed guidelines (see Annex A) when managing the continuing process of publishing Recommendations during the 2001-2004 study period.

4.2   The Director of TSB should report to the next WTSA and to the intervening meetings of the TSAG on any difficulties encountered in the timely publication of texts, with proposals for remedial action.

5   Relation with Council

The Director of TSB should invite Council to consider what adjustments, if any, may be needed to the ITU policy on publication, pricing, etc. in order to facilitate the rapid, wide and effective dissemination of ITU-T Recommendations.

ANNEX A

Guidelines on publication of ITU-T Recommendations

A.1   The following guidelines have been drawn up to assist in the timely publication of the approved ITU-T Recommendations. These guidelines should apply to those ITU services involved in publication and distribution of Recommendations, and (to the extent relevant) to other organizations permitted by ITU to publish and distribute Recommendations under conditions and arrangements established with ITU.

A.2   From the users' viewpoint, the main principles that need to be applied are:

a)   the maximum feasible use of electronic publishing of Recommendations through direct online access to databases which are updated as soon as possible after approval of the Recommendations and by periodic (e.g. quarterly) publication on an appropriate distribution medium;

b)   unambiguous labelling of Recommendations to identify successive versions (see ITU-T A.12);

c)   convenient (e.g. online or on a distribution medium) access to appropriate guidance and definitive information on prices, availability and current status of Recommendations;

d)   simple-to-use indexes and search facilities to locate specific subjects without necessarily knowing the titles or understanding the general structure and letter series used to designate ITU-T Recommendations.

A.3 Immediately after the conditions for its approval have been met, a new or revised Recommendation should be made available to the public in accordance with the conditions established by ITU.

The Recommendations should be made available in appropriate formats such as:

• online access – as soon as practicable;

• CD-ROM – periodically (e.g. quarterly);

• paper copy.

Minor modifications may be covered by publishing amendments or corrigenda rather than reissuing the complete Recommendation.

A.4 The current status of the complete range of Recommendations must be accessible on a database at any time. The current status should also be published twice per year.

A.5 Adequate indexing and search facilities should be provided both on a database and in hard copy.

A.6 For research and reference purposes, ITU should maintain an official copy in an archive of all Recommendations that are or were valid in the preceding twelve years.

A.7 The generally accessible database should contain currently in force versions of Recommendations.

A.8 ITU Copyright should be strictly enforced on all formats of ITU-T Recommendations.

ITU-T Recommendation A.12

Identification and layout of ITU-T Recommendations

(Montreal, 2000)

1　Scope

The Telecommunication Standardization Advisory Group (TSAG) periodically reviews the methods of identifying and laying out Recommendations as well as the Author's Guide for drafting ITU-T Recommendations, prepared and updated by the Telecommunication Standardization Bureau (TSB), providing thus detailed guidelines on format and style. This Recommendation provides principles that are applied in identifying and laying out Recommendations.

2　Identification and layout of Recommendations

2.1　All ITU-T Recommendations shall be numbered. The number of each Recommendation shall have a letter prefix referring to the series as well as a number identifying the particular subject in that series. The numbering shall be done in a manner which permits clear, unequivocal identification and facilitates electronic storage of information concerning the Recommendation. The Recommendation number shall be associated on the cover with the date of approval in the format YYYY. The month may be added if required for uniqueness.

2.2　The scope of the series identified by the letter shall be as follows:

A　Organization of the work of ITU-T

B　*Not allocated*

C　*Not allocated*

D　General tariff principles

E　Overall network operation, telephone service, service operation and human factors

F　Non-telephone telecommunication services

G　Transmission systems and media, digital systems and networks

H　Audiovisual and multimedia systems

I　Integrated services digital network

J　Cable networks and transmission of television, sound programme and other multimedia signals

K　Protection against interference

L　Construction, installation and protection of cables and other elements of outside plant

M　TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits

N　Maintenance: international sound-programme and television-transmission circuits

O　Specifications of measuring equipment

P　Telephone transmission quality, telephone installations, local line networks

Q　Switching and signalling

R　Telegraph transmission

S　Telegraph services terminal equipment

T　Terminals for telematic services

U   Telegraph switching

V   Data communication over the telephone network

W   *Not allocated*

X   Data networks and open system communications

Y   Global information infrastructure and Internet protocol aspects

Z   Languages and general software aspects for telecommunication systems

2.3   Recommendations in each series shall be classified in sections according to subject.

2.4   The title of each Recommendation should be concise (preferably no more than one line) but unique, meaningful and unambiguous. The details identifying the precise intent and coverage should be contained in the text where possible (e.g. under scope).

2.5   The date of formal approval of the Recommendation or its revision and the study group(s) responsible for coordinating proposals for any future revision shall be clearly indicated in the foreword.

2.6   The author of a new or revised Recommendation shall provide, in front of the main body of the Recommendation, a summary as outlined in the "Author's Guide for drafting ITU-T Recommendations" prepared by TSB. The author may also provide other up-front elements such as background information and keywords as provided for in the Guide.

2.7   The "Author's Guide for drafting ITU-T Recommendations" prepared by TSB should be applied in drafting new Recommendations, and, wherever practicable, in revising existing Recommendations.

ITU-T Recommendation A.13

Supplements to ITU-T Recommendations

(Montreal, 2000)

1   Introduction

In the course of its studies, each study group deals with contributions and reports, which are distributed to those organizations that have registered for participation in the study group's work and Recommendations resulting from those studies reach a much wider audience. Normally, any information that is considered as merely illustrative or supplementary to a Recommendation should be included as a (non-integral) Appendix to that Recommendation, where it is useful to the wider audience. However, there are exceptional instances where separate publication of such information is warranted, in the form of Supplements to the Recommendations.

2   Supplements

The following general principles shall be applied by study groups for the development, approval, identification and revision of Supplements:

2.1   Before proposing any new or revised text as a Supplement, a study group or TSAG should ensure, in consultation with the Director, that:

i)   the subject matter is within its mandate;

ii)   there is a sufficient need for the information on a long-term basis;

iii)   the text cannot be reasonably adapted for inclusion in an existing or new Recommendation (e.g. as an appendix);

iv)   the text is sufficiently mature and that the text follows, as far as possible, the format of the "Author's Guide for drafting ITU-T Recommendations";

v)   the text contains material which is supplementary to and associated with the subject matter of one or more Recommendations but is not essential to their completeness or understanding and implementation.

2.2   Supplements do not require approval according to Resolution 1 or Recommendation A.8 procedures; agreement by the study group or by TSAG (in case of a Supplement developed by TSAG) is sufficient.

2.3   Supplements should be limited in number and volume.

2.4   Supplements are only informative and are therefore not considered to be an integral part of any Recommendation(s). They do not imply any agreement on the part of ITU-T.

2.5   Each Supplement should be unambiguously identified by the series letter to which it is associated followed by a sequential number unique within that series.

2.6   Since Supplements are essentially reference material, no onus is implied on the issuing study group to update or to reissue Supplements. However, should reference to a Supplement be made in a Recommendation, the study group should review the applicability both of that reference and the Supplement at least once every four years, and take any necessary action.

2.7   Supplements should be included in databases along with ITU-T Recommendations, but may be deleted after consultation with the concerned study group if not reviewed or updated after a period of eight years.

2.8   To the extent practicable, Supplements will be published in a similar fashion to Recommendations, but with a lower priority, and taking into account market needs.

ITU-T Recommendation A.23

Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology

(Helsinki, 1993 amended at Geneva 1996, Montreal, 2000)

The WTSA,

considering

a) the purposes of the International Telecommunication Union set forth in Article 1 of its Constitution (Geneva, 1992) relating to the harmonization of telecommunication facilities;

b) the duties of the Telecommunication Standardization Sector (Chapter III of the Constitution, Geneva, 1992) of the International Telecommunication Union;

c) Resolution 7 (Geneva, 1996) recognizes common interests with ISO and IEC concerning telecommunication and information technologies as well as some other topics and cooperation with them by appropriate means,

decides

1 that in accordance with Resolution 7, every effort should be made in establishing respective study programmes to identify overlapping studies with a view to avoiding duplication of work;

2 that for those subjects in the fields of information technology including data transmission, multimedia, open system communications and telematic services, etc., where there is a common interest and where it is agreed that coordination is desirable, then text should be drawn up mutually and kept aligned;

3 that in carrying on the respective studies, collaborative meetings at appropriate levels should be scheduled, where necessary. In drafting aligned text, it is necessary to take into account the respective timing for approvals and publication, particularly with the ISO/IEC Joint Technical Committee 1 (JTC 1) on Information Technology.

A Guide for ITU-T and ISO/IEC JTC 1 Cooperation is given in Annex A, which contains a set of procedures for cooperation between the two sides. These procedures, which have also been adopted by ISO/IEC JTC 1, should be used, with flexibility, according to need. The "Rules for presentation of ITU-T | ISO/IEC common text"[1] in Annex A should be respected in the drafting of common texts.

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[1] The Guide is published as a separate booklet and is available from TSB.

Supplement 1 to A-series Recommendations

Guidelines on quality aspects of protocol related Recommendations

(Montreal, 2000)

1 Scope

This Supplement covers the readability, correctness, completeness, consistency, unambiguity, implementability and testability aspects of quality of Protocol Related Recommendations and specifies a process which can assist in the development of higher quality Recommendations.

2 Purpose

The purpose of the quality guidelines is to serve as a reference to ensure a consistent, high quality standard of Protocol Related Recommendations and the same level of understanding of this subject by all Study Groups.

3 Objective

The main objective of this supplement is to improve the quality of ITU-T Protocol Related Recommendations and help to improve the interoperability of products which are based on these ITU-T Recommendations.

4 Field of application

The criteria and the process apply primarily to new Protocol Related Recommendations under development, but may be applied to the evaluation of the quality of the existing protocol related Recommendations.

The quality aspects should be applied by the relevant Study Groups beginning with the planning phase and continuing through all subsequent phases leading to approval of the Recommendation, and in some cases, through the implementation phase.

5 Definitions

This supplement defines the following terms.

5.1 **formal description technique (FDT)**: Standardized languages e.g. SDL, MSC and ASN.1, and other techniques, e.g. GDMO, intended for formal specification of system behaviour, structure and data.

5.2 **specification and description language (SDL)**: Internationally standardized formal language for specifying and describing real-time systems.

5.3 **message sequence charts (MSC)**: Internationally standardized language for describing sequences of messages interchanged between system components and their environment.

5.4 **abstract test suite (ATS)**: A test suite composed of abstract test cases.

5.5 **abstract test case**: A complete and independent specification of the actions required to achieve a specific test purpose, defined at the level of abstraction of a particular Abstract Test Method, starting in a stable testing state and ending in a stable testing state.

5.6 abstract test method: The description of how an Implementation Under Test is to be tested, given an appropriate level of abstraction to make the description independent of any particular realization of a Means of Testing, but with enough detail to enable abstract test cases to be specified for this test method.

5.7 executable test suite (ETS): A test suite composed of executable test cases.

5.8 executable test case: A realization of an abstract test case.

5.9 tree and tabular combined notation (TTCN): A standardized notation for specifying conformance test suites in a manner that is independent of test methods, layered software architectures or protocols and which reflects the abstract testing methodology defined in Recommendations X.290 and X.291.

5.10 validation: A process of checking a specification to ensure that it is syntactically and semantically correct and represents the intended behaviour.

5.11 conformance clause: A part of a standard or Recommendation which identifies what in the standard or Recommendation should be met in order to conform to the standard or Recommendation.

5.12 specification: Prescription of the design of an aspect of a product or a set of products.

5.13 implementation conformance statement (ICS): A statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented. The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, managed object ICS and information object ICS.

5.14 implementation extra information for testing (IXIT): A statement made by the supplier or an implementor of an IUT which contains or references all of the information (in addition to that given in ICS) related to the IUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the IUT. An IXIT can take several forms: protocol IXIT, profile IXIT, profile specific IXIT, and information object IXIT.

5.15 test tool: Hardware and/or software, excluding the test suite itself, used to carry out or assist in carrying out the testing required.

5.16 means of testing (MOT): Hardware and/or software, and the procedures for its use, including the executable test suite itself, used to carry out the testing required.

5.17 implementation under test (IUT): An implementation of one or more requirements specifications, being that part of a system which is to be studied by testing.

5.18 interoperability testing: Testing to assess the ability of two or more systems to exchange information and to make mutual use of the information that has been exchanged.

5.19 reference implementation: An implementation of one or more standards or specifications, against which a Means of Testing and test tools for those standards or specifications are tested for the purpose of validation of those Means of Testing or test tools.

6 Acronyms

This Supplement uses the following abbreviations.

ASN.1   Abstract Syntax Notation One

ATS   Abstract Test Suite

ETS   Executable Test Suite

FD   Formal Definition

FDT   Formal Description Technique

IUT   Implementation Under Test

MOT   Means of Testing

MSC   Message Sequence Chart

PICS   Protocol Implementation Conformance Statement

PIXIT Protocol Implementation Extra Information for Testing

SDL   Specification and Description Language

TTCN Tree and Tabular Combined Notation

7   Developing high quality Recommendations

7.1   Overview of the quality aspects

In preparing new Recommendations or making an assessment of the quality of existing Recommendations, the following aspects should be considered:

Readability – This requires that a Recommendation is well structured and can be easily read and understood. This implies good use of the natural languages with adequate use of figures, examples and references.

Completeness – A Recommendation should be complete in the sense that it includes all parts necessary for its implementation. This includes clearly identified, precise and unambiguous specifications, and may include the Abstract Test Suite, the Protocol Implementation Conformance Statement Proforma and the Protocol Implementation Extra Information for Testing Proforma.

Correctness – Specifications should be error-free and represent the intended behaviour; this applies especially to the parts of the Recommendation expressed using formal description techniques.

Consistency – Different parts of the Recommendation or a set of related Recommendations should not contain contradictory information.

Unambiguity – A Recommendation should not be subject to different interpretations; implementations from different suppliers should be compatible; this is especially important where interoperability is required in a multi-vendor environment.

Implementability – A specification should not be unnecessarily complex. This means that the specification should permit only a minimum number of optional features, avoiding those options whose sole purpose is to achieve consensus. The specification should be based on the best technical solution.

Testability – If products are based on a specification contained in a Recommendation, it should be possible to test whether the product conforms to the specification.

7.2   Upfront identification

Each Study Group should identify upfront during the formulation of the Study Group Questions and subsequently in the development phase of Recommendations, which quality aspects need to be fulfilled based on market requirements. A check-list to facilitate this identification is contained in Annex A.

As a general guideline, all Recommendations that address the interoperability of equipment, networks, protocols or services should consider all quality aspects addressed here.

## 7.3	Formal Description Techniques

Formal specifications should be made available in machine-readable format to allow companies to use their facilities for simulation, validation, automatic code generation or other types of automatic processing, should they wish to do so.

Guidelines on the use of FDTs are contained in Recommendation Z.110. It provides criteria for their use and should, therefore, be taken as a reference in conjunction with this Supplement. It is planned to extend the scope of Recommendation Z.110 to cover a wider range of applications developed by groups such as, OMG, TINA-C.

Whenever a discrepancy between a natural language description and a FD, or between two FDs, is detected, the discrepancy should be resolved by changing the natural language description or the FDs without necessarily giving preference to one over the other(s).

## 7.4	Overview of the process

The quality of Recommendations is closely connected with the use of Formal Description Techniques (FDTs) and the use of computer-based tools. The main components of the quality process are formal specifications, validation of specifications and testing of prototype implementations. Figure 1 illustrates the complete process.

The main component of the process is the formal specification expressed using an FDT. In this process, a precise and unambiguous formal specification may first be produced from the natural language specification. The FDTs should be widely available, allowing the process to be largely automated using commercially available computer-based tools.

The second key component of the process is the specification validation step in which specification defects are detected and removed. Once the specification is verified, it can be used to produce two or more implementations by automatic generation of the implementation code to assess the ease of implementation and subsequently test the conformance and interoperability. The purpose of this is to ensure that the specification is error-free and describes the intended behaviour. At the same time, implementability of the specification can be verified and the conformance test suite developed and validated.

It is preferable to have the conformance test suites generated directly from the formal specification using software tools so that the individual test cases will be traceable to the specification.

## 8	Quality checks

Before approving each new Protocol related Recommendation (including Amendments, revised Recommendations, etc.), the quality check-list should be completed and made available to the Study Group meeting. This list will identify the level of compliance with the quality aspects.

## 9	Specific guidelines

## 9.1	Readability

Recommendations should be clear, well-structured and easily read and understood. This applies both to the natural language text and the formal specification. This applies to all Recommendations irrespective of whether they are protocol related or not.

Specifically, the functional purpose of the Recommendation should be clearly stated in natural language.

9.2 Completeness of Recommendations

9.2.1 Conformance section

In many cases, specification of mandatory requirements and optional features may be scattered throughout the Recommendation, often mixed with tutorial or explanatory text and examples. It is essential to identify and isolate each normative item in the Recommendation. For this purpose, all normative requirements and optional features should be summarized in a special section, i.e. the conformance clause of a Recommendation, indicating individual references to the parts in the Recommendation where the full specification is given.

9.2.2 Tools for completeness checking

For checking completeness, the following tools may be used:

a)   *Protocol Implementation Conformance Statement (PICS)*

For each relevant Recommendation, a PICS may be developed for use by the implementor of the Recommendation to declare what mandatory and optional features affecting interoperability have been implemented and which have not.

b)   *Protocol Implementation Extra Information for Testing (PIXIT)*

For each relevant Recommendation, a PIXIT may be specified to facilitate testing.

c)   *Managed Object Conformance Statement (MOCS)*

For each Recommendation specified using the Guidelines for the definition of Managed Objects (Recommendation X.722), a MOCS proforma based on Recommendation X.724 may be developed for use by the implementor of the Recommendation to declare what mandatory and optional features affecting interoperability have been implemented and which have not.

9.2.3 Testing methodology

The check-list should indicate which testing methodology has been used. One such methodology is specified in the X.290 series of Recommendations.

9.3 Correctness

9.3.1 Validation of specifications

The overall validation process is illustrated in Figure 1. It consists of implementation, simulation and testing using commercial computer-based tools.

Examples of guidance for validation of specifications are given in Recommendation Z.110 and the Methodology Appendix of Recommendation Z.100. Validation could be done by the Study Group members through pilot projects within their own organizations.
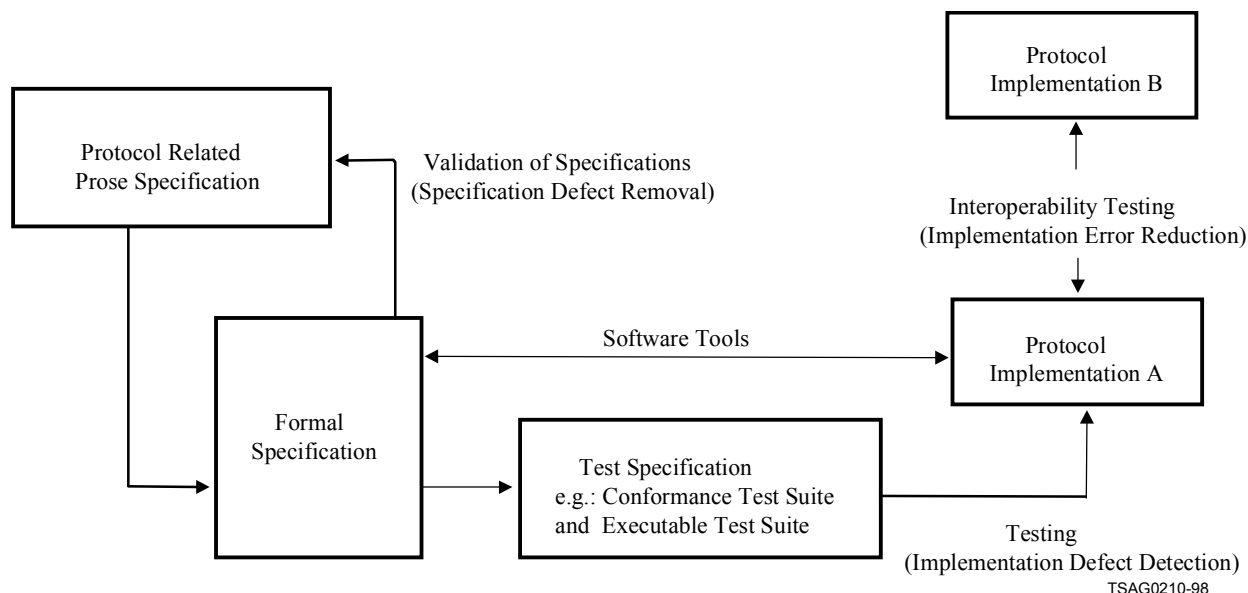
NOTE 1 – Not all of the illustrated processes in Figure 1 are required for all protocols.
NOTE 2 – Several of the relations indicated by the arrows could be supported by software tools.

Figure 1 – Flow Diagram to illustrate the quality process

9.3.2   Abstract Test Suite (ATS)

For each relevant Recommendation, a corresponding Abstract Test Suite expressed in the standardized (Recommendation X.292) Tree and Tabular Combined Notation (TTCN) and in compliance with the X.290 series of Recommendations may be developed.

9.3.3   Publication phase

Specific steps should be taken through the publication phase to ensure the correctness of the published Recommendation.

9.3.4   Maintenance

Procedures are currently in place (Resolution 1) for identifying and correcting errors in approved Recommendations.

9.4   Consistency

Different parts of the Recommendation should not contain contradictory information. Whenever a discrepancy between a natural language and a FD, or between two FDs, is detected, the discrepancy should be resolved by changing or improving the natural language description or the FDs without necessarily giving preference to one over the other(s).

9.5   Unambiguity

A Recommendation should not be subject to different interpretations; implementations from different suppliers should be compatible; this is especially important where interoperability is required in a multi-vendor environment.

9.6 Implementability

9.6.1 Reduction of the number of options

Options reduce the chances of interoperability. The number of options should be reduced so that only the essential options are included and there are no redundancies.

9.6.2 Best technical solutions

Each Recommendation should be based on the principle of best technical solutions rather than a compromise solution to achieve consensus.

9.7 Testability

Testing interfaces, such as points of control and observation should be defined, for example, according to a standardized testing methodology and an appropriate Abstract Test Suite should be specified for each protocol. Reduced complexity of Recommendations is also essential for testability of implementations.

10 Use of tools in developing Recommendations

10.1 Early error detection

The use of commercial software tools, e.g. protocol validation, syntax check tools etc., in conjunction with formal description techniques during the development of Recommendations, is essential for early error detection and the development of a common view during the consensus process. The use of tools makes errors visible early, thereby resulting in substantial savings in later efforts to uncover and correct errors.

10.2 Timely Recommendations

The use of automated techniques is essential for timely production of Recommendations. These tools reduce the total time required to develop a Recommendation and the associated Abstract Test Suites.

10.3 Lower cost

Appropriate steps should be taken to reduce the cost to develop Recommendations. The use of computer-aided techniques and automation tools during the development of Recommendations will reduce the overall cost of developing Recommendations.

11 References

[1]   ITU-T Recommendations X.290-X.296, *OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications*.

[2]   ITU-T Recommendation Z.500 (1997), *Framework on formal methods in conformance testing*.

[3]   ITU-T Recommendation Z.100 (1993), *CCITT Specification and Description Language (SDL)*.

[4]   ITU-T Recommendation Z.105 (1995), *SDL combined with ASN.1 (SDL/ASN.1)*.

[5]   ITU-T Recommendation Z.110 (1996), *Criteria for the use of formal description techniques by ITU-T*.

[6]   ITU-T X.680- and X.690-series Recommendations, *Abstract Syntax Notation One (ASN.1)*.

[7]   ITU-T Recommendation Z.120 (1996), *Message Sequence Chart*.

ANNEX A

Quality Check-list for Protocol Related Recommendations

A.1   General Check-list

The following check-list is provided to assist the developers of protocol related Recommendations in determining which clauses of the Quality Guidelines have been addressed. See Table A.1

Table A.1 – Quality Check-list

Item	Quality Aspect	Reference	Addressed		
1	Readability	9.1	Yes	No	N/A
2	Completeness	9.2	Yes	No	N/A
3	Conformance section	9.2.1	Yes	No	N/A
4	Completeness checking	9.2.2	Yes	No	N/A
5	Testing Methodology	9.2.3	Yes	No	N/A
6	Correctness	9.3	Yes	No	N/A
7	Validation of Specifications	9.3.1	Yes	No	N/A
8	Abstract Test Suite	9.3.2	Yes	No	N/A
9	Publication Phase	9.3.3	Yes	No	N/A
10	Maintenance	9.3.4	Yes	No	N/A
11	Consistency	9.4	Yes	No	N/A
12	Unambiguity	9.5	Yes	No	N/A
13	Implementability	9.6	Yes	No	N/A
14	Reduced number of options	9.6.1	Yes	No	N/A
15	Best technical solution	9.6.2	Yes	No	N/A
16	Testability	9.7	Yes	No	N/A
17	Use of tools	10	Yes	No	N/A
18	Early error detection	10.1	Yes	No	N/A
19	Timely Recommendations	10.2	Yes	No	N/A
20	Lower cost	10.3	Yes	No	N/A

A.2   Specific Check-list

In addition, to the quality check-list of Table A.1, a more specific set of questions is needed to:

–   identify upfront what quality level should be aimed at;

–   assess whether the quality goals have been met;

–   distinguish between various levels of qualities;

–   distinguish between different techniques to achieve quality;

–   enable quality control across these techniques.

Specific questions

Natural language texts

1) Is readability of the text validated?

2) Does any label refer to items that do not appear in the Description Technique specification?

3) Are the required measures completed on the missing references?

Illustrations

4) Is the readability of the illustrations validated?

5) Do the illustrations use Description Technique notations only?

6) Does any label refer to items that do not appear in the Natural language texts?

7) Does any label refer to items that do not appear in the Description Technique specification?

8) Are the required measures completed on the missing references?

Description Techniques

9) Is use of Description Techniques required for the Recommendation?

10) Is one Description Technique only used?

11) Is a combination of Description Techniques used?

12) If yes, which techniques are used?

13) Are alphanumeric notations provided for the Description Techniques?

14) Are graphic notations provided for the Description Techniques?

15) Is the syntax of the Description Techniques formally specified?

16) Is the semantics of the Description Techniques formally specified?

17) Are mappings between the used Description Techniques formally specified?

18) Are the Description Techniques standardised?

19) If yes, which technique by which organization?

Description Technique specification

20) Is the Description Technique specification well structured?

21) Is completeness of the specification validated?

22) What testing methodology has been used for completeness validation?

23) Was the correctness of the specification verified?

24) Is consistency within the Description Technique specification validated?

25) What testing methodology has been used for consistency validation?

26) Is consistency to natural language texts and illustrations validated?

27) Is the specification unambiguous?

Completeness

28) Is the conformance clause specified in the standard?

29) Is the Protocol Implementation Conformance Statement (PICS) proforma specified?

30) Is the conformance Abstract Test Suite specified?

31) Is the conformance testing methodology specified?

32) Is the Protocol Implementation Extra Information for Testing (PIXIT) proforma specified?

Implementability

33) Are all not strictly needed options removed?

34)   Is the best technical solution specified?

35)   Is a computable algorithm provided for the specification?

Testability

36)   Are test specifications needed for the Recommendation?

37)   Are interoperability tests needed?

38)   Are abstract test suites provided for the specification?

39)   Are the abstract test suites produced automatically from the specifications?

40)   Are testing facilities offered for implementations?

Implementation testing

41)   Are implementation tests needed for the Recommendation?

42)   What implementations are provided?

43)   What implementations are tested by using the abstract test suites?

44)   Is module testing undertaken?

45)   Is system testing undertaken?

46)   Is user testing undertaken?

47)   Is interoperability testing undertaken?

48)   What performance tests have been undertaken?

49)   Are the performance measurements satisfactory?

Supplement 2 to A-series Recommendations

Guidelines on interoperability experiments

(Montreal, 2000)

1 Background

1.1 Study Groups of ITU-T have been doing their best to ensure interoperability of products made in accordance with ITU-T Recommendations. There is no better way to assess interoperability than to actually interoperate systems and equipment of various manufacturers. ITU-T has occasionally initiated interoperability experiments for specific projects in the past. Some examples are:

a)   Signalling System No.7 Field Trial in early 1980s (SG 11).

b)   ISDN Field Trials in various places in late 1980s. (SG 11 and then SG 18).

c)   Digital Circuit Multiplexing Equipment (DCME) in early 1990s (SG 15).

1.2 However, when interoperability experiment/testing has not been performed, users may have suffered from the lack of interoperability between products coming from different manufacturers. Moreover, manufacturers are not always members of ITU-T and develop their products only by reading relevant Recommendations.

2 Objective

The objective of these guidelines is to encourage interoperability experiments to be performed outside of ITU-T and to facilitate information exchange between parties participating in such experiments and study groups of ITU-T.

3 Guidelines

3.1 The interoperability experiments are to be performed outside of ITU-T on a voluntary basis, self-governed, self-supporting and incurring no additional cost to ITU-T. Such interoperability experiments may therefore involve non ITU-T members as well.

3.2 The self-governance of interoperability experiments to be performed outside of ITU-T means that parties participating in such an experiment should govern themselves by making rules of their own. ITU-T is in no way involved in such a rule making.

3.3 ITU-T would like to ask the kind cooperation of its members participating in such an interoperability experiment to submit contributions to study groups based on the results of the experiment in order to improve the quality of Recommendations, e.g. by proposing text changes to remove ambiguities, etc.

3.4 Furthermore, ITU-T would like to ask the kind cooperation of its members participating in such an experiment to share information on the experiment at study group meetings as much as possible. Examples of information that would be useful to be shared are as follows:

–   how should experiments be performed: experiment items, experiment methods, test equipment, experiment schedules, coordinator, etc;

–   where are the experiments going to be conducted;

–   how should experiment results be handled in order to submit contributions to ITU-T to improve the quality of Recommendations;

–   identification of other activities in the same area and potential cooperation and work-sharing with them.

PART 3

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and appointed Chairmen and Vice-Chairmen
of the ITU Telecommunication Standardization Sector**

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| Chairman: | | 2001 - 2002 | Mr. R. BLANE | (UK) |
| | | 2003 - 2004 | Mr. Ph. DISTLER | (F) |

| Deputy Chairman: | | 2001 - 2002 | Mr. Ph. DISTLER | (F) |
| | | 2003 - 2004 | Mr. R. BLANE | (UK) |

| Vice-Chairmen: | Mr. M. NEIBERT | (USA) |
| | Mr. E. MATARAZZO | (B) |

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Vice-Chairmen:	Mr. A. KUSHTUEV	(RUS)
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	Mr. H.K. HAMANI	(NGR)
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Study Group 6 – Outside plant

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Study Group 7 – Data networks and open system communications

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	Mr. P.F. MASAMBU	(UGA)
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	Mr. A. ZOURMBA	(CME)

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Vice Chairmen:	Mr. E. ELOP	(CME)
	Mr. M. TRAORE	(MLI)
	Mr. A. AKUE-KPAKPO	(TGO)

TAL – Tariff Group for Latin America[1]

Chairman:	Mr. J.G. NETO	(B)
Vice Chairmen:		

TAS – Tariff Group for Asia and Oceania

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Vice Chairmen:	Mr. S.D. SAXENA	(IND)
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TEUREM – Tariff Group for Europe and the Mediterranean Basin[2]

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Vice Chairmen:

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[1] TAL Group will appoint the Vice-Chairmen at their first meeting, in agreement with the Director of TSB.

[2] WTSA-2000 authorizes ITU-T Study Group 3 to appoint, if need should arise, Chairman and Vice-Chairmen of TEUREM group in agreement with the Director of TSB.

PART 4

**Questions approved for study by the
ITU Telecommunication Standardization Sector**

STUDY GROUP 2
Operational aspects of service provision, networks and performance

Question	Title
1/2	Application of Numbering, Naming and Addressing Plans for Fixed and Mobile Services
2/2	Routing and interworking plans for fixed and mobile networks
3/2	Management and development of voice and non-voice based telecommunication services
4/2	Human factor issues in international telecommunication services
5/2	Service quality of networks
6/2	Network management
7/2	Traffic engineering for personal communications
8/2	Traffic engineering for SS No. 7 and IP-based signalling networks
9/2	Traffic engineering for networks supporting IP services

STUDY GROUP 3
Tariff and accounting principles
including related telecommunications economic and policy issues

Question	Title
1/3	Development of charging and accounting/settlement mechanisms for network capabilities and services features made available by new technologies
2/3	Adaptation of the D-series Recommendations to the evolving market environment
3/3	Regional studies for the development of cost models together with related economic and policy issues
4/3	Terms and definitions for Recommendations dealing with tariff and accounting principles

STUDY GROUP 4
Telecommunication management, including TMN

Question	Title
1/4	Terms and definitions
2/4	Designation for interconnections among network operators
3/4	Transport network and service operations procedures for performance and fault management
4/4	Test and measurement techniques and instrumentation for use on telecommunications systems and their constituent parts
5/4	Jitter and wander test and measurement techniques and instrumentation for use on telecommunications systems and their constituent parts
6/4	Methodology and quality assurance for TMN specifications
7/4	TMN principles and architecture
8/4	TMN User Interface
9/4	Requirements for the TMN X-Interface
10/4	Framework for unified management of integrated circuit-switched and packet-based networks (with an initial emphasis on IP-based networks)
11/4	Principles of the customer network management and the network-network management

STUDY GROUP 4
Telecommunication management, including TMN

Question	Title
12/4	Service management and generic network element information models for TMN interfaces
13/4	Generic Network level management of transmission systems
14/4	Management models for ANT and ATM network elements, including the support of access signalling and IP
15/4	Technology Specific Network level management of transport networks
16/4	TMN Management Support for IMT-2000 and IN
17/4	Open Distributed Management Infrastructure
18/4	Protocols to support operation, administration and maintenance at the F, Q and X interfaces
19/4	Information models for management applications related to switching and generic support services

STUDY GROUP 5
Protection against electromagnetic environment effects

Question	Title
1/5	Resistibility, EMC and safety aspects of unbundling and interoperability in telecommunications networks
2/5	EMC related to broadband access systems
3/5	Radio-frequency environmental characterization and health effects related to mobile equipment and radio systems
4/5	Resistibility of new types of communication equipment and access networks
5/5	Lightning protection of fixed, mobile and wireless systems
6/5	Bonding configurations and earthing of telecommunication systems in the global environment
7/5	EMC prediction through mathematical modelling
8/5	Quality processes using electromagnetic compatibility
9/5	Interference produced by power lines and electrified railway lines into telecommunications networks
10/5	Methodology for solving electromagnetic problems in telecommunications installations
11/5	Maintenance and enhancement of existing recommendations related to human safety in the telecommunications environment
12/5	Maintenance and enhancement of existing EMC recommendations
13/5	Maintenance and enhancement of existing resistibility recommendations
14/5	Terminology

STUDY GROUP 6
Outside plant

Question	Title
1/6	Environmental issues of telecommunication plant
2/6	Fire safety of telecommunication installations
3/6	Copper networks for shared multi-services in one multi-pair cable
4/6	Infrastructure and installation considerations for cables and equipment
5/6	Optical fibre cable network maintenance
6/6	Installation of underground telecommunication cables in small trenches
7/6	Joint closures, termination and distribution frames, outdoor enclosures and passive components
8/6	Optical fibre cable construction
9/6	Construction of optical networks in the access area
10/6	Marinized Terrestrial Cables as defined in ITU-T Recommendation G.972

STUDY GROUP 7
Data networks and open system communications

Question	Title
1/7	Technical characteristics, classes of service, facilities and categories of access for networks providing data communication
2/7	Network performance and quality of service in data communication networks
3/7	Numbering and routing for public data networks
4/7	Access and interworking procedures
5/7	Interfaces and signalling applicable to DTEs and public networks using or providing frame relay services
6/7	Revision of mature data network Recommendations
7/7	IP-related lower layer protocols and service mechanisms
8/7	End-to-end QoS multicast communications
9/7	Abstract Syntax Notation One (ASN.1)
10/7	Testing of information and communication protocols
11/7	Revision of mature Open Systems Interconnection (OSI) Recommendations
12/7	Directory services and systems
13/7	Security services, mechanisms and protocols
14/7	Open distributed processing (ODP)

STUDY GROUP 9
Integrated broadband cable networks and television and sound transmission

Question	Title
1/9	Digital networks carrying sound-programme and television signals for broadcasting
2/9	Digital transmission of conventional television and high-definition television signals for contribution and primary distribution
3/9	Digital secondary distribution of standard-definition and high-definition television
4/9	Measurement and control of the Quality of Service for television transmission on contribution and distribution networks
5/9	Interactivity in the secondary distribution of television
6/9	Conditional access and copy protection for digital cable distribution to the home
7/9	Requirements and methods for sound-programme and television "webcasting" services
8/9	Application programming interfaces (API) for cable television distribution
9/9	Functional requirements for a universal integrated receiver or set-top box for the reception of cable television and other services
10/9	Functional characteristics for the interconnection of cable television networks with the public switched network and other delivery systems
11/9	Digital program insertion for MPEG-2 bit streams
12/9	Cable Television delivery of services and applications that use Internet Protocols (IP) and/or packet-based data
13/9	Voice and Video IP Applications over cable television networks
14/9	The extension of cable-based services over broadband In Home Networks
15/9	High-speed "Webcasting" services over cable television networks
16/9	Transmission of multi-channel analogue and/or digital television signals over optical access networks
17/9	Management and operational requirements with regard to Wide Area Network edge devices for TV and sound-programme transmission
18/9	Transport of uncompressed studio quality TV, sound-programme signals, and other signals using the same interface on telecommunication networks
19/9	Transport of video and audio signals over contribution or primary distribution networks using IP techniques
20/9	Signal quality parameters for MPEG-2 Transport Streams transmitted via telecommunication networks
21/9	Objective and Subjective methods for evaluating conversational audiovisual quality in multimedia services

STUDY GROUP 10
Languages and general software aspects for telecommunication systems

Question	Title
1/10	Quality assurance, methodology and use of description techniques
2/10	ODL: Object Definition Language
3/10	Software Platforms and Middlewares for the Telecom Domain
4/10	Unified Modelling Language (UML) Combined with ITU-T Languages
5/10	Encoding of SDL Data
6/10	SDL: Specification and Description Language
7/10	Time expressiveness and Performance annotations in ITU-T Modeling Languages
8/10	Testing Languages and Validation based on Formal Models
9/10	MSC: Message Sequence Charts
10/10	Specification and Description Language (SDL) data binding to Message Sequence Charts (MSC)
11/10	DCL: Deployment and Configuration Language
12/10	URN: User Requirements Notation
13/10	Quality Aspects of Protocol-related Recommendations

STUDY GROUP 11
Signalling requirements and protocols

Question	Title
1/11	Signalling requirements for signalling support for new, value added, IP based and IN based services
2/11	Network signalling requirements for the support of Virtual Home Environment (VHE) in the fixed network
3/11	Network signalling protocols to support mobility in the fixed network
4/11	API/object interface and architecture for signalling
5/11	Protocols for further evolution of IN capability sets
6/11	Signalling requirements for signalling support for service interworking of both dialup Internet access and Voice, Data and Multimedia Communications over IP-based networks
7/11	Signalling requirements for signalling to efficiently identify and direct traffic destined for Internet Service Provider (ISPs)
8/11	Signalling requirements for flexible management of dynamic bandwidth and quality of service demands in connection control
9/11	Signalling requirements for the support of Bearer Independent Call Control (BICC) applications
10/11	Signalling requirements for control of signal processing equipment and of remote transmission nodes
11/11	Protocols for the support of Bearer Independent Call Control (BICC) applications
12/11	Access and network signalling for advanced narrow-band and broadband services
13/11	Common transport protocols
14/11	Protocol test specifications
15/11	Protocol for the support of AAL Type 2 bearers

STUDY GROUP 12
End-to-end transmission performance of networks and terminals

Question	Title
1/12	Evolution of the work programme
2/12	Speech Transmission Characteristics and Measurement methods for Terminals and Gateways interfacing Packet-Switched (IP) Networks
3/12	Transmission characteristics of speech terminals both for fixed circuit-switched and mobile networks
4/12	Telephonometric methodologies for hands-free terminals and speech enhancement devices (including AEC and Noise Reduction)
5/12	Telephonometric methodologies for handset and headset terminals
6/12	Analysis methods using complex measurement signals
7/12	Methods, tools and test plans for the subjective assessment of speech and audio quality
8/12	Extension of the E-Model
9/12	Objective measurement of speech quality under conditions of non-linear and time-variant processing
10/12	Transmission planning for voiceband, data and multimedia services
11/12	Speech transmission planning for multiple interconnected networks (e.g. public, private, Internet)
12/12	Transmission performance considerations for voiceband services carried on networks that use Internet Protocol (IP)

STUDY GROUP 13
Multi-protocol and IP-based networks and their internetworking

Question	Title
1/13	Principles, Requirements, Frameworks and Architectures for an Overall Heterogeneous Network Environment
2/13	ATM Layer and its Adaptation
3/13	OAM and Network Management in IP-Based and Other Networks
4/13	Broadband and IP Related Resource Management
5/13	Network Interworking including IP Multiservice Networks
6/13	Performance of IP-Based Networks and The Emerging Global Information Infrastructure
7/13	B-ISDN/ATM Cell Transfer and Availability Performance
8/13	Transmission Error and Availability Performance
9/13	Call Processing Performance
10/13	Core Network Architecture and Interworking Principles
11/13	Mechanisms to Allow IP-Based Services Using MPLS to Operate in Public Networks
12/13	Global Coordination of Network Aspects
13/13	Interoperability of Satellite and Terrestrial Networks
14/13	Access Architecture Principles and Features at the Lower Layers for IP-Based and Other Systems
15/13	General Network Terminology including IP Aspects
16/13	Telecommunication Architecture for an Evolving Environment

STUDY GROUP 15
Optical and other transport networks

Question	Title
1/15	Access network transport
2/15	Optical systems for access networks
3/15	Support for Recommendations Specifying Systems Based on ISDN Physical Layers
4/15	Transceivers for customer access and in-premises phone line networking systems on metallic pairs
5/15	Compression and classification in signal processing network equipment
6/15	Speech enhancement in signal processing network equipment
7/15	Voice gateway equipment
8/15	Interaction aspects of signal processing network equipment
9/15	Transport equipment and network protection/restoration
10/15	ATM and Internet Protocol (IP) equipment
11/15	Signal structures, interfaces and interworking for transport networks
12/15	Technology Specific Transport Network Architectures
13/13	Network Synchronization and Time Distribution Performance
14/15	Network management for transport systems and equipment
15/15	Characteristics and test methods of optical fibres and cables
16/15	Characteristics of optical systems for terrestrial transport networks
17/15	Characteristics of optical components and subsystems
18/15	Characteristics of optical fibre submarine cable systems
19/15	General characteristics of optical transport networks

STUDY GROUP 16
Multimedia services, systems and terminals

Question	Title
A/16	MediaCom 2004
B/16	Multimedia Architecture
C/16	Multimedia applications and services
D/16	Interoperability of Multimedia Systems and Services
E/16	Media coding
F/16	Quality of Service and End-to-end Performance in Multimedia Systems
G/16	Security of Multimedia Systems and Services
H/16	Accessibility to Multimedia Systems and Services
1/16	Multimedia systems, terminals and data conferencing
2/16	Multimedia over packet networks using H.323 systems
3/16	Infrastructure and interoperability for Multimedia over packet networks
4/16	Video and data conferencing using Internet-supported services
5/16	Mobility for Multimedia Systems and Services
6/16	Advanced video coding
7/16	Wideband coding of speech at around 16 kbit/s
8/16	Encoding of speech signals at bit rates around 4 kbit/s
9/16	Variable bit rate coding of speech signals
10/16	Software tools for signal processing standardization activities and maintenance of existing voice coding standards
11/16	Voiceband Modems: Specification and Performance Evaluation
12/16	DCE-DCE Protocols for the PSTN and ISDN
13/16	DTE-DCE Interfaces and Protocols
14/16	Facsimile terminals (Group 3 and Group 4)

SPECIAL STUDY GROUP
IMT-2000 and beyond

Question	Title
A/IMT	Network signalling requirements for wireless access to services provided over IP-based networks
B/IMT	Network signalling requirements for emerging mobility services (IMT-2000 and their evolution), including services over IP-based networks.
C/IMT	Network signalling requirements for the support of Virtual Home Environment (VHE) in mobile networks
D/IMT	Network signalling protocols for mobility services (IMT-2000 and their evolution), including IP services