

Telecommunication Standardization Sector of ITU

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY

FLORIANÓPOLIS, 5-14 OCTOBER 2004

Resolutions

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

Study Groups and other groups

List of study Questions (2005-2008)



ITU-T

Book 1

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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.

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World Telecommunication Standardization Assembly

(Florianópolis, 2004)

Book 1

CONTENTS

	Page
PART 1 – Resolutions adopted by the Assembly of the ITU Telecommunication Standardization Sector	1
PART 2 – ITU-T series A Recommendations: organization of the work of the ITU Telecommunication Standardization Sector	95
PART 3 – Study Groups, TSAG and Tariff Groups and appointed Chairmen and Vice-Chairmen of the ITU Telecommunication Standardization Sector	163
PART 4 – Questions approved for study by the ITU Telecommunication Standardization Sector	169

PART 1

Resolutions adopted by the Assembly of the ITU Telecommunication Standardization Sector

CONTENTS

Resolu	tion Pag
1	Rules of procedure of the ITU Telecommunication Standardization Sector (ITU-T)
2	ITU-T study group responsibility and mandates
7	Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC)
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.
17	Telecommunication standardization in relation to the interests of developing countries
18	Principles and procedures for the allocation of work to, and coordination between, ITU-R and ITU-T
20	Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources.
22	Authorization for TSAG to act between WTSAs
26	Assistance to the regional tariff groups
29	Alternative calling procedures on international telecommunication networks
31	Admission of entities or organizations to participate as Associates in the work of ITU-T
32	Strengthening electronic working methods for the work of ITU-T
33	Guidelines for ITU-T strategic activities
34	Voluntary contributions
35	Appointment and maximum term of office for chairmen and vice-chairmen of ITU-T study groups and of TSAG
38	Coordination among ITU-T, ITU-R and ITU-D for activities relating to IMT-2000 and systems beyond IMT-2000.

Reso	lution
40	Regulatory aspects of ITU-T work
42	Implementation of results-based budgeting – Impact on planning in ITU-T
43	Regional preparations for WTSAs
44	Bridging the standardization gap between developing and developed countries
45	Effective coordination of standardization work across study groups in ITU-T and the role of TSAG
46	ITU-T contribution to Council Working Group on the World Summit on the Information Society
47	Country code top-level domain names
48	Internationalized domain names
49	ENUM
50	Cybersecurity
51	Combating spam
52	Countering spam by technical means.
53	Establishment of a seminar and workshop coordination committee
54	Creation of regional groups
55	Mainstreaming gender in ITU-T activities

RESOLUTION 1

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

(Florianópolis, 2004)¹

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that, in accordance with Article 17 of the ITU Constitution, the duties of the ITU Telecommunication Standardization Sector (ITU-T) shall be to study technical, operating and tariff questions and to adopt recommendations with a view to standardizing telecommunications 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 ITU-T and the ITU Radiocommunication Sector (ITU-R) are defined in the ITU Convention;
- e) that, in accordance with No. 184A of the Convention, the World Telecommunication Standardization Assembly (WTSA) is authorized to adopt the working methods and procedures for the management of the activities of ITU-T in accordance with No. 145A of the Constitution;
- f) 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,

resolves

that the provisions referred to in *considering* d) and e) above shall be amplified by the provisions set down in this resolution and in the resolutions to which they refer, bearing in mind that in case of inconsistency, the Constitution, the Convention, the International Telecommunication Regulations (ITR) and the General Rules of Conferences, Assemblies and Meetings of the Union (in that order) shall prevail over this resolution.

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; Montreal, 2000).

SECTION 1

World Telecommunication Standardization Assembly

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 In accordance with Chapter I of the General Rules of Conferences, Assemblies and Meetings of the Union, the Secretary-General of ITU shall send an invitation to participate in WTSA to all Member States of the Union, to the ITU-T Sector Members as well as to the organizations and agencies referred to in Article 25 of the Convention. 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, ITU-T Sector Members (Nos. 110 to 112 of the Constitution) and any other organization referred in Article 25 of the Convention intending to send a delegation, representatives or observers to WTSA are required to advise the Director, 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 shall forward this information to the inviting Member State.
- **1.1.4** The elected officials, the General Secretariat and the Bureaux of the Union, as appropriate, 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, 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 12 of the General Rules of Conferences, Assemblies and Meetings of the 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, *inter alia*, the accounts for expenditure incurred by the current WTSA, in accordance with the General Rules of Conferences, Assemblies and Meetings of the Union, as well as the estimate of the financial needs of ITU-T up to the next WTSA, including those pertinent to the preparation of the biennial budgets and financial plan, as appropriate.
- 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 and working 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.

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:
- **1.3.3.1** WTSA shall consider 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 such action is proposed.
- **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) propose a set of study groups;
- c) allocate Questions to study groups, as appropriate;

- d) 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;
- e) produce a clear description of the general area of responsibility within which each study group may amend existing and develop new Recommendations, in collaboration with other groups, as appropriate;
- f) review, and adjust as necessary, the lists of Recommendations for which each study group is responsible;
- g) propose the establishment, where needed, of other groups in accordance with Nos. 191A and 191B of the Convention.
- **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 Member States and 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 General Rules of Conferences, Assemblies and Meetings of the Union and prepare a report on the estimated expenses of ITU-T to cover its financial requirements until the next WTSA, for the subsequent biennial budgets and financial plan, as appropriate, taking into account the pertinent results of WTSA including priorities. The Director shall prepare such estimates in accordance with Article 7 of the Financial Regulations.
- **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 reports 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** In accordance with No. 340C of the Convention, when a Member State is not represented by an administration, the representatives of the recognized operating agencies of the Member State concerned shall, as a whole, and regardless of their number, be entitled 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 their relevant groups

2.1 Classification of study groups and their relevant groups

- **2.1.1** WTSA establishes study groups in order for each of them:
- a) to pursue the goals laid down in a set of Questions related to a particular area of study in a taskoriented 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 their relevant 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 Recommendation 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 ITU-R and prepare draft Recommendations on questions of common interest. ITU-T 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 group², 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. The lead study group shall keep TSAG informed on the progress of the work as defined in the scope of the lead study group activity. Issues which cannot be resolved by the study group should be raised for TSAG to offer advice and proposals for the direction of the work.

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 of TSB 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 In special cases, WTSA may appoint the chairman and request the Radiocommunication Assembly to appoint a vice-chairman.

2.3 Participation in meetings

- **2.3.1** Member States and other duly authorized entities shall be represented in the study groups and their relevant 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 its relevant 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.

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 Recommendation 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. Those appointed should be active in the field of the study group concerned and committed to the work of the study group. 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** On the basis of 3.1.2 above, appointed vice-chairmen should be considered first in the appointment of working party chairmen. However, that would not prevent other competent experts being appointed as working party chairmen.
- **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, at the same time recognizing the need to only appoint the number of vice-chairmen and working party chairmen necessary for the efficient and effective management and functioning of the study group, consistent with the projected structure and work programme.
- **3.1.6** In principle, a chairman, vice-chairman or working party chairman, on accepting this role, is expected to have the support necessary to fulfil this commitment throughout the period to the next WTSA.

SECTION 4

Telecommunication Standardization Advisory Group

- 4.1 In accordance with Article 14A of the Convention, the Telecommunication Standardization Advisory Group (TSAG) shall be open to representatives of administrations of Member States and representatives of ITU-T Sector Members and to chairmen of the study groups and other 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, to 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. TSAG will monitor the activities of the lead study groups and advise on the progress report as presented to TSAG. TSAG will aim to ensure that the programmes of work across the study groups are steered to successful completion.
- **4.3** TSAG shall be composed of representatives of administrations of Member States and representatives of Sector Members, and the study group chairmen, other 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 clause 1.1 of ITU-T Recommendation A.1. The meetings should take place as necessary, but at least once a year³.
- **4.7** In the interest of minimizing the length and costs of the meetings, the chairman of TSAG should collaborate with the Director 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 ongoing discussions taking place during the meeting and are intended to assist in resolving conflicting views which exist during the meeting.
- 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 the operation of TSB.

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.

- 5.3 In the Director's estimate of the financial needs of ITU-T until the next WTSA as part of the biennial budgetary preparatory process, 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 for the subsequent biennial budgets and financial plan, as appropriate, taking into account the pertinent results of WTSA including priorities.
- **5.4** The Director will prepare the financial estimates in accordance with Article 7 of the Financial Regulations, taking into account the relevant results of WTSA including priorities for the work of the Sector.
- 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.
- **5.14** The Director shall seek to foster cooperation and coordination with the other standardization organizations for the benefit of all members.

SECTION 6

Contributions

6.1 Contributions are submitted and formatted in accordance with ITU-T Recommendations A.1 and 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 distribute the proposed 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;
- 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 for 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** A study group may agree to commence work on a draft Question before its approval.
- **7.1.11** If, despite the above provisions, a Member State or Sector Member proposes a Question directly to a WTSA, the Member State or Sector Member should be invited to submit the proposal to the next meeting of TSAG to allow time for its thorough examination.
- **7.1.12** In order to allow for the specific characteristics of countries with economies in transition, developing countries, and especially least developed countries, TSB shall take account of the relevant provisions of WTSA Resolution 17 in responding to any request submitted by such countries through the Telecommunication Development Bureau (BDT), particularly with regard to matters connected with training, information, examination of questions which are not covered by the study groups of the ITU Telecommunication Development Sector (ITU-D), and technical assistance required for the examination of certain questions by the ITU-D study groups.

7.2 Approval of Questions between WTSAs (see Figure 7.1a)

- **7.2.1** 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 7.2.2 or 7.2.3 below.
- **7.2.2** 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 of TSB shall notify the results by circular.
- **7.2.3** 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 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 shall notify the results of the consultation by circular. (See also 8.2.)
- **7.2.4** Between WTSAs, the periodic meetings of TSAG will review the work programme of ITU-T and recommend revisions as necessary.

7.2.5 In particular, TSAG will review any new and revised Questions to determine whether a proposed new or revised Question is in line with the mandate of the study group. TSAG may then endorse the text of any new and revised Questions and note the text of any new and revised Questions already approved.

7.3 Approval of Questions by WTSA (see Figure 7.1b)

- **7.3.1** 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.
- **7.3.2** 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.

7.4 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 between WTSAs

- **7.4.1.1** 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.
- **7.4.1.2** 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.
- **7.4.1.3** Notification of the result will be given in a circular, and TSAG will be informed by a report from the Director of TSB. In addition, the Director shall publish a list of deleted Questions whenever appropriate, but at least once by the middle of a study period.

7.4.2 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.

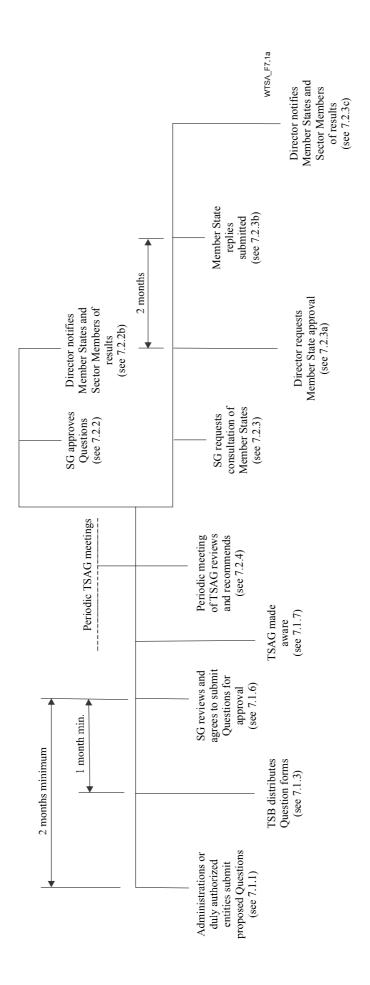


Figure 7.1a - Approval of Questions between WTSAs

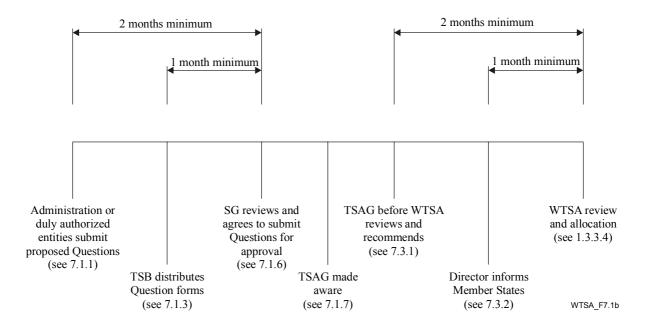


Figure 7.1b – Approval of Questions at WTSA

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) (see Recommendation A.8) 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 follow TAP. Likewise, Recommendations not in Domains 04 or 11 are assumed to follow 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 follow TAP. Likewise, Recommendations not in Domains 04 or 11 are assumed to follow 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 of TSB 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 the provisions of No. 246D of the 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 the provisions of No. 246D of the Convention. 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 has 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 Recommendation has been consented (ITU-T Recommendation A.8, clause 3.1), or determined (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 Recommendation 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 summary of the Recommendation. 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 official and 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 official and working languages at the time that the Director makes the announcement of the intended application of the approval procedure set out in this resolution. Any associated electronic material included in the Recommendation (e.g. software, test vectors, etc.) must also be made available to TSB at the same time. 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 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 official and working languages.
- **9.3.4** The summary shall be prepared in accordance with the author's guide for drafting ITU-T Recommendations. It 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.
- **9.3.5** The text of the draft new or revised Recommendation must have been distributed in the official and 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 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 ITU-T Sector Member or Associate 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, who shall submit it to the relevant study group for prompt attention.
- **9.3.12** The Director 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 announcement by the Director of TSB 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 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 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 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 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 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 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 official and 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 official and working languages as soon as practicable, indicating, as necessary, a date of entry into effect. However, in accordance with ITU-T Recommendation 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 ITU-T patent database and the ITU-T software copyright 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, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate ITU-T databases available at the ITU-T website."
- **9.6.5** See also ITU-T Recommendation 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 implementers 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 implementers' 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 series of contributions. Implementers' guides shall be approved by the study group and made available to the public.

9.8 Deletion of Recommendations

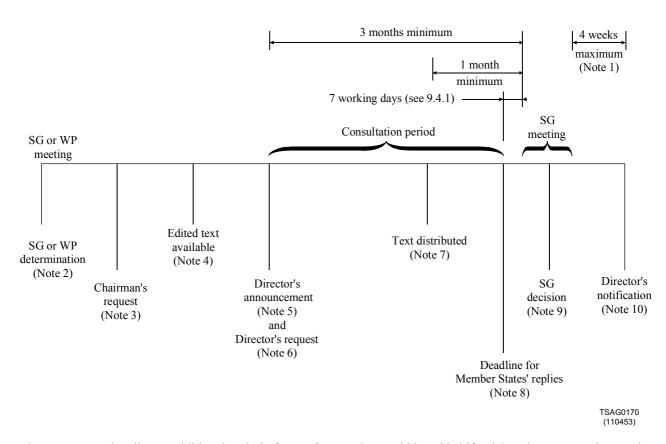
Study groups may decide in each individual case which of the following alternatives is the most appropriate one.

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 of TSB. 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 chairman to make the request to the Director (9.3.1).

NOTE 3 – CHAIRMAN'S REQUEST: The SG chairman 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, must be available to TSB in final edited form in at least one official and working language (9.3.3). Any associated electronic material included in the Recommendation must also be made available to TSB at the same time.

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 official and 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 using TAP – Sequence of events

Appendix I

(to Resolution 1)

Information for submission of a Question

- Source
- Short title
- Type of Question or proposal⁴
- 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
 - Ouestions
 - study groups
 - relevant standardization bodies

Guidelines for drafting Question text are available at the ITU-T website

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 issued or pending patent(s) and/or software copyright(s), may be required to implement this draft Recommendation. Available patent and software copyright information can be accessed at the ITU-T website.

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

Appendix III

(to Resolution 1)

Statement on Telecommunication Standardization Sector (ITU-T) patent policy⁵

The following is a "code of practice" regarding intellectual property rights (patents) covering, in varying degrees, the subject matters of ITU-T Recommendations⁶. 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 (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.
- 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 form.

⁵ Consult the ITU-T website for the latest version.

⁶ Formerly CCITT Recommendations.

RESOLUTION 2

ITU-T study group responsibility and mandates

(Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) 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 work programme of the ITU Telecommunication Standardization Sector (ITU-T);
- b) that ITU-T has to evolve in order to stay relevant to the changing telecommunication environment and to its membership interests;
- c) that collocation of study group, working party or rapporteur group meetings could also be a means to avoid duplication of work and to improve efficiency of work; in practice, collocation enables:
- attendees' participation in the work of more than one study group;
- reduction in the need for exchange of liaison statements between the study groups concerned;
- saving costs for ITU and for ITU members and other experts;
- d) that the World Telecommunication Standardization Assembly (WTSA), through Resolution 22, assigns authority to the Telecommunication Standardization Advisory Group (TSAG) in the interval between WTSAs to restructure and establish ITU-T study groups in response to changes in the telecommunication marketplace,

noting

that the study group structure, responsibilities and mandates agreed at WTSA may be modified in the interval between WTSAs, and that the current study group structure, responsibility and mandates may be found on the ITU-T website or obtained from the Telecommunication Standardization Bureau (TSB),

resolves

- that the mandate of each study group, which it shall use as the basis for organizing its study programme, shall consist of:
- a general area of responsibility, as set out in Annex A, within which the study group may amend existing Recommendations, in collaboration with other groups, as appropriate;
- 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 of this assembly);
- to encourage the study groups to consider collocation (e.g. of study group plenaries, working parties or rapporteur meetings) as a means to improve cooperation in some areas of work; the study groups involved will need to identify the areas in which they need to cooperate, based on their mandates, and keep TSAG and TSB informed,

instructs the Telecommunication Standardization Bureau

to support and facilitate the operational aspects of such collocation.

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; and
- 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

Responsible for studies regarding the management of telecommunication services, networks, and equipment, including support for next-generation networks (NGN) and the application and evolution of the telecommunication management network (TMN) framework. Additionally, it is 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 and related indoor installations

Responsible for studies on the outside plant and related indoor installations covering:

- construction of all types of terrestrial cable for public telecommunications, including marinized terrestrial cables and the associated hardware (closures, connectors, cabinets, poles, etc.);
- construction and maintenance of the telecommunication infrastructure. This includes interoffice, access and related building and home cable and hardware installations;
- installation, jointing and termination of cables;
- protection of the environment from the deployment of telecommunication related cable, hardware and equipment in the outside plant;
- protection from corrosion and other forms of damage from environment impact, except electromagnetic processes, of cables for public telecommunications and associated structures;
- protection against fire of telecommunication buildings and outside plant;
- procedures for safety of personnel.

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 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 for networks including convergence toward NGN, and enhancements to existing Recommendations on access and internetwork signalling protocols of BICC, ATM, N-ISDN and PSTN.

Study Group 12

Performance and quality of service

Responsible for Recommendations on the end-to-end transmission performance of terminals and networks, in relation to the perceived quality and acceptance by users of text, data, speech, and multimedia applications.

Although this work includes the related transmission implications of all networks and all telecommunication terminals, a special focus is given to IP QoS, interoperability and implications for NGN, and also includes work on performance and resource management.

Study Group 13

Next-generation networks

Responsible for studies relating to the architecture, evolution and convergence of next-generation networks including frameworks and functional architectures, signalling requirements for NGN, NGN project management coordination across study groups and release planning, implementation scenarios and deployment models, network and service capabilities, interoperability, impact of IPv6, NGN mobility and network convergence and public data network aspects.

Study Group 15

Optical and other transport network infrastructures

Study Group 15 is the focal point in ITU-T for the development of standards on optical and other transport network infrastructures, systems, equipment, optical fibres, and the corresponding control plane technologies to enable the evolution toward intelligent transport networks. This encompasses the development of related standards for the customer premises, access, metropolitan and long haul sections of communication networks.

Study Group 16

Multimedia terminals, systems and applications

Responsible for studies relating to multimedia service capabilities, and application capabilities (including those supported for NGN). This encompasses multimedia terminals, systems (e.g. network signal processing equipment, multipoint conference units, gateways, gatekeepers, modems, and facsimile), protocols and signal processing (media coding).

Study Group 17

Security, languages and telecommunication software

Responsible for studies relating to security, the application of open system communications including networking and directory, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

Study Group 19

Mobile telecommunication networks

Responsible for studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications 2000 (IMT-2000) and beyond, 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 telecommunication management
 SG 9 Lead study group on integrated broadband cable and television networks
 SG 11 Lead study group on signalling and protocols
 Lead study group on intelligent networks
 SG 12 Lead study group on quality of service and performance
 SG 13 Lead study group for NGN 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 terminals, systems and applications

 Lead study group on ubiquitous applications ("e-everything", such as e-health and e-business)
- SG 17 Lead study group on telecommunication security

 Lead study group on languages and description techniques
- SG 19 Lead study group on mobile telecommunication networks and for mobility

Annex B

(to Resolution 2)

Points of guidance to study groups for the development of the post-2004 work programme

- **B.1** This annex provides points of guidance to study groups for the development of the post-2004 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 TSB concerning general principles for numbering and routing and the effect on allocation of international codes.

Study Group 2 should provide the Director of 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 that may have an impact on tariff and accounting principles, including the related telecommunication economic and policy issues.

Study Group 4

As the lead study group on telecommunication management, Study Group 4 has the responsibility for the development and maintenance of a consistent ITU-T work plan on telecommunication management activities prepared with the cooperation of relevant ITU-T study groups. In particular, this work plan will focus on activities involving two types of interfaces:

- fault, configuration, accounting, performance and security management (FCAPS) interfaces between network elements and management systems, and between management systems; and
- transmission interfaces between network elements.

In support of market-acceptable FCAPS interface solutions, Study Group 4 studies will include:

- evolution of the telecommunication management framework currently based on telecommunication management network (TMN) concepts;
- management of next-generation networks as well as the mixed circuit-switched and packet-switched network environment present during the transition to NGN;
- specification of reusable management information definitions via protocol-neutral techniques;
- continuation of management information modelling for the major telecommunication technologies, such as optical and IP-based networking;
- extension of management technology choices consistent with market needs, industry-recognized value, and major, emerging technical directions; and
- strengthening of the collaborative relationships with SDOs, forums and consortia.

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 5

Study Group 5 is encouraged to hold collocated meetings with Study Group 6 whenever possible, as determined by the study group management teams.

Study Group 6

The responsibility for studies involving all physical aspects of outside plant will extend its scope to cover also building and home installations, addressing construction, installation and maintenance of the cable plant, including internal cabling and hardware for termination purposes.

Within this framework, Study Group 6, addressing also reliability and security aspects, will handle cable performance, field deployment and integrity of installations also for mixed transmission media, such as hybrid fibre/copper cables and novel media, such as plastic optical fibre cables.

In this way, the complete chain of cables for interoffice, access and related buildings and home applications will be standardized.

Study Group 6 will also take care of the aspects related to the deployment of new services on existing copper network, such as co-existence of different services from different providers in the same cable and positioning of components (e.g. xDSL filters) inside the central office main distribution frame, including also the need to provide performance requirements of new copper pair cables designed to support higher bandwidth.

This activity is strictly related to the continuation of studies on the local loop unbundling (LLU) with the scope to provide all the correct technical solutions needed to assure network integrity and interoperability, the easy use of equipment and access security in a context where operators can interact without affecting the quality of service defined by regulatory and administrative issues.

The activity on the construction of infrastructures will address the investigation and standardization of all new techniques that allow faster, cost-effective and safer cable installation, also taking into account environmental issues such as the reduction of excavation, the problem for traffic, the generation of noise.

Continued strong cooperation with Study Group 15 and IEC TCs 20, 46 and 86 with the relevant subcommittees is foreseen.

Study Group 6 wishes to continue in this new study period all the activities of support to countries with economies in transition, developing countries, and especially least developed countries, with the organization of study group meetings and workshops in the ITU regions, in cooperation with local entities. Further involvement of ITU regions is envisaged with the possible setting up of regional working groups with the aim of highlighting specific needs and submitting contributions to Study Group 6.

Study Group 6 is encouraged to hold collocated meetings with Study Group 5 whenever possible, as determined by the study group management teams.

Study Group 9

Within its general area of responsibility, Study Group 9 will 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;
- 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 9 is encouraged to hold collocated meetings of relevant activities with those of other study groups whenever possible, as determined by the study group management teams.

Study Group 11

Study Group 11 is to develop Recommendations on the fundamental aspects of network signalling and control architecture and protocols for networks, including convergence toward NGN, in cooperation and close coordination with other study groups responsible for Questions dealing with other networks and NGN.

Recommendations are to be developed on the following Questions considering convergence of fixed and mobile networks:

- network signalling and control functional architectures in emerging NGN environments;
- application control and signalling requirements and protocols;
- session control and signalling requirements and protocols;
- bearer control and signalling requirements and protocols;
- resource control and signalling requirements and protocols;
- signalling and control requirements and protocols to support attachment in NGN environments.

Study Group 11 is to lend assistance in the preparation of a handbook on the deployment of packet-based networks.

Study Group 11 is to reuse, where appropriate, protocols that are being developed by other SDOs, in order to maximize standards investments.

Study Group 11 is to work on enhancements to existing Recommendations on access and internetwork signalling protocols of BICC, ATM, N-ISDN and PSTN, i.e., SS No. 7, DSS1 and DSS2, etc. The objective is to satisfy business needs of member organizations that wish to offer new features and services on top of networks based on existing Recommendations.

Study Group 11 is encouraged to hold collocated meetings of relevant activities with those of Study Group 13 and Study Group 19 whenever possible, as determined by the study group management teams.

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, multiplexers, gateway and network signal processing equipments, networks with IP segments).

As the lead study group on QoS and performance, Study Group 12 ensures coordination within ITU-T, but also with other SDOs and forums, and develops frameworks to improve collaboration.

The study group plans to undertake work on

- transmission planning, in particular focused on NGN;
- QoS interoperability, including static and dynamic apportionment of end-to-end performance objectives among independent networks;
- quality modelling (psychophysical models, INMD, opinion models) for speech (including wideband) and multimedia, and subjective quality assessment;
- speech quality in motor vehicle environments;
- speech terminal characteristics and measurement methods;
- performance and resource management;
- QoS coordination (as lead study group or as a coordination project).

Study Group 13

The mission of Study Group 13 is:

- To study the functional and structural architecture of the NGN using the generic definitions, symbols and abbreviations that are defined in related ITU-T Recommendations. This study will include xDSL, IMS and other IP-related network architectures as well as the NGN work already undertaken in ITU-T, and taking account of NGN-related studies in other standards bodies.
- To study the separation of service control and provision from the underlying network, and the extension of service control to cover multimedia services across convergent fixed and mobile networks. The required service platforms should offer open interfaces, using APIs and/or proxy servers, for third-party service providers' use. The resulting services will need to be accessible to end users as they roam between networks and end-to-end services should be available between users connected to different networks using different service providers.
- To study a nomadicity architecture that includes support for broadband xDSL access. This will identify requirements about various types of mobility and its behaviours, such as nomadicity, as part of the overall NGN functional architecture. Authentication and security issues need to be resolved.
- To define an end-to-end QoS architecture that includes QoS signalling and relevant protocol aspects that will support a wide range of services (including real-time/streaming/non-real-time services and multimedia) over NGN. NGN should be capable of providing a predictable and consistent end-to-end QoS guarantee for each service flow with requested QoS class.
- To develop, in conjunction with Study Group 11, signalling requirements for NGN to enable interoperable services across different access and core bearer networks, and how the service requirements can be used to control the lower layer, transport and access level QoS mechanisms.
- To identify appropriate migration and interworking strategies for existing networks and services towards target NGN networks, taking into account that this process takes place through several evolutionary steps/milestones.
- To perform project coordination and release planning through the development of release plans for NGN, ensuring communication and cooperation within ITU and with other SDOs concerned, and increasing the visibility of NGN work through, for example, workshops.
- To provide a single focus for the participation in NGN studies of countries with economies in transition, developing countries, and especially least developed countries, and for the evolution of existing systems and networks.

- To act as the focus for NGN studies and the coordinated management of NGN across the ITU-T study groups.
- To be the parent body of the NGN focus group.

Study Group 13 is encouraged to hold collocated meetings of relevant activities with those of Study Group 11 and Study Group 19 whenever possible, as determined by the study group management teams.

Study Group 15

Study Group 15 is the focal point in ITU-T for the development of standards on optical and other transport network infrastructures, systems, equipment, optical fibres, and the corresponding control plane technologies to enable the evolution toward intelligent transport networks. This encompasses the development of related standards for the customer premises, 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-Mbit/s and Gbit/s) network access and home networking. This also includes related work on modelling for network, system and equipment management, transport network architectures and layer interworking. Special consideration is being given to the changing telecommunication environment towards IP-type networks as part of the evolving next-generation network (NGN).

Network, system and equipment features covered include routing, switching, interfaces, multiplexers, cross-connect, add/drop multiplexers, amplifiers, repeaters, regenerators, multilayer network protection switching and restoration, network synchronization, transport equipment management and control plane capabilities to enable evolution toward intelligent transport networks (e.g. automatically switched optical networks (ASON)). Many of these topics are addressed for various transport media and technologies, such as metallic and terrestrial/submarine optical fibre cables, dense and coarse wavelength division multiplexing (DWDM and CWDM) optical systems, optical transport network (OTN), Ethernet and other packet based data services, 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, SDOs, 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

Study Group 16 will work on the following items:

- development of a framework and roadmaps for the harmonized and coordinated development of multimedia telecommunication standardization over wired and wireless networks to provide guidance across all ITU-T and ITU-R study groups (in particular ITU-T SG 9 and ITU-R SG 6), and in close cooperation with other regional and international SDOs and industry forums; these studies will include mobility, IP and interactive broadcasting aspects, close cooperation between ITU-T and ITU-R is encouraged at all levels;
- development and maintenance of a database of existing and planned multimedia standards;
- development of multimedia end-to-end architectures, including home network environments (HNE);
- operation of multimedia systems and applications, including interoperability, scalability and interworking over different networks;
- high-layer protocols for multimedia systems and applications, including NGN applications and services;

- facsimile communication (facsimile terminals and gateways) and modems;
- media coding and signal processing;
- multimedia terminal including facsimile terminals;
- terminals, network signal processing equipments, gateway implementations, and characteristics;
- QoS and end-to-end performance in multimedia systems;
- security of multimedia systems and services;
- accessibility to multimedia systems and services;
- ubiquitous applications ("e-everything", such as e-health, e-business, e-government, multimedia emergency communication for disaster relief).

Study Group 17

Study Group 17 is responsible for studies relating to security, the application of open system communications including networking and directory, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

In the area of security, Study Group 17 is responsible for developing the core Recommendations on security such as security architecture and frameworks. In addition, Study Group 17 provides overall coordination of security work in the ITU-T.

In the area of open system communication, Study Group 17 is responsible for Recommendations in the following areas:

- open systems interconnection (OSI) (X.200-, X.400-, X.600-, X.800-series, etc.);
- directory services and systems (F.500- and X.500-series); and
- open distributed processing (ODP) (X.900-series).

In the area of languages, Study Group 17 is responsible for studies on modelling, specification and description techniques. This work, which includes languages such as ASN.1, SDL, MSC, eODL, URN, and TTCN, will be developed in line with the requirements of and in cooperation with the relevant study groups such as SG 4, SG 9, SG 11, SG 13, SG 15 and SG 16.

In the area of software aspects of telecommunication systems, this 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.

The work of Study Group 17 will be coordinated with developments carried out by other standardization bodies such as ISO/IEC JTC1, IETF and ETSI. Applicable work done in forums and consortia, such as OMG, TMF, SDL Forum Society, ASN.1 Consortium, OASIS, etc., will also be considered in order to get the maximum synergy and to minimize the efforts in the development of new Recommendations.

Study Group 19

Study Group 19 has the primary responsibility within ITU-T for overall network aspects of mobility and mobile communication networks, including IMT-2000 and beyond IMT-2000. It is responsible for:

- service and network capability requirements and network architecture;
- mobility management;
- identification of existing and evolving IMT-2000 systems;
- preparation of a handbook on IMT-2000;
- convergence of evolving IMT-2000 networks with evolving fixed networks;

- providing a migration path regarding network aspects and mobility from existing IMT-2000 systems towards systems beyond IMT-2000;
- enhancing an overview road map on network aspects and mobility of existing IMT-2000 systems specified by ITU-T and external organizations (e.g. SDOs, partnership projects (PPs), IETF, relevant external forums, etc.); and
- studying mobility management requirements and techniques with the aim of allowing for global mobility between evolving IMT-2000 systems and systems beyond IMT-2000 specified by external organizations.

The points above include the development of a long-term common IP-based network architecture applicable to mobile communication networks, including mobility within next-generation networks. Additionally, considering the ongoing evolutionary directions of network infrastructure, they include near-term IP-based internetworking.

In addition, Study Group 19 will study:

- harmonization of different IMT-2000 family member standards as they evolve beyond IMT-2000, especially with respect to mobility management and convergence with evolving fixed networks, as much as possible in cooperation with relevant bodies;
- 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.

In order to assist countries with economies in transition, developing countries, and especially least developed 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.

Study Group 19 shall maintain strong cooperative relations with external SDOs and 3GPPs and develop a complementary programme. It shall proactively promote communications with external organizations to allow for normative referencing in ITU-T Recommendations of mobile network specifications developed by those organizations.

Study Group 19 is encouraged to hold collocated meetings of relevant activities with those of Study Group 11 and Study Group 13 whenever possible, as determined by the study group management teams.

Annex C (to Resolution 2)

List of Recommendations under the responsibility of the respective study groups and TSAG in the post-2004 study period

Study Group 2

E-series, except those in conjunction with Study Group 17

F-series, except those under the responsibility of Study Groups 13, 16 and 17

Recommendations 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, Q.940-series

V.51/M.729, V.55/O.71

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

Z.300-series

Study Group 5

K-series

Study Group 6

L-series

Study Group 9

J-series

N-series

P.900-series

Study Group 11

Q-series, except those under the responsibility of Study Groups 4, 13, 15, 16 and 19

Maintenance of the U-series

Study Group 12

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

G.821, G.826, G.827, G.828, G.829, G.8201, G.921

G.1000-series

I.350-series (including Y.1501/G.820/I.351), I. 371, I.378, I.381

P-series, except P.900-series

Y.1220-, Y.1530-, Y.1540-, Y.1560-series

Study Group 13

F.600-Series

G.801, G.802, G.860-series

I-series, except those under the responsibility of Study Groups 2, 12, 15, and those having double/triple numbering in other series

Q.933 and Q.933 bis

X.1-X.25, X.28-X.49, X.60-X.84, X.90-X.159, X.180-X.199, X.272, X.300-series

Y-series, except those under the responsibility of Study Groups 12, 15 and 16.

Study Group 15

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

I.326, I.430 Series, I.414, I.630 and I.700-series except I.751 (see SG 4)

Q.500-series except Q.513 (see SG 4)

Maintenance of the R-series

X.50-series, X.85/Y.1321, X.86/Y.1323, X.87/Y.1324

V.38, V.300

Y.1300-Y.1309, Y.1330-Y.1359, Y.1700-Y.1709, Y.1720

Study Group 16

F.700 Series

G.160-series, G.190-series, G.711 and G.720-series, G. 760-series (including G.769/Y.1242), G.776.1, G.779.1/Y.1451.1

H-series

T-series

Q.115.1, Q.115.2

V-series, except those under the responsibility of Study Group 4 and 15

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

Study Group 17

E.104, E.409, E.115 (in conjunction with Study Group 2)

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

X-series, except those under the responsibility of Study Groups 4, 13, 15, and 16

Z-series except Z.300-series

Study Group 19

Q.10xx series, Q.1700-series

TSAG

A-series Recommendations

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

(Malaga-Torremolinos, 1984; Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) the purposes of the Union set forth in Article 1 of the ITU Constitution relating to the harmonization of telecommunication facilities;
- b) the duties of the ITU Telecommunication Standardization Sector (ITU-T) as set forth in Chapter III of the Constitution;
- c) the interest of both the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) in certain aspects of telecommunications, as indicated under *recognizing* in Resolution 24 (Kyoto, 1994) of the Plenipotentiary Conference;
- d) the common interest of ISO and IEC on the one hand and ITU-T on the other in the development of standards on telecommunication and information technologies, on cables, wires and optical fibres and on protection measures which take full account of the needs of manufacturers, users and those responsible for communication systems;
- e) 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 coordination meeting newly established between the three organizations through their top management;
- d) 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;
- e) the principles of collaboration established between ISO and IEC and particularly with ISO/IEC JTC 1 on information technology as contained in ITU-T Recommendation A.23 and in the ISO/IEC JTC 1 Directives;
- f) that other standardization activities of a collaborative nature may require coordination;
- g) the increasing cost of developing international standards,

resolves

to continue inviting 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 the Telecommunication Standardization Bureau (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 to consider and propose further improvements to the procedures for cooperation between ITU-T 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 Recommendation 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;
- 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 with in a single organization, and cases where cross-referencing would be helpful to users of published International Standards and Recommendations:
- 8 to invite administrations to contribute significantly to the coordination between ITU-T on the one hand and ISO and IEC on the other by ensuring adequate coordination of national activities associated with the three organizations.

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; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that postal and telecommunication administrations and the relevant recognized operating agencies (ROA) and service providers need to keep themselves informed of technical progress liable to improve or 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;
- b) that the VIth CCITT Plenary Assembly resolved to create a "CCPS/CCITT Contact Committee" to consider questions of joint interest to both organizations in order:
- to identify complementary activities to assist both organizations in coordinating time-scales of results;
- to identify overlapping activities to minimize duplication of work;
- c) that the Contact Committee has fulfilled its purpose well, providing a sound basis for ongoing fruitful collaboration at the working level between the Postal Operations Council (POC) (the successor to the Consultative Council for Postal Studies (CCPS) in 1995) and the ITU Telecommunication Standardization Sector (ITU-T) (the successor to the International Telegraph and Telephone Consultative Committee (CCITT) in 1993),

resolves

- 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 ITU-T, Study Group 2 should continue to act as the main point of contact for POC/ITU-T collaborative studies;
- 3 that the Director of the Telecommunication Standardization Bureau should encourage and assist this collaboration between the two organs.

Telecommunication standardization in relation to the interests of developing countries¹

(Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

the broad range of studies performed by the ITU Telecommunication Standardization Sector (ITU-T) in developing technical, operational and tariff Recommendations,

noting

the multifarious difficulties encountered by the developing countries in ensuring their effective and efficient participation in the work of ITU-T,

recognizing

- a) 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, as well as the need to reduce the cost of equipment taking into account the needs and requirements of developing countries;
- b) that there is still large gap between developed and developing countries in the area of telecommunication standardization,

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 humankind as a whole,

taking account of

Nos. 190 and 196 of the ITU Convention, Resolution 25 (Rev. Marrakesh, 2002), § 41 of Annex 1 to Resolution 71 (Rev. Marrakesh, 2002) and Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference,

resolves

- to request the Director of the Telecommunication Standardization Bureau (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, in particular those of developing countries;
- 3 subject to approval by the Council, to provide administrations of developing countries with a free electronic copy of ITU handbooks, directives, etc. related to implementation of ITU-T Recommendations, particularly with respect to planning, operation and maintenance of telecommunication networks,

In this resolution, the term "developing countries" is used in the generic sense and includes also countries with economies in transition and least developed countries.

instructs the Director of the Telecommunication Standardization Bureau

to provide the Telecommunication Development Bureau with all the necessary support with a view to:

- encouraging and increasing the participation of 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.;
- encouraging the establishment and operation of groups addressing the above questions;
- working with Sector Members, manufacturers and R&D organizations in particular, on exchanging
 information on new technologies and requirements of developing countries, with a view to
 improving effective participation of the developing countries in telecommunication standardization
 activities;
- assisting developing countries in formulating draft Questions and in making proposals;
- developing standardization activities in the regional offices;
- launching a campaign to promote standardization activities in order to attract new Sector Members from developing countries,

further instructs the study groups

- 1 to take appropriate steps to have studies carried out on questions connected with standardization which are identified by world telecommunication development conferences;
- 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, and to provide solutions/options relevant to developing countries wherever possible;
- to continue liaising with study groups of the ITU Telecommunication Development Sector, where appropriate, when developing new or revised ITU-T Recommendations, on the specific needs and requirements of developing countries, in order to broaden the appeal and applicability of the Recommendations in those countries.

Principles and procedures for the allocation of work to, and coordination between, ITU-R and ITU-T

(Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

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

- 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 budgetary provisions for such meetings in the budget of their Sector.

Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources

(Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis 2004)

The World Telecommunication Standardization Assembly (Florianópolis 2004),

recognizing

- a) the relevant rules of the International Telecommunication Regulations (ITR) regarding the integrity of numbering resources;
- b) the instructions in the resolutions adopted by plenipotentiary conferences relevant for the stability of the numbering plans, especially the E.164 plan, and in particular *resolves to instruct* 2 of Resolution 133 (Marrakesh, 2002) of the Plenipotentiary Conference:

"to take any necessary action to ensure the sovereignty of ITU Member States with regard to country code numbering plans and addresses will be fully maintained, as enshrined in Recommendation E.164 of the ITU Telecommunication Standardization Sector, in whatever application they are used",

noting

- a) that the procedures governing the allocation and management of international numbering, naming, addressing and identification resources and related codes (e.g. new telephone ISDN country codes, telex destination codes, signalling area/network codes, data country codes, mobile country codes) are laid down in the relevant E-, F-, Q- and X-Series ITU-T Recommendations;
- b) that the principles concerning future numbering, naming, addressing and identification plans to deal with emerging services or applications and relevant number allocation procedures to meet international telecommunication needs will be studied in accordance with the ongoing work programme approved by this assembly for study groups of the ITU Telecommunication Standardization Sector (ITU-T);
- c) that the national authorities responsible for allocation of numbering, naming, addressing and identification resources, including Q.708 signalling area/network codes and X.121 data country codes, normally participate in Study Group 2;
- d) that it is in the common interest of ITU-T Member States and Sector Members that the Recommendations and guidelines for international telecommunication numbering, naming, addressing and identification resources should be:
- i) known, recognized and applied by all;
- ii) used to build and maintain confidence of all in the related services:
- e) Articles 14 and 15 of the ITU Convention concerning the activities of ITU-T study groups and the responsibilities of the Director of the Telecommunication Standardization Bureau (TSB), respectively,

considering

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

instructs

- the Director of TSB, before assigning, reassigning and/or reclaiming international numbering, naming, addressing and identification resources, to consult:
- i) the chairman of Study Group 2, in liaison with the chairmen of the other relevant study groups, or if needed the chairman's delegated representative; and
- ii) the relevant administration(s); and/or
- iii) the authorized applicant/assignee when direct communication with TSB is required in order to perform its responsibilities.

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

- 2 Study Group 2, in liaison with the chairmen of the other relevant study groups, to provide the Director of TSB:
- i) advice on technical, functional and operational aspects in the assignment, reassignment and/or reclamation of international numbering, naming, addressing and identification resources in accordance with the relevant Recommendations, taking into account the results of any ongoing studies;
- ii) guidance in cases of reported complaints about misuses of an international telecommunication numbering resource;
- 3 the Director of TSB to take the appropriate measures where Study Group 2, in liaison with the other relevant study groups, has provided advice and guidance in accordance with *instructs* above;
- 4 the Director of TSB, in close collaboration with Study Group 2, and any other relevant study groups, to follow up on the misuse of any numbering, naming, addressing and identification resources and inform the Council accordingly;
- Study Group 2 to study, urgently, necessary action to ensure that the sovereignty of ITU Member States with regard to country code numbering, naming, addressing and identification plans is fully maintained, as enshrined in Recommendation E.164 and other relevant Recommendations; this shall cover ways and means to address and counter any misuse of any numbering, naming, addressing and identification resources, and of call progress tones and signals, through proper development of a proposed resolution and/or the development and adoption of a Recommendation towards this aim.

Authorization for TSAG to act between WTSAs

(Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that, under the provisions of Article 14A of the ITU Convention, the Telecommunication Standardization Advisory Group (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 the ITU Telecommunication Standardization Sector (ITU-T) make decisions on matters such as work priorities, study group structure and meeting schedules in shorter periods of time, between world telecommunication standardization assemblies (WTSA), in order to maintain its preeminence;
- c) that Resolution 107 (Marrakesh, 2002) of the Plenipotentiary Conference considers that there is an urgent need to ensure efficient ITU operations within the constraints of limited human and financial resources;
- d) that Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference resolves that WTSA shall continue to promote the continued evolution of the standardization sector and adequately address strategic issues in standardization;
- e) 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;
- f) that TSAG can help improve coordination of the study process and provide improved decision-making processes for the important areas of ITU-T activities;
- g) that flexible administrative procedures, including those related to budgetary considerations, are needed in order to adapt to rapid changes in the telecommunication environment;
- h) 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,
- i) that it is desirable for TSAG to consider the implications of new technologies for the standardization activities of ITU-T and how such technologies can be included within the ITU-T work programme;
- j) that TSAG can play an important role in ensuring coordination between study groups, as appropriate, on standardization issues including, as required, avoiding duplication of work, and identifying linkages and dependencies between related work items;
- k) that TSAG, in providing advice to study groups, may take account of the advice of other groups,

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,

recognizing

that the Plenipotentiary Conference (Marrakesh, 2002) adopted Nos. 191A and 191B of the Convention that allow WTSA to establish and terminate other groups,

resolves

- 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 the Telecommunication Standardization Bureau (TSB), as appropriate:
- a) maintain up-to-date, efficient and flexible working guidelines;
- b) assume responsibility, including development and submission for approval under appropriate procedures, for the A-series Recommendations (Organization of the work of ITU-T);
- c) 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;
- d) issue advice on study group schedules to meet standardization priorities;
- e) while recognizing the primacy of the study groups in carrying out the activities of ITU-T, create, terminate or maintain other groups, appoint their chairmen and vice-chairmen, and establish their terms of reference with a defined duration, in accordance with Nos. 191A and 191B of the Convention, in order to enhance and improve the effectiveness of ITU-T's work as well as promoting flexibility in responding rapidly to high-priority issues; such groups shall not adopt Questions or Recommendations;
- f) review reports of and consider appropriate proposals made by coordination groups and other groups, and implement those that are agreed;
- g) establish the appropriate mechanism, for example, coordination groups or other groups, to address key topics of work which span several study groups, with a view to ensuring effective coordination of standardization topics in order to achieve suitable global solutions;
- h) advise the Director of TSB on financial and other matters;
- i) 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;
- j) group, as far as practicable, Questions of interest to countries with economies in transition, developing countries, and especially least developed countries, in order to facilitate their participation in these studies;
- k) other specific matters within the competence of WTSA, subject to the approval of Member States, using the approval procedure contained in Resolution 1 of this assembly, Section 9;
- that revisions to the relevant procedures for adoption of Questions and Recommendations by study groups, other than those referred to in Nos. 246D, 246F and 246H of the Convention, may be initiated by TSAG for approval by Member States between WTSAs, using the approval procedure contained in Resolution 1 of this assembly, Section 9;

- that TSAG provide liaison on its activities to organizations outside ITU in consultation with the Director of TSB, as appropriate;
- that TSAG consider the implications, for ITU-T, of market needs and new emerging technologies that have not yet been considered for standardization by ITU-T, and establish an appropriate mechanism to facilitate the examination of their consideration, including assigning Questions or coordinating the work of study groups;
- 5 that a report on the above TSAG activities shall be submitted to the next WTSA.

Assistance to the regional tariff groups

(Geneva, 1996; Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

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 developing countries, and in particular 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 Study Group 1 of the ITU Telecommunication Development Sector (ITU-D) 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) have, to a large extent, developed their cost methodology;
- g) that the implementation of those existing cost methodologies needs to be pursued, while adapting them to evolution,

calls upon the Director of the Telecommunication Standardization Bureau

to cooperate with the Director of the Telecommunication Development Bureau in order to:

- i) continue to provide specific assistance to the regional tariff groups for pursuing the study of the methods and/or methodologies and criteria to be used in setting rates and collection charges;
- ii) encourage the continuing development by the members of the regional groups of computerized application tools related to their cost methodology;
- take appropriate steps to facilitate meetings of the regional tariff groups and promote the necessary synergies between the two Sectors.

Alternative calling procedures on international telecommunication networks

(Geneva, 1996; Montreal, 2000, Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recalling

- a) Resolution 1099, adopted by the Council at its 1996 session, concerning alternative calling procedures on international telecommunication networks, which urged the ITU Telecommunication Standardization Sector (ITU-T) to develop, as soon as possible, the appropriate Recommendations concerning alternative calling procedures;
- b) Resolution 22 (Rev. Istanbul, 2002) of the World Telecommunication Development Conference, which resolves:
- i) to encourage all administrations and international telecommunication operators to enhance the effectiveness of ITU's role and to give effect to its Recommendations, particularly those of ITU-T Study Group 3, 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 effort in studying the issue of refile, in order to achieve an outcome based on the spirit of Resolution 21 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference;
- iii) to request administrations and international operators which permit the use of alternative calling procedures in their country in accordance with their national regulations to respect the decisions of other administrations and international operators whose regulations do not permit such services;
- c) Resolution 21 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference concerning alternative calling procedures on telecommunication networks, which resolves:
- to encourage administrations and international telecommunication operators to implement ITU-T Recommendations in order to limit the negative effects that, in some cases, alternative calling procedures have on developing countries;
- ii) to request administrations and international operators which permit the use of alternative calling procedures on their territory in accordance with their national regulations to pay due regard to the decisions of other administrations and international operators whose regulations do not permit such services;
- d) ITU-T Recommendation D.201, 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, refiling and other alternative calling procedures, which may be potentially harmful, are permitted in some countries and not in others¹;

As at 15 May 2004, 114 countries and territories had announced that incoming and outgoing call-back is prohibited in their territories.

- b) that call-back, refiling and other alternative calling procedures, which may be potentially harmful, offer alternative calling procedures which may be attractive for users;
- c) that call-back, refiling and other alternative calling procedures, which may be potentially harmful, affect the revenue of recognized operating agencies (ROA), which may seriously hamper, in particular, the efforts of countries with economies in transition, developing countries, and especially least developed countries, for the sound development of their telecommunication networks and services;
- d) that distortions in traffic patterns resulting from call-back, refiling and other alternative calling procedures, which may be potentially harmful, may impact on 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 and refiling 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 Recommendation D.5;
- b) administrations and ROAs should vigorously pursue the implementation of ITU-T Recommendation D.140 and the principle of cost-orientated accounting rates and accounting rate shares.

resolves

- 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;
- 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 request Study Group 2 to study other aspects and forms of alternative calling procedures, including refiling;
- to request Study Group 3 to study the economic effects of call-back on the effort of countries with economies in transition, developing countries, and especially least developed countries, for sound development of their local telecommunication networks and services, and to evaluate the effectiveness of the suggested guidelines for consultation on call-back,

calls upon the Director of the Telecommunication Standardization Bureau

to cooperate with the Director of the Telecommunication Development Bureau in order to facilitate the participation of countries with economies in transition, developing countries, and especially least developed countries, in these studies and to take care of 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:	Administration Y and ROAs in Y should take all reasonable measures to stop call-back providers in its territory offering call-back:
a) prohibited; and/or	a) in other countries where it is prohibited; and/or
b) harmful to the network.	b) which is harmful to the networks involved.
ROAs in country X will cooperate in the implementation of such steps.	

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.

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

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

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 the ITU Telecommunication Standardization Sector (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 No. 241A of the ITU Convention enables the Sectors to admit participation of entities or organizations in the work of a given study group as an Associate;
- d) that Nos. 241A, 248B and 483A of the Convention describe the principles for the participation of Associates,

resolves

- that an interested entity or organization may join 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 alternative 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

- 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 Nos 241B, 241C, 241D and 241E of the Convention;
- the Telecommunication Standardization Advisory Group 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 the Telecommunication Standardization Bureau

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

Strengthening electronic working methods for the work of ITU-T

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) the rapid pace of technology change and the consequent need for improved and more rapid standards development;
- b) that electronic working methods (EWM) enable open, rapid and easy collaboration between participants in the activities of the ITU Telecommunication Standardization Sector (ITU-T);
- c) that the implementation of EWM 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 EWM 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 EWM capabilities;
- f) the decisions contained in Resolution 65 (Kyoto, 1994), Resolution 66 (Rev. Minneapolis, 1998) and Resolution 104 (Minneapolis, 1998) of the Plenipotentiary Conference,

noting

- a) the desire of members to receive documents in electronic format in a timely manner and the need to reduce the increasing amount of hard copy documentation generated during meetings and dispatched by mail;
- b) that some forms of EWM have already been implemented by ITU-T, such as electronic document submission and the electronic forum service;
- c) the desire of ITU-T members to conduct electronic meetings;
- d) the increasing use of portable computers by members during meetings;
- e) 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;
- f) the economies possible from enhancing ITU-T EWM capabilities (e.g. reduced costs for distribution of paper documentation, travel costs, etc.);
- g) the encouragement by other telecommunication standardization organizations of collaboration using EWM;
- h) that the alternative approval process (AAP) (Recommendation A.8) is conducted primarily by electronic means,

resolves

- 1 that the principal EWM objectives of ITU-T are:
- that collaboration between members on development of Recommendations should be by electronic means;
- that ITU-T should provide facilities and capabilities for EWM 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;
- that these objectives should be systematically addressed in an EWM Action Plan, including individual action items identified by the ITU-T membership or TSB, and prioritized and managed by TSB with the advice of the Telecommunication Standardization Advisory Group (TSAG),

instructs

- 1 the Director of TSB to:
- maintain the EWM Action Plan to address the practical and physical aspects of increasing the EWM 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 EWM facilities and capabilities;
- 2 the TSAG EWM Working Party to continue to:
- act as the point of contact between ITU-T membership and TSB on EWM 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 EWM liaisons;
- encourage participation by all participants in the work of ITU-T, especially EWM 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.

Guidelines for ITU-T strategic activities

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Montreal, 2000; Florianópolis, 2004),

noting

- a) that, in accordance with No. 197C of the ITU Convention, the duties of the Telecommunication Standardization Advisory Group (TSAG) shall include, *inter alia*, to review strategies and priorities for activities in the ITU Telecommunication Standardization Sector (ITU-T);
- b) that, in accordance with Resolutions 71 and 72 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference 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,

considering

- a) the relevant outputs of the World Summit on the Information Society regarding ITU-T;
- b) the relevant implications of results-based budgeting and its impact on ITU-T planning activities, in accordance with Resolution 42 of this assembly,

resolves to invite 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 the Telecommunication Standardization Advisory Group

- to monitor the Sector's work during the current study period in light of the current strategic plan set out in Resolution 71 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference and the evolution of the telecommunication environment, including:
- setting appropriate priorities during the course of the study period against which the performance of the Sector can be measured;
- obtaining regular reports from study group chairmen and other responsible entities as to the achievement of such priorities;
- implementing appropriate action to enable priorities 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:
- clauses of the current strategic plan that 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 the World Trade Organization (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 needs and financial institutions);
- pursuant to Resolution 72 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, 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 in relevant A-series Recommendations;
- the consideration of an evolution in the role of ITU-T to an increasingly inclusive and marketoriented 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.

Voluntary contributions

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) Resolution 71 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference on the strategic plan for the Union 2004-2007, targeting ambitious strategic objectives in the activities of the ITU Telecommunication Standardization Sector (ITU-T);
- b) Decision 5 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, limiting expenditure of the Union for the period 2004 to 2007;
- c) Resolution 44 adopted by this assembly on bridging the standardization gap between developing¹ and developed countries,

recalling

- a) that the ITU Constitution, Convention and Financial Regulations 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, Sector Members and Associates;
- b) that expenditures 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,

considering further

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, Sector Members and Associates from both developing and developed countries to submit to the Director of the Telecommunication Standardization Bureau projects and other initiatives of interest for ITU-T to be financed under voluntary contributions.

In this resolution, the term "developing countries" is used in the generic sense and includes also countries with economies in transition and least developed countries.

Appointment and maximum term of office for chairmen and vice-chairmen of ITU-T study groups and of TSAG

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that No. 189 of the ITU Convention provides for the establishment of study groups of the ITU Telecommunication Standardization Sector (ITU-T);
- 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 the Telecommunication Standardization Advisory Group (TSAG) have been incorporated in Article 14A of the Convention;
- d) that No. 242 of the Convention requires the World Telecommunication Standardization Assembly (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 of this assembly indicates that WTSA shall appoint the chairmen and vice-chairmen of study groups and of TSAG;
- f) that Section 3 of Resolution 1 of this assembly 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 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 or her 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;
- b) that the management team of a study group should include at least the chairman, vice-chairmen and working party chairmen,

resolves

- 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;
- 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, WTSA will appoint the chairman and only the number of vice-chairmen deemed necessary for the efficient and effective management and functioning of the group in question;
- 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 the Telecommunication Standardization Bureau will circulate the profiles to the heads of delegation present at 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 a 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 TSAG

- 1 Typically, the positions of chairmen and vice-chairmen to be filled are known in advance of WTSA.
- a) In order to help 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 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.
- d) In drafting the consolidated list, the following should be taken into account: In cases where there are two or more candidates with equal competence for the same chairman position, preference should be given to candidates from Member States and Sector Members having the lowest number of designated study group chairmen.
- 2 Situations which cannot be considered within 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.

- 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 chairmen and vice-chairmen

No. 242 of the Convention 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."

Whilst giving primary consideration to the qualifications below, there should be an appropriate representation of chairmen and vice-chairmen from countries with economies in transition, developing countries and least developed countries.

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

- knowledge and experience;
- continuity in participation in the relevant study group;
- managerial skills;
- availability¹;
- active in the work of the study group;

and the following qualifications, *inter alia*, appear to be of 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;
- availability¹.

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

A further factor to be considered when appointing chairmen and vice-chairmen to both study groups and TSAG is candidates' availability for the period up to the next WTSA.

Coordination among ITU-T, ITU-R and ITU-D for activities relating to IMT-2000 and systems beyond IMT-2000

(Montreal, 2000; Florianópolis 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that the ITU Telecommunication Standardization Sector (ITU-T) has undergone a reorganization at this assembly in response to the rapidly progressing worldwide telecommunication standardization environment;
- b) that ITU-T is actively continuing its studies on mobility and overall network aspects of IMT-2000 and systems beyond IMT-2000;
- c) that Study Group 8 of the ITU Radiocommunication Sector (ITU-R) has the ITU-R responsibility for the future development of IMT-2000 and systems beyond IMT-2000;
- d) that the ITU-T study groups involved in the standardization of IMT-2000 and systems beyond IMT-2000 and ITU-R Study Group 8 have had, and continue to have, effective informal coordination via liaison activity with respect to development of Recommendations relating to IMT-2000 and systems beyond IMT-2000 for both Sectors;
- e) that the Radiocommunication Advisory Group (RAG) has advised the Director of the Radiocommunication Bureau (BR) that this coordination at the working level between ITU-R and ITU-T on an informal basis be encouraged and continued;
- f) that ITU-R Study Group 8 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 systems beyond IMT-2000, within a complementary framework, as an efficient means of effecting progress in both Sectors, such a roadmap concept facilitating the communication of issues relating to IMT-2000 and systems beyond IMT-2000 with organizations external to ITU;
- g) that Study Group 2 of the ITU Telecommunication Development Sector (ITU-D) is currently involved in activities closely coordinated with ITU-T and ITU-R and relating to the development of guidelines on the smooth transition of existing mobile networks to IMT-2000 and systems beyond IMT-2000 for countries with economies in transition, developing countries, and especially least developed countries,

noting

- a) Resolution 18 of this assembly, on principles and procedures for the allocation of work to, and coordination between, ITU-R and ITU-T;
- b) ITU-T Recommendation A.4, on the communication process between ITU-T and forums and consortia;
- c) ITU-T Recommendation A.5, on generic procedures for including references to documents of other organizations in ITU-T Recommendations;
- d) ITU-T Recommendation 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 ITU-R in the ongoing development of IMT-2000,

resolves

- that ITU-T maintain a roadmap for all of its standardization activities relating to IMT-2000 and systems beyond IMT-2000;
- that the effective coordination currently established between ITU-T, ITU-R and ITU-D for activities relating to IMT-2000 and systems beyond IMT-2000 be continued so as to ensure full alignment and harmonization of the work programmes, including the roadmaps, of the three Sectors,

instructs the Director of the Telecommunication Standardization Bureau

to bring this resolution to the attention of the Director of BR and the Director of the Telecommunication Development Bureau (BDT),

encourages the Directors of the three Bureaux

to investigate new ways to improve the efficiency of ITU work on IMT-2000 and systems beyond IMT-2000.

Regulatory aspects of ITU-T work

(Montreal, 2000; Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recognizing

the provisions of Nos. 246D to 246H of the ITU Convention,

considering

- a) that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) 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 ITU-T, particularly on technical matters;
- d) that many matters having policy or regulatory implications may involve technical implementation and therefore need to be considered in appropriate technical study groups;
- e) that Resolution 82 (Minneapolis, 1998) of the Plenipotentiary Conference refers to the approval of some Questions and Recommendations using an alternative approval process;
- f) that Resolution 82 (Minneapolis, 1998) of the Plenipotentiary Conference provides some examples of matters having policy or regulatory implications,

noting

- a) that the ITU Member States have identified significant policy responsibilities in Chapter VI of the ITU Constitution (Articles 33-43) and in Chapter V of the Convention (Articles 36-40), and in relevant resolutions of plenipotentiary conferences;
- b) that the International Telecommunication Regulations further describe policy and regulatory obligations incumbent upon Member States;
- c) that No. 191C of the Convention empowers the World Telecommunication Standardization Assembly to assign matters within its competence to the Telecommunication Standardization Advisory Group (TSAG), indicating the action required on those matters,

resolves

- that, further to the examples provided in Resolution 82 (Minneapolis, 1998) of the Plenipotentiary Conference, 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;
- 2 to request TSAG to consult Member States on any relevant issues other than those specified above,

invites Member States

to contribute actively to the work to be carried out on this matter.

Implementation of results-based budgeting – Impact on planning in ITU-T

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) Resolution 71 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, which contains the strategic plan for the Union in an annex;
- b) Resolution 72 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, which addresses the linkage between strategic, financial and operational planning in ITU;
- c) Resolution 107 (Marrakesh, 2002) of the Plenipotentiary Conference, which highlights the need to strengthen the integration of strategic, financial and operational planning based on a results-based budgeting foundation;
- d) the Report on the Consultancy Project submitted to the 2004 session of the Council, which urges the implementation of results-based budgeting based on UN best practices and includes a recommendation to introduce a consistent planning 'hierarchy' across all of ITU that will link Sectors' objectives to budget "outputs" and to operational plans, and that will form the basic structure of the budget presentation;
- e) the decision of the 2004 session of the Council to revise the mandate of the Council Group on the Financial Regulations to identify implementation strategies for various financial management issues, including the linkage of the budget structure to strategic and operational planning,

considering further

- a) that, pursuant to Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference, the World Telecommunication Standardization Assembly:
- i) shall address strategic issues in standardization and, through the Director of the Telecommunication Standardization Bureau (TSB), provide its comments to the Council; and
- ii) should take into account the Union's strategic plan and give consideration to the financial status of the Sector;
- b) that, in accordance with that resolution, the Director of TSB, in preparing a report to WTSA and providing support to the chairmen of the study groups, is instructed to include a report on the financial status of the Sector in order to assist WTSA in its functions,

recognizing

that there are major obstacles to an integrated planning and budgeting function at ITU, and that there is an urgent need to address the issue of coordinating the ITU strategic plan with the various strategic documents and resolutions adopted at the Sector level (and reflected in Sector operational plans),

resolves to invite the Director of the Telecommunication Standardization Bureau

- 1 to request advice from TSAG on a set of pre-defined objectives and outputs (i.e. what the ITU Telecommunication Standardization Sector (ITU-T) aims to achieve over the budget period), taking into account all relevant results of this assembly and the priorities of ITU-T;
- 2 to prepare the draft budget of the Sector, taking into consideration such priorities and relevant results of this assembly.

Regional preparations for WTSAs

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that many regional telecommunication organizations have coordinated their preparations for this assembly;
- b) that many common proposals have been submitted to this assembly from administrations participating in the preparatory work of regional telecommunication organizations;
- c) that this consolidation of views at regional level, together with the opportunity for interregional discussions prior to the assembly, has eased the task of reaching a consensus during the assembly;
- d) that the burden of preparation for future assemblies is likely to increase;
- e) that the coordination of preparations at regional level is consequently of great benefit to the Member States;
- f) that greater efficiency of regional coordination and interaction at interregional level prior to future assemblies will help ensure their success;
- g) that some regional organizations lack the necessary resources to organize adequately and participate in such preparations;
- h) that there is a need for overall coordination of the interregional consultations,

recognizing

- a) the benefits of regional coordination as already experienced in the preparation of world radiocommunication conferences;
- b) that the Plenipotentiary Conference and the World Telecommunication Development Conference have adopted resolutions establishing regional preparatory processes for their respective conferences,

taking into account

the efficiency benefits that a world telecommunication standardization assembly (WTSA) could gain from an increased amount and level of preparation by the Member States prior to the assembly,

noting

- a) that many regional telecommunication organizations have expressed the need for the Union to cooperate more closely with regional telecommunication organizations;
- b) that, consequently, the Plenipotentiary Conference (Minneapolis, 1998) resolved that the Union should develop stronger relations with regional telecommunication organizations,

noting further

that the relationship between ITU regional offices and regional telecommunication organizations has proved to be of great benefit,

resolves to instruct the Director of the Telecommunication Standardization Bureau

to organize, within the financial limitations established by the Plenipotentiary Conference, one regional preparatory meeting per region, the closest in time possible to the next WTSA, followed by an informal meeting of the chairmen and vice-chairmen of the regional preparatory meetings and other interested parties, to be held not earlier than six months prior to WTSA,

requests the Secretary-General, in cooperation with the Director of the Telecommunication Standardization Bureau

- to consult with Member States and regional and subregional telecommunication organizations on the means by which assistance can be provided in support of their preparations for future WTSAs;
- 2 on the basis of such consultations, to assist Member States and regional and subregional telecommunication organizations in such areas as:
- i) the organization of informal regional and interregional preparatory meetings;
- ii) the organization of information sessions;
- iii) the development of coordination methods;
- iv) the identification of major issues to be resolved by the next WTSA;
- 3 to submit to the 2006 session of the Council a report on feedback from Member States concerning the necessity of WTSA preparatory meetings, and to the next WTSA a report on the application of this resolution,

invites Member States

to participate actively in the implementation of this resolution,

invites regional and subregional telecommunication organizations

- 1 to participate in coordinating and harmonizing the contributions of their respective Member States in order to generate common proposals where possible;
- 2 to convene interregional meetings in order to arrive at interregional common proposals.

Bridging the standardization gap between developing¹ and developed countries

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries;
- b) that Resolution 129 (Marrakesh, 2002) of the Plenipotentiary Conference invites Member States to undertake concerted action to pursue the matter with a view to achieving the objectives of Resolution 37 (Istanbul, 2002) of the World Telecommunication Development Conference,

recognizing

- a) that, in accordance with Article 13 of the ITU Convention, the World Telecommunication Standardization Assembly (WTSA) is convened to consider specific matters related to telecommunication standardization:
- b) that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) cover both technical matters and matters having policy or regulatory implications;
- c) that Article 17 of the ITU Constitution, while providing that the functions of ITU-T shall fulfil the purposes of the Union relating to telecommunication standardization, stipulates that such functions are to be performed "bearing in mind the particular concerns of the developing countries",

noting

- a) that the standardization gap between developed and developing countries should be bridged by collective efforts from both developed and developing countries;
- b) that ITU has been playing a key role in bridging the digital divide, which includes the standardization gap between developed and developing countries;
- c) that ITU's programmes for fostering Partnerships continue to strengthen and expand the assistance ITU provides its members, particularly developing countries,

taking into account

- a) that developing countries could benefit from an improved capability in the application and development of standards;
- b) that the telecommunication industry, particularly manufacturers and operators, could also benefit from the greater involvement of developing countries in the making and application of standards,

In this resolution, the term "developing countries" is used in the generic sense and includes also countries with economies in transition and least developed countries.

resolves

- that the objectives of the action plan annexed to this resolution, aimed at bridging the standardization gap between developed and developing countries, should be implemented to the extent feasible without delay;
- that the ITU regional offices shall be encouraged to work closely with the Telecommunication Standardization Bureau (TSB) in order to carry out the objectives of the action plan,

instructs the Director of the Telecommunication Standardization Bureau

- to work closely with the Director of the Telecommunication Development Bureau (BDT) on implementing the objectives of the action plan annexed to this resolution;
- taking into account financial constraints and existing and planned BDT activities, to include in the TSB budget proposal to the Council funds identified for the implementation of this resolution,

invites the Director of the Telecommunication Standardization Bureau

to work closely with the Director of BDT to encourage the formation of Partnerships as one of the means for financing the plan,

instructs the study groups

to be actively involved in the implementation of the programmes set forth in the action plan annexed to this resolution,

encourages Member States and Sector Members

to take the objectives set out in the action plan into account in their participation in ITU-T.

Annex

(to Resolution 44)

Action plan for the implementation of Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference

I Programme 1: Strengthening standard-making capabilities

- 1) Objective
- To improve the standard-making capabilities of developing countries.
- 2) Activities
- Developing guidelines to assist developing countries in their involvement in ITU-T activities.
- Developing webcasting systems that enable developing-country experts to follow study group meetings from their office workstations.
- Conducting a certain number of consultancy projects designed to support developing countries in the development of standardization plans, strategies, policies, etc. The outputs should be further transformed into best practices.

II Programme 2: Assisting BDT in enhancing efforts in respect of standards application

1) Objective

To assist BDT in:

- Ensuring that developing countries have a clear understanding of ITU-T Recommendations.
- Enhancing the application of ITU-T Recommendations in developing countries.

2) Activities

To assist BDT in:

- Reviewing/assessing the existing national standards of developing countries and determining whether they are consistent and in accordance with the current ITU-T Recommendations.
- Developing a set of guidelines on how to apply ITU-T Recommendations, with particular emphasis on Recommendations having regulatory and policy implications.
- Compiling and maintaining a database containing information on new technologies that are standardized.
- Organizing training courses on the application of specific Recommendations.
- Establishing a forum on the ITU-T website where developing countries can raise questions concerning their understanding and application of Recommendations and seek advice from study group experts.

III Programme 3: Human resource building

- Organizing seminars, workshops and study group meetings in developing countries.
- In close collaboration with BDT, providing training courses on standardization to developing countries.
- Establishing and maintaining a forum, moderated by a group of experts, to support and provide advice to standardization bodies in developing countries.

IV Programme 4: Flagship groups for bridging the standardization gap

- A developed country voluntarily joins a number of developing countries in a small group in order to support them in their standardization activities. The close cooperation and direct support thus provided will enable the developing countries within such groups to carry out their standardization activities more effectively. The groups could be called flagship groups for bridging the standardization gap.
- TSB shall support and encourage the establishment of such flagship groups, the activities of which should serve to improve the quality of standardization activities in developing countries.
- Details of each new flagship group should be posted on the ITU-T website. Those details could include plans, reports on conducted tasks, best practices, etc.

V Programme 5: Fundraising for bridging the standardization gap

- a) Contributions to the action plan in the following forms of Partnership and others means:
 - Partnership contributions.

76

• Voluntary contributions by industry participating in the telecommunication market of developing countries.

- Voluntary contributions by others.
- Any potential additional budget allocated by ITU within budget limits.
- b) Management of funds raised by TSB:
 - The Director of TSB shall be responsible for the management of funds raised as above, which shall be used principally for achieving the objectives of these programmes.
- c) Principles for use of funds:
 - Funds are to be used for training, surveying, studying programmes, etc. (but not for the purchase of equipment).

Effective coordination of standardization work across study groups in ITU-T and the role of TSAG

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

noting

- a) that the ITU Telecommunication Standardization Sector (ITU-T) is the pre-eminent global standardization body comprising administrations, equipment vendors, operators and regulators;
- b) that, under Article 17 of the ITU Constitution, ITU-T shall, bearing in mind the particular concerns of the developing countries, fulfil the purposes of the Union by studying technical, operating and tariff questions and adopting Recommendations on them with a view to standardizing telecommunications on a worldwide basis:
- c) that, under Article 13 of the ITU Convention, the World Telecommunication Standardization Assembly (WTSA) is required, *inter alia*, to approve the programme of work for ITU-T for each study period and to determine the priority, urgency, estimated financial implications and time-scale for the completion of studies,

considering

- a) Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference, which resolves that WTSA shall adequately address strategic issues in standardization, and encourages Member States, ITU-T Sector Members and study group chairmen and vice-chairmen to concentrate, *inter alia*, on the identification and analysis of strategic issues in standardization in their preparations for WTSA so as to facilitate the work of the assembly;
- b) that the interests of countries with economies in transition, developing countries, and especially least developed countries, are promoted by ensuring a coordinated approach to standardization where strategic standardization issues are concerned;
- c) that WTSA has agreed to a new ITU-T study group structure and improvements to ITU-T's working methods that will assist ITU-T in meeting the standardization challenges of the 2005-2008 study period,

recognizing

- a) that effective coordination between study groups is critical to ITU-T's ability to meet emerging standardization challenges and the needs of its membership;
- b) that ITU-T study groups are responsible for developing Recommendations on technical, operating and tariff questions on the basis of contributions submitted by the membership;
- c) that the effective coordination of standardization activities would assist in meeting the objectives of Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference;
- d) that operational coordination can be effected by means of joint rapporteur group meetings, liaison statements between study groups and the study group chairmen's meetings organized by the Director of the Telecommunication Standardization Bureau;
- e) that effective coordination is facilitated by taking a top-down approach to the coordination of work between study groups, including the identification of linkages between related work items;

- f) that the Telecommunication Standardization Advisory Group (TSAG) can play an important role in ensuring cross-study group coordination on standardization issues, including the measurement of standardization progress against agreed milestones;
- g) that it is appropriate for WTSA, as the highest body in ITU-T, to identify strategic standardization issues for each study period,

bearing in mind

that the coordination of standardization activities is particularly important in relation to:

- a) next-generation networks (NGN);
- b) security (including cybersecurity);
- c) telecommunications for disaster relief (TDR);
- d) home networking,

emphasizing

that coordination should serve to improve the effectiveness of ITU-T activities and should not limit the authority of each study group to develop Recommendations based on contributions from the membership,

resolves

that the coordination of ITU-T activities in regard to high-priority standardization issues should ensure:

- i) the identification of high-level objectives and priorities for ITU-T studies from a global viewpoint;
- ii) cooperation between study groups, including the avoidance of duplication of work and the identification of linkages between related work items;
- the planned coordination of time-frames, deliverables, objectives and milestones for standardization activities;
- iv) that the interests of countries with economies in transition, developing countries, and especially least developed countries, are taken into account;
- v) cooperation and coordination with the ITU Radiocommunication and Telecommunication Development Sectors and with other, external, standardization bodies,

instructs the Telecommunication Standardization Advisory Group

- to take an active role in ensuring coordination between study groups, as appropriate, on highpriority standardization issues that are being studied in more than one study group;
- 2 to take into account, and implement as necessary, advice given to TSAG by other groups established in the interests of effective coordination on high-priority standardization topics.

ITU-T contribution to Council Working Group on the World Summit on the Information Society

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) the importance of definitions related to Internet issues;
- b) the role of the ITU Telecommunication Standardization Sector (ITU-T) in preparing ITU's contributions to the World Summit on the Information Society (WSIS),

bearing in mind

- a) the successful outcome of the first phase of WSIS;
- b) the second phase of WSIS, to be held in Tunis in November 2005, and the corresponding preparatory process,

noting

that Council Resolution 1222 on ITU activities relevant to WSIS instructs the Council Working Group on WSIS to continue to provide updated inputs to the WSIS preparatory process,

resolves

- to establish a short-lived group for the purpose of providing the first meeting of the Council Working Group on WSIS in 2005 with a definition relevant to the technical aspects of the telecommunication networks used by the Internet;
- 2 to invite the chairman of the Council Working Group on WSIS to add a corresponding item on the agenda in 2005,

instructs the Director of the Telecommunication Standardization Bureau

to provide the necessary support to accept relevant contributions and to support a one-day meeting of the short-lived group prior to the first meeting of the Council Working Group on WSIS in 2005,

invites ITU-T members

to submit contributions to this group.

Country code top-level domain names

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recognizing

- a) relevant parts of Resolution 102 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference;
- b) Resolution 133 (Marrakesh, 2002) of the Plenipotentiary Conference;
- c) relevant results of the first phase of the World Summit Information Society;
- d) the evolving role of the World Telecommunication Standardization Assembly as reflected in Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference,

considering

- a) that issues persist in some cases with respect to the delegation of country code top-level domain names (ccTLD) to entities designated by national authorities;
- b) that intergovernmental organizations have had and should continue to have a facilitating role in the coordination of Internet-related public policy issues;
- c) that international organizations have also had and should continue to have an important role in the development of Internet-related technical standards and relevant policies;
- d) that ITU has a record of successfully handling similar issues,

instructs Study Group 2

to study, and to work with Member States and Sector Members, recognizing the activities of other appropriate entities, to review Member States' ccTLD experiences,

instructs the Director of the Telecommunication Standardization Bureau

to take appropriate action to facilitate the above and to report to the ITU Council annually regarding the progress achieved in this area,

invites Member States

to contribute to these activities,

further invites Member States

to take appropriate steps within their national legal frameworks to ensure that issues related to delegation of country code top-level domains are resolved.

Internationalized domain names

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recognizing

- a) relevant parts of Resolution 102 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference;
- b) Resolution 133 (Marrakesh, 2002) of the Plenipotentiary Conference;
- c) relevant results of the first phase of the World Summit on the Information Society (WSIS);
- d) the evolving role of the World Telecommunication Standardization Assembly, as reflected in Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference,

considering

- a) that there needs to be an in-depth discussion of the political, economic and technical issues related to internationalized domain names (IDN) arising out of the interaction between national sovereignty and the need for international coordination and harmonization;
- b) that intergovernmental organizations have had, and should continue to have, a facilitating role in the coordination of Internet-related public policy issues;
- c) that international organizations have also had, and should continue to have, an important role in the development of Internet-related technical standards and relevant policies;
- d) that the ITU Telecommunication Standardization Sector (ITU-T) has a record of successfully handling similar issues in a timely manner;
- e) the ongoing activities of other relevant organizations,

instructs Study Group 17, in collaboration with other relevant study groups

to study IDN, and to continue to liaise and cooperate with appropriate entities in this area,

instructs the Director of the Telecommunication Standardization Bureau

to take appropriate action to facilitate the above and to report to the Council annually regarding the progress achieved in this area,

invites Member States

to contribute to these activities.

ENUM

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recognizing

- a) Resolution 133 (Marrakesh, 2002) of the Plenipotentiary Conference, in particular:
- i) the rapid developments towards the convergence of telecommunications and the Internet;
- ii) that the future management of the registration and allocation of Internet domain names and addresses must fully reflect the geographical and functional nature of the Internet, taking into account an equitable balance of interests of all stakeholders, in particular of administrations, businesses and consumers:
- that Internet domain names and addresses, and more generally the Internet and global information networks, must be widely accessible to all citizens without regard to gender, race, religion or country of residence;
- iv) that the methods of allocation of Internet domain names and addresses should not privilege any country or region of the world to the detriment of others;
- v) the existing role and sovereignty of ITU Member States with respect to allocation and management of their respective country code numbering resources;
- vi) the paragraph instructing the Secretary-General of ITU to take any necessary action to ensure that the sovereignty of ITU Member States with regard to country code numbering plans and addresses will be fully maintained, as enshrined in ITU-T Recommendation E.164, in whatever application they are used;
- b) the evolving role of the World Telecommunication Standardization Assembly as reflected in Resolution 122 (Marrakesh, 2002) of the Plenipotentiary Conference,

noting

- a) the work of Study Group 2 concerning ENUM;
- b) the current unresolved issues concerning administrative control of the highest level Internet domain which will be used for ENUM,

instructs Study Group 2

to study how ITU could have administrative control over changes that could relate to the international telecommunication resources (including naming, numbering, addressing, and routing) used for ENUM,

instructs the Director of the Telecommunication Standardization Bureau

to take appropriate action to facilitate the above and to report to the Council annually regarding the progress achieved in this area.

invites Member States

to contribute to these activities,

further invites Member States

to take appropriate steps within their national legal frameworks to ensure proper implementation of this resolution.

Cybersecurity

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) the crucial importance of the information and communication infrastructure to practically all forms of social and economic activity;
- b) that the legacy public switched telephone network (PSTN) has a level of inherent security properties because of its hierarchical structure and built-in management systems;
- c) that IP networks provide reduced separation between user components and network components if adequate care is not taken in the security design and management;
- d) that the converged legacy networks and IP networks are therefore potentially more vulnerable to intrusion if adequate care is not taken in the security design and management;
- e) that the type and number of cyberincidents, including attacks from worms, viruses, malicious intrusions and thrill-seeker intrusions are on the increase,

recognizing

the *resolves* of Resolution 130 (Marrakesh, 2002) of the Plenipotentiary Conference to strengthen the role of ITU in information and communication network security, and the instruction to intensify work within ITU study groups,

recognizing further

the emphasis of this assembly to focus the network security work of the ITU Telecommunication Standardization Sector (ITU-T),

noting

the vigorous activity and interest in the development of security standards and Recommendations in ITU-T Study Group 17 and in other standardization bodies, including the Global Standards Collaboration group,

resolves

- that ITU-T evaluate existing and evolving new Recommendations, and especially signalling and communications protocol Recommendations, with respect to their robustness of design and potential for exploitation by malicious parties to interfere destructively with their deployment in the global information and communication infrastructure;
- that ITU-T continue to raise awareness, within its area of operation and influence, of the need to defend information and communication systems against the threat of cyberattack, and continue to promote cooperation among appropriate entities in order to enhance exchange of technical information in the field of information and communication network security,

further resolves

to forward to the Telecommunication Standardization Advisory Group (TSAG) the report of the Cybersecurity Symposium held on 4 October 2004 in Florianópolis, for its consideration and follow-up as appropriate,

instructs the Director of the Telecommunication Standardization Bureau

to develop, in consultation with the chairman of TSAG and the appropriate study group chairmen, a plan to undertake the abovementioned evaluation of relevant Recommendations at the earliest possible time considering resources available and other priorities, and to provide updates of the progress regularly to TSAG,

further instructs the Director of the Telecommunication Standardization Bureau

- to include in the annual report to the Council specified in Resolution 130 (Marrakesh, 2002) of the Plenipotentiary Conference the progress in the evaluations under *resolves* above;
- 2 to continue to take appropriate action to publicize the need to defend information and communication networks against the threat of cyberattack, and to cooperate with other relevant entities in these efforts;
- 3 to liaise with other bodies active in this field, such as the International Organization for Standardization (ISO) and the Internet Engineering Task Force (IETF),

invites Member States, Sector Members and Associates, as appropriate,

to participate actively in the implementation of this resolution and the associated actions.

Combating spam

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

recognizing

that the "Declaration of Principles" of the World Summit on the Information Society (WSIS) states that:

37. Spam is a significant and growing problem for users, networks and the Internet as a whole. Spam and cybersecurity should be dealt with at appropriate national and international levels,

recognizing further

that the WSIS "Plan of Action" states that:

- 12. Confidence and security are among the main pillars of the information society.
 - d) Take appropriate action on spam at national and international levels,

considering

- a) relevant provisions of the basic instruments of ITU;
- b) that agreed measures to combat spam fall within Goal 4 of the strategic plan for the Union for 2004-2007 (Part I, clause 3) set out in Resolution 71 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference;
- c) Resolution 52 on countering spam by technical means;
- d) the report of the chairman of the ITU WSIS thematic meeting on countering spam, which advocated a comprehensive approach to combating spam, namely:
- i) strong legislation,
- ii) the development of technical measures,
- iii) the establishment of industry partnerships,
- iv) education, and
- v) international cooperation,

instructs the Director of the Telecommunication Standardization Bureau, in cooperation with the Directors of the other Bureaux and the Secretary-General

to prepare urgently a report to the Council on relevant ITU and other international initiatives for countering spam, and to propose possible follow-up actions for consideration by the Council,

invites Member States and Sector Members

to contribute to this work,

further invites Member States

to take appropriate steps within their national legal frameworks to ensure that appropriate and effective measures are taken to combat spam.

Countering spam by technical means

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that spam has become a widespread problem causing loss of revenue to Internet service providers, telecommunication operators, mobile telecommunication operators and business users, as well as other problems to users in general;
- b) the report of the chairman of the ITU World Summit on the Information Society thematic meeting on countering spam, which advocated a comprehensive approach to combating spam, namely:
- i) strong legislation,
- ii) the development of technical measures,
- iii) the establishment of industry partnerships,
- iv) education, and
- v) international cooperation;
- c) that technical measures to counter spam represent one of those approaches mentioned in b) above;
- d) that many countries, in particular countries with economies in transition, developing countries, and especially least developed countries, need help when it comes to countering spam;
- e) that spamming is at times used for criminal, fraudulent or deceptive activities;
- f) the availability of relevant ITU-T Recommendations, which could provide guidance for future development in this area, particularly with regard to lessons learned,

recognizing

- a) relevant provisions of the basic instruments of ITU;
- b) that spam creates telecommunication network security problems, including by being a vehicle for spreading viruses, worms, etc.;
- c) that spam is a global problem that requires international cooperation in order to find solutions;
- d) that addressing the issue of spam is a matter of urgency,

instructs the relevant study groups

in cooperation with the Internet Engineering Task Force (IETF) and other relevant groups, to develop, as a matter of urgency, technical Recommendations, including required definitions, on countering spam, as appropriate, and to report regularly to the Telecommunication Standardization Advisory Group on their progress,

instructs the Director of the Telecommunication Standardization Bureau

to provide all necessary assistance with a view to expediting such efforts, and to report on this to the Council.

Establishment of a seminar and workshop coordination committee

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004),

considering

- a) that it is a priority for countries, particularly developing countries¹, to participate in, and to have access to detailed information on, seminars and workshops organized by the ITU Telecommunication Standardization Sector (ITU-T);
- b) that such events are crucially important for the effective dissemination of all information designed to provide detailed and up-to-date knowledge of developments in the field of technical standardization;
- c) that mechanisms should be identified to encourage developing countries to participate more actively in the definition and organization of these events;
- d) that ITU-T should maintain its pre-eminence by attracting new and forward-looking studies in telecommunications and information technology,

noting

- a) the difficulties that countries, particularly developing countries, encounter in terms of being aware of the latest standardization trends and in terms of their effective and efficient participation in such activities;
- b) the need to prioritize the themes and issues of interest to the ITU membership in order to optimize the use of allocated resources for the implementation of workshop and seminar activities,

recognizing

- a) that there is a need to identify an appropriate mechanism for improving the process for the holding of seminars and workshops, which play a significant role in disseminating information about ITU-T's activities for the benefit of the ITU-T membership;
- b) that ITU-T's current structure does not include a standing group specifically responsible for supervising the organization of seminars and workshops and for disseminating the related outcomes and documentation;
- c) the need to continuously monitor market needs and advances and trends in telecommunications and information technology,

bearing in mind

- a) that, in accordance with Nos. 197E and 197F of the ITU Convention, the Telecommunication Standardization Advisory Group (TSAG) shall provide guidelines for the work of study groups and recommend measures to foster cooperation and coordination with other standardization bodies;
- b) that Nos. 191A and 191B of the Convention empower the World Telecommunication Standardization Assembly (WTSA) to create "other groups" and to appoint their chairmen and vice-chairmen;

¹ In this resolution, the term "developing countries" is used in the generic sense and includes also countries with economies in transition and least developed countries.

- c) that, in accordance with Resolution 22 of this assembly, TSAG shall issue advice on study group schedules to meet standardization priorities;
- d) that, in Resolution 123 (Marrakesh, 2002), the Plenipotentiary Conference resolved to instruct the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries,

resolves

to establish a seminar coordination committee (SCC), under the supervision of TSAG, to be specifically responsible for agile monitoring of technological evolution, transparent oversight of the organization of seminars and workshops, and continued dissemination of outcomes and related documentation,

instructs the Telecommunication Standardization Advisory Group

to implement, within one year, the seminar coordination committee (SCC), to define its terms of reference and working methods and to appoint its management team,

instructs the Director of the Telecommunication Standardization Bureau

to work closely with the Directors of the other Bureaux and provide all necessary support and advice to the committee in its task of encouraging and strengthening the participation of countries in the workshop and seminar activities of ITU-T within the existing budgetary allocation.

Creation of regional groups

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly, (Florianópolis, 2004),

considering

- a) that Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference instructs the Secretary-General and the Directors of the three Bureaux to work closely with each other in pursuing initiatives that assist in bridging the standardization gap between developing and developed countries;
- b) that the work of certain study groups, particularly in relation to, among other things, next-generation networks (NGN), security, quality, mobility and multimedia, are of considerable strategic significance for developing countries¹ during the next study cycle, covering the period 2005-2008,

recognizing

- a) the highly satisfactory results obtained by the regional approach within the framework of Study Group 3's activities;
- b) the high level of participation and involvement of developing countries, and African countries in particular, in the meetings of Study Group 3,

noting

- a) the need to increase the participation of developing countries in the work of the other study groups, with a view to ensuring that their specific needs and concerns are better taken into account;
- b) the need to improve and strengthen the organization and working methods of the study groups of the ITU Telecommunication Standardization Sector (ITU-T) in the interests of enhancing the participation of developing countries;
- c) the importance of having appropriate consultative frameworks for the formulation and study of Questions, preparation of contributions and capacity-building;
- d) the need for developing countries to be more present and more active within ITU-T's standardization forums,

bearing in mind

- a) that the application of the organizational set-up and working methods of Study Group 3 in some of the other study groups could serve to improve the level of developing country participation in standardization activities and contribute to achieving the objectives of Resolution 123 (Marrakesh, 2002) of the Plenipotentiary Conference;
- b) that a common and coordinated approach in regard to standardization could serve to foster the promotion of standardization activities in developing countries,

In this resolution, the term "developing countries" is used in the generic sense and includes also countries with economies in transition and least developed countries.

resolves

to support the creation of regional groups,

invites the regions

- to identify, on a case-by-case basis, study groups in which a similar organizational set-up to Study Group 3 may be used;
- to apply, as appropriate, the working and organizational set-up of Study Group 3 to the study groups thus identified for establishing such regional groups,

instructs the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau

- 1 to provide all necessary support for creating and ensuring the smooth functioning of the regional groups;
- 2 to take all necessary measures to facilitate the organization of the meetings and workshops of those groups,

invites

the regional groups thus created to cooperate closely with the relevant regional organizations.

Mainstreaming gender in ITU-T activities

(Florianópolis, 2004)

The World Telecommunication Standardization Assembly (Florianópolis, 2004)

noting

- a) Resolution 70 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, on the inclusion of gender perspective in the work of ITU;
- b) Resolution 44 (Istanbul, 2002) of the World Telecommunication Development Conference, which resolved that the ITU Telecommunication Development Sector (ITU-D) should include gender initiatives in each of the programmes established under the Istanbul Action Plan,

noting further

- a) Resolution 1187, adopted by the Council at its 2001 session, on gender perspective in ITU human resources management, policy and practice, which requests the Secretary-General to allocate appropriate resources, within existing budgetary limits, to establish a gender unit with full-time dedicated staff;
- b) the Memorandum of Understanding between ITU, the United Nations Development Programme (UNDP) and the United Nations Development Fund for Women (UNIFEM), signed in July 2000, which promotes cooperation to enable women to participate in, and benefit from, the current communications revolution,

recognizing

- a) that the role of standardization is essential for effective development of globalization and information and communication technologies;
- b) that many women, including women engineers, are competent to contribute to this development;
- c) that statistically very few women are included in the national and international standardization processes,

considering

- a) the progress made by ITU, particularly in ITU-D, in awareness-raising on gender issues, specifically over the last six years, in increasing women's participation in international forums, and in studies, projects and training;
- b) the Declaration of Principles and Action plan of the World Summit on the Information Society,

resolves

that ITU-T should encourage the inclusion of a gender perspective in the work of the Telecommunication Standardization Advisory Group and the study groups of the ITU Telecommunication Standardization Sector over the next four-year cycle,

invites the Director of the Telecommunication Standardization Bureau

- to encourage the mainstreaming of a gender perspective in the work of the Telecommunication Standardization Bureau in accordance with the principles already applied in ITU;
- 2 to encourage Member States and Sector Members to contribute to meeting gender-equality objectives through participation of qualified women and men in standardization activities as well as in leadership positions,

invites Member States and Sector Members

to support active involvement of women experts in standardization groups and activities.

PART 2

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

CONTENTS

Recor	Recommendation				
A.1	Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)				
A.2	Presentation of contributions relative to the study of Questions assigned to ITU-T				
A.4	Communication process between ITU-T and Forums and Consortia				
A.5	Generic procedures for including references to documents of other organizations in ITU-T Recommendations				
A.6	Cooperation and exchange of information between ITU-T and national and regional standards development organizations				
A.7	Focus groups: Working methods and procedures				
A.8	Alternative approval process for new and revised ITU-T Recommendations				
A.9	Working procedures for the Special Study Group on IMT-2000 and Beyond				
A.11	Publication of ITU-T Recommendations and WTSA proceedings				
A.12	Identification and layout of ITU-T Recommendations				
A.13	Supplements to ITU-T Recommendations				
A.23	Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology				
A-Sup	ppl. 2 Guidelines on interoperability experiments				
A-Sup	ppl. 3 IETF and ITU-T collaboration guidelines				

ITU-T Recommendation A.1

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

(1996; 2000; 2004)

1 Study groups and their relevant 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 the Telecommunication Standardization Bureau (TSB), and with due consideration of the physical and budgetary capabilities of the ITU Telecommunication Standardization Sector (ITU-T). To minimize the number of meetings required, every effort should be made to resolve questions by correspondence (No. 245 of the ITU 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 timelimits 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 consent, 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, 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 (JCG) 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 the World Telecommunication Standardization Assembly (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, Associate 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 7.4.1 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** 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.
- **1.4.6** 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 Liaison statements

- **1.5.1** 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

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

1.5.2 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 study groups and working parties involved for information and to TSB for processing.

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

1.6.1 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.
- **1.6.2** 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 ITU official and working languages.
- **1.6.3** 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.
- **1.6.4** 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.
- **1.6.5** Individual reports of meetings should be accessible online to appropriate users as soon as electronic versions of these documents are available to TSB.
- **1.6.6** 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.
- **1.6.7** 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.

1.7 Definitions

This Recommendation defines the following terms:

- **1.7.1 clause**: The word clause shall be used to denote single-digit or multiple-digit numbered text passages.
- **1.7.2 text**: The "text" of Recommendations is understood in a broad sense. It may contain printed or coded text and/or data (such as test images, graphics, software, etc.).
- **1.7.3 annex**: An annex to a Recommendation contains material (e.g. technical detail or explanation) which is necessary to its overall completeness and comprehensibility and is therefore considered an integral part of the Recommendation. As an integral part of the Recommendation, approval of an annex follows the same approval procedures as Recommendations.

NOTE – In common ITU-T | ISO/IEC texts, this element is called an "integral annex".

1.7.4 appendix: An appendix to a Recommendation contains material which is supplementary to and associated with the subject matter of the Recommendation but is not essential to its completeness or comprehensibility. It is therefore not considered to be an integral part of the Recommendation and thus does not require the same approval procedures as Recommendations; agreement by the study group is sufficient. An appendix is translated, upon advice from a study group, in the official and working languages for publication after agreement by the study group to append the proposed text.

NOTE – In common ITU-T | ISO/IEC texts, this element is called a "non-integral annex".

- **1.7.5 amendment**: An amendment to a Recommendation contains changes or additions to an already published ITU-T Recommendation. The amendment is published by ITU-T as a separate document that contains primarily changes or additions. If it forms an integral part of the Recommendation, approval of an amendment follows the same approval procedures as Recommendations; otherwise it is agreed by the study group.
- **1.7.6 corrigendum**: A corrigendum to a Recommendation contains corrections to an already published ITU-T Recommendation. A corrigendum is published by ITU-T as a separate document that contains only corrections. TSB may correct obvious errors by issuing a corrigendum with the concurrence of the study group chairman; otherwise approval of a corrigendum follows the same approval procedures as Recommendations.

NOTE – In common ITU-T | ISO/IEC texts, this element is called a "technical corrigendum".

- **1.7.7 supplement**: (see Recommendation A.13).
- 1.7.8 implementers' guide: An implementers' guide is a document which records all identified defects (e.g. typographical errors, editorial errors, ambiguities, omissions or inconsistencies, and technical errors) associated with a Recommendation or a set of Recommendations and their status of correction, from their identification to final resolution. An implementers' guide is issued by the ITU-T following agreement by a study group. Typically, defect corrections are first collected in an implementers' guide and, at a time deemed appropriate by the study group, they are used to produce a corrigendum or are included as revisions to a Recommendation.
- **1.7.9 normative reference**: Another document that contains provisions which, through reference to it, constitute provisions to the referring document.

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 and 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 the Telecommunication Standardization Advisory Group (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 (JCG) in consultation with TSAG. JCGs 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 JCG 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 JCG. Any study group may also propose that another study group take the lead study group role with a liaison statement 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 JCG 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 JCG and recommend that a particular study group chairman assume the lead.
- **2.2.5** A JCG 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 JCG's activities to supplement WTSA Resolutions 1 and 7) 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 JCG does not confer any authority upon its members not already provided by the study groups involved. A JCG 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 JCG meeting to which the relevant study group chairmen must be invited.

- **2.2.7** JCGs 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 JCG activities within their study groups. Others may also attend. All participants should confine contributions to the purpose of the JCG 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 JCG in a study period should be announced in a collective letter of the lead study group. JCGs should work primarily by correspondence.
- **2.2.9** Meetings should be convened by the chairman of the JCG.
- **2.2.10** Inputs to the work of a JCG should be sent to the JCG chairman, the Director 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 JCG.
- **2.2.11** JCGs should submit proposals to study groups to achieve alignment in the development of related Recommendations by the respective study groups.
- **2.2.12** JCG reports are issued after each meeting and will be included in the Report series of the lead study group. TSAG may monitor JCG activities through these reports.
- **2.2.13** TSB will provide support for a JCG, within available resource limits, at the request of the lead study group chairman.
- **2.2.14** A JCG 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 JCG 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 so requires, 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, ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Development Sector (ITU-D) 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 to be submitted not later than 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 Recommendation 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 rapporteur meetings, along with details of the issues to be studied, 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 its relevant 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 Recommendation 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 "Patent Statement and Licensing Declaration" 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 ITU-T Sector Member or Associate may submit a general patent statement and licensing declaration using the form 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.
- **3.1.6** A contributor submitting software for incorporation in the draft Recommendation is required to submit a software copyright statement and licensing declaration form available at the ITU-T website. The form must be provided to TSB at the same time that the contributor submits the software.
- **3.1.7** 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.

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 posted on the ITU-T website. As far as possible, the Director of TSB shall group the contributions received 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 language, the Director 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 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 official and working language into which they have been translated by the sender. They shall be posted on the ITU-T website and 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 one month before the date of the meeting, they shall be translated for distribution at the beginning of the meeting.
- **3.2.4** Delayed contributions should be available from TSB at least one full working day before the meeting.
- **3.2.5** Contributions received by the Director 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 at shorter notice.
- **3.2.6** The Director should insist that contributors follow the rules established for the presentation and form of documents set out in Recommendation A.2, and the timing given in 3.1.7. A reminder should be sent out by the Director whenever appropriate.
- **3.2.7** The Director, 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.
- **3.2.8** 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.
- **3.2.9** 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

(1984; 1988; 1993; 1996; 2000; 2004)

- 1 With regard to the presentation of contributions to the study of Questions assigned to the ITU Telecommunication Standardization Sector (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 International Organization for Standardization (ISO) and the International Electrotechnical Commission (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).
- 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 the Telecommunication Standardization Bureau (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).

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 and working 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.

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.



INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2005 - 2008

COM 12-<no>-E mmm/yyy Original: English

Question(s):	
STUDY GROU	P 12 - CONTRIBUTION <no></no>
SOURCE*:	
TITLE:	
* Contact:	Tel:
	Fax:
	E-mail:
Attention: This is not a publication made available to the pu of ITU, by ITU-T Sector Members and Associates, and their available to, and used by, any other persons or entities without	ablic, but an internal ITU-T Document intended only for use by the Member States r respective staff and collaborators in their ITU-T related work. It shall not be made at the prior written consent of ITU-T.

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

(1996; 2000; 2002)

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 on 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 on the list, the procedure described for this case in 2.1.1 is applied. Any areas of concern should immediately be 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

A proposal to send documentation (referred to as "communication statement", including requests for documentation) to an A.4-qualified forum/consortium can arise from work by a rapporteur group, working party or study group. The decision to send such information is made by the study group chairman in consultation with the relevant working party chairman, and, if arising from a study group meeting, 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. As soon as they arrive they are made available with the agreement of the study group chairman for advance consideration by the relevant group. Moreover, they are issued as a document to the relevant group with a reference to the originating forum/consortium, i.e. as a

Temporary Document at a study group or working party meeting, or as a document at a rapporteur meeting. In the latter case, the receipt and disposition of the document received should be recorded in the report of the rapporteur meeting.

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
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 one region 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.

Forum/consortium attributes	Desired characteristics
5) IPR Policy:	
patent;	 should be consistent with ITU-T Patent policy;
software copyright;	 should be consistent with ITU-T Software copyright Policy;
copyright;trademark.	 ITU and ITU Member States and Sector Members should have right to copy for standardization related purposes (see also Rec. 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 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 Rec. A.4

	1	2	3	4
	Initiation	Evaluation	Decision	Process once established
	(includes questionnaire in Annex A)	according to the criteria		= 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 on 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
				10100000
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 on 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

(1998; 2000; 2001)

1 Scope

This Recommendation provides generic procedures for referencing the documents of other organizations in ITU-T Recommendations. This clause outlines the Scope, clauses 2 and 3 describe the procedures in detail. Appendix I provides the format for documenting a study group or working party decision with respect to making the reference. Specific information regarding organizations can be found on the ITU-T web site.

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 or working party providing information as outlined in 2.2.1 to 2.2.10.

The study group or working party evaluates this information and decides whether to make the reference. The preferred format for documenting the study group or working party decision is given in Appendix I.

Specific details for referencing documents of the considered organization are provided on the Databases page of the ITU-T web site.

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 the 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 or working party may proceed with its 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 or working party evaluates the above information and comes to its conclusions based on the usual consensus process. The decision of the study group or working party shall be documented using the format in Appendix I. This requirement must be completed, at the latest, at the time the Recommendation is decided under TAP or consented under AAP.

The study group or working party report may simply note that the procedures of ITU-T A.5 have been satisfied and provide a pointer to the document where the full details reside.

- **2.4** If the study group or working party decides to make the reference, it should be introduced with the standard text provided in clause 2 of the "Author's guide for drafting ITU-T Recommendations". 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 ITU-T A.23 applies (see 6.6 of Appendix II of Annex A/A.23 (2001).
- 2.5 If instead of referencing, the study group or working party 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 or working party, 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 the 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 ITU-T 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.

Appendix I

Format for documenting a study group or working party decision

The decision of the study group or working party 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

(1998; 2000; 2002)

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" (SDOs) 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 Rec. 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 on 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.

A proposal to send a text to an A.6-qualified standards development organization can arise from work by a rapporteur group, working party or study group. The decision to send such information is made by the study group chairman in consultation with the relevant working party chairman, and, if arising from a study group meeting, 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 an 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 an 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. As soon as they arrive they are made available with the agreement of the study group chairman for advance consideration by the relevant group. Moreover, they are issued as a document to the relevant group with a reference to the originating standards development organization, i.e. as a Temporary Document at a study group or working party meeting, or as a document at a rapporteur meeting. In the latter case, the receipt and disposition of the document received should be recorded in the report of the rapporteur meeting.

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
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;	 should indicate in which country/countries it has legal status;
accreditation;	 should indicate the accrediting entity;
secretariat;	 should identify the permanent secretariat;
 nominated representative. 	 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:	
- patents;	 should be consistent with ITU-T Patent policy;
software copyright;	 should be consistent with ITU-T software copyright policy;
copyright;trademark.	 as per agreement between ITU-T and the organization (see also ITU-T Rec. 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 Rec. A.6

	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 on 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 on the list that the SDO is A.6-qualified	

ITU-T Recommendation A.7

Focus groups: Working methods and procedures

(2000; 2002; 2004)

1 Scope

The objective of focus groups is to help advance the work of the ITU Telecommunication Standardization Sector (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, or from the Director of the Telecommunication Standardization Bureau (TSB) in exceptional cases and for a particular reason. In the case of a focus group proposed by the Director, the parent study group shall be identified as soon as possible.

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 the Telecommunication Standardization Advisory Group (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 chairman of TSAG 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 website 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 organizations, 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. In appropriate circumstances, and subject to a study group's review and approval, the term and scope of a focus group may be extended.

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 organizations.

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 Telecommunication Information Exchange Services (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 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

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. In the case of a focus group proposed by the Director of TSB, the focus group shall send all of its deliverables to the parent study group for further consideration.

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. For a focus group proposed by the Director, consensus shall be used.

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.

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

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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 cooperation 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.

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-T 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 ITU-T Recommendations

(2000; 2004)

1 General

1.1 Recommendations of the ITU Telecommunication Standardization Sector (ITU-T) 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 Resolution 1 of the World Telecommunication Standardization Assembly (WTSA).

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

1.2 In accordance with the ITU 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 the Telecommunication Standardization Bureau (TSB) shall announce the intention to apply 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. Any associated electronic material included in the Recommendation (e.g. software, test vectors, etc.) must also be made available to TSB at the same time. 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 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.

- 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 ITU-T Sector Member or Associate 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 process (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 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:
- 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 the revised and edited draft text is made 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. 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 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, no more than one Member State present in the meeting opposes the decision to approve the Recommendation (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 shall notify whether the text is approved or not by a circular. The Director 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 approved 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 Recommendation 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 and the ITU-T software copyright 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, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the appropriate ITU-T databases available at the ITU-T website."

6.6 See ITU-T Recommendation A.11 concerning the publication of new and revised Recommendations.

7 Correction of defects

7.1 When a study group identifies the need for implementers 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 implementers' 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 series of contributions. Implementers' 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 of TSB. In addition, the Director shall publish a list of deleted Recommendations whenever appropriate, but at least once by the middle of a study period.

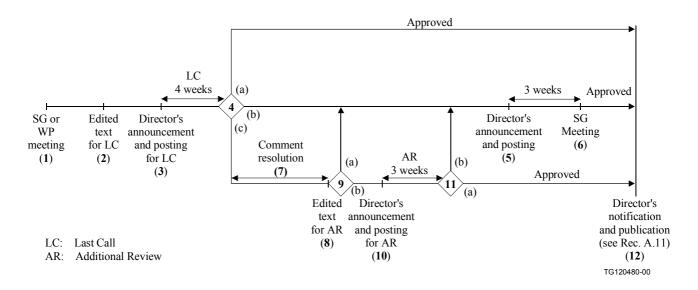


Figure 1/A.8 – Sequence of events

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). Any associated electronic material included in the Recommendation must also be made available to TSB at the same time.
- 3) Director's last call announcement and posting The Director announces the beginning of the last call to all Member States, Sector Members and Associates 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, via 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

Working procedures for the Special Study Group on IMT-2000 and Beyond

(2000; 2003)

1 General

- 1.1 The working procedures described below are applicable only to the Special Study Group (SSG). On the points not explicitly referred to by this Recommendation, the working procedures that apply to other regular study groups shall apply.
- 1.2 The working procedures described here are intended to increase the overall effectiveness and responsiveness of the ITU to marketplace needs.
- 1.3 The working procedures described below shall take effect as soon as practicable in order to gain experience in their application. Additions or modifications to the working procedures proposed by this Special Study Group to TSAG and approved by TSAG shall be applied 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 the Special Study Group has determined or consented, together with observations on its working procedures and their effectiveness.

3 Working procedures other than for approving Recommendations

- 3.1 The Special Study Group and its subgroups shall work electronically to the maximum extent possible, with paper copies of documents provided only on request. Participants should make use of the templates provided by the TSB to ensure compatibility of documentation for all participants. The Special Study Group should explore new electronic methods to test their effectiveness for conducting the work. In using these electronic methods, the ITU principles of openness and transparency shall be maintained to ensure full participation of the membership. Clause 5 provides procedures for electronic meetings.
- 3.2 The Special Study Group and its subgroups shall not be bound by 1.1.2/A.1 governing 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.
- 3.3 Working parties, rapporteurs and other subgroup (e.g., editors) meetings in addition to those which have been approved at a full SSG meeting, may be held between SSG meetings on request of the working party chairman, rapporteur or subgroup leader in consultation with the Special Study Group management team and after confirming their approval by electronic means. A minimum of one month's notice to the SSG membership is required for all such additional meetings, whether physical, teleconference or electronic. The Working Methods Coordinator shall work closely with the TSB in order to optimize this process. Rapporteurs have the responsibility to announce such meetings of their groups to all SSG members using the e-mail reflector noted in 3.6.

- **3.4** In addition to physical meetings, subgroups of the Special Study Group, as much as possible, are encouraged to hold teleconferences and electronic meetings.
- **3.5** For study group or working party meetings, which are physical meetings convened by Collective Letter, documents must be submitted a minimum of five working days before the meeting starts.

For rapporteur meetings, conference calls, electronic meetings, etc., input documents or notice (title or subject) of input documents must be submitted a minimum of ten working days before the meeting starts in support of deciding whether to hold the meeting. The list of such planned contributions shall be posted on TIES as soon as practicable for the information of all members. The objective is to provide the input documents five working days before the meeting. These input documents shall be posted on TIES, irrespective of physical or non-physical meetings or meeting venue, and be accessible to all members.

The Working Methods Coordinator shall work closely with the TSB to ensure maximum accessibility and timely notice of electronic documents to all members of the SSG.

Where appropriate, the SSG shall use input documents types as used by other study groups.

Meeting reports must be made available quickly, with an objective of two weeks after the end of the meeting.

3.6 Meetings of the Special Study Group or a working party of the Special Study Group shall be announced through the usual collective letters issued for such meetings. Electronic reminders are not needed in this case.

For other subgroup meetings, whether teleconferences, electronic or physical, where such meetings were proposed and approved at a meeting of the SSG, electronic reminders are not required. For other subgroup meetings, whether teleconferences, electronic or physical, where such meetings were not proposed and approved at a meeting of the SSG, but were proposed and agreed per 3.3 above, notice shall be sent electronically one month before the meeting using a suitable e-mail reflector maintained by the TSB for the SSG. This electronic notification shall be carried out by the subgroup leader (e.g., the rapporteur for a rapporteurs meeting). The TSB shall post a notification for all meetings and provide a link to the relevant meeting logistics information in the "meeting schedule" web page of the SSG website, using information provided by the subgroup leader for teleconferences or electronic meetings, or by the host for physical meetings.

3.7 Proposed new Questions shall not be 'approved' by the study group at the meeting where they were drafted, unless there has been appropriate consultation on the proposed new Question before the study group meeting. The consultation should be transparent to all SSG members and allow review by Member States and Sector Members to occur before the study group considers the new Question. This is in accordance with Resolution 1, section 7.1.7.

Providing there is consensus on the proposals for modifications of existing Questions, such proposals may be approved at the meeting at which they are proposed.

To ensure transparency and open review of new Questions before they are submitted for approval, the Chairman of the Special Study Group shall notify SSG members using the SSG e-mail reflector if it is proposed to approve a new Question at the next study group meeting. The Chairman should ensure the text of the proposed new Question is distributed using the e-mail reflector at least two months before the study group meeting. A summary of the rationale for the proposed new Question should also be included.

Four members (Member States and Sector Members) should support a Question. Being listed as a supporting organization for Questions brings with it certain obligations. Examples of the obligations are included in Resolution 1, section 7.3.2. Supporting organizations should do at least one of the following:

- provide a rapporteur or editor for the work (not both from one organization);
- offer to host at least one meeting for the activity;

 commit resources to actively participate consistently in the studies under the Question, through the submission of contributions.

The type of support should be recorded with the supporting organization.

When less than four supporting organizations are identified for a proposed new Question, then that proposed Question shall not be studied, as this indicates insufficient interest by the membership of the ITU. This shall not exclude the study of the proposed new Question at a future time, when sufficient interest is demonstrated.

Providing there is consensus on the proposals for refinement of existing Questions, such proposals may be approved at the meeting at which they are proposed.

Active participation is needed to progress the work of Questions. Clause 1.4.3/A.1 deals with the deletion of Questions.

4 Output

- **4.1** The outputs of the Special Study Group shall be Recommendations. The Special Study Group shall apply approval procedures as in other study groups in the case of Recommendations.
- **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-T 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.

5 Procedures for electronic meetings

5.1 General e-meeting requirements

Electronic rapporteurs, editors or other subgroup meetings (e-meetings) may be held. Study group and working party meetings shall be physical meetings. To facilitate progressing the SSG work and to minimize the cost (both monetary and time) associated with face-to-face meetings, electronic meetings are encouraged.

The decision whether to use an electronic meeting or some other form of meeting (face-to-face, conference call, etc.) should be made with due regard to the nature of the work to be undertaken and should be agreed by the group concerned.

No specific mechanism is prescribed for e-meetings. A variety of technologies and mechanisms may be adopted as available, subject to the needs of the meeting and compliance with the procedures in this Recommendation. However, no special requirements should be imposed on e-meeting participants other than having a suitable TIES account to enable access to the meeting documents, Internet access, and a browser or FTP client.

The terms of reference established for a specific e-meeting should be narrow and focused to minimize as far as possible the duration of the meeting and to maximize its efficiency. The terms of reference and dates for e-meetings should be agreed and advertised as for other SSG subgroup meetings.

E-meetings shall not overlap with face-to-face meetings in the SSG. E-meetings should not normally overlap with other e-meetings within the SSG. An effort should be made to avoid overlap with key meetings of related bodies.

As e-meetings taking place over several time zones may create difficulties in coordination of delegation positions, members must have ready on-line access to all e-meeting documentation (including material produced by drafting activity.) To this end, all e-meeting documentation must be hosted on TIES.

To avoid the potential of abortive work and mistaken perception of consensus, e-meetings should be scheduled to allow participants adequate time to analyse the results of the previous meeting and to prepare and obtain approval of inputs for the next meeting. (Four weeks is the recommended minimum interval.)

To avoid the possibility of requiring work on "weekends" due to time zone differences, and to allow time for uploading contributions prior to the meeting, it is recommended that e-meetings either start on a Thursday and end on a Tuesday the second week following, or start on a Tuesday and end on the following Tuesday. This approach facilitates the coordinated establishment of meeting schedules within the study group.

5.2 E-meeting duration and schedule

The duration of e-meetings should not normally exceed 14 consecutive calendar days.

Due consideration shall be given to scheduling of the electronic discussions when e-meetings straddle weekends, noting the time zones for all the participants. Activities should be scheduled such that the discomfort or other difficulties associated with working outside normal working hours shall be shared as equitably as practicable across all the participants and all the regions involved. Formal interaction during "weekends" should be avoided. Real-time interactive activity should be limited to a maximum duration of two hours. Session start and stop times should be expressed in UTC as a common reference point which participants may use to determine local times for their own participation.

5.2.1 Preparation for the e-meeting

Successful e-meetings require that adequate planning and preparation be undertaken prior to each meeting.

All contributions to the meeting should be made available on TIES as indicated in 3.5. A drop box should be available for participants to upload documents for submission. Every effort should be made to minimize the volume of data to be downloaded. Suggestions for reducing the size of files to be downloaded are given in Appendix A.

As for other study group subgroup meetings, if the convener, in consultation with the SSG Chairman, considers that there are insufficient contributions to start the e-meeting, then the meeting shall be cancelled as indicated in 3.5.

The convener shall produce a list of delegates registered for the e-meeting, and ensure that all registered delegates are informed of appropriate access arrangements such as the TIES address for the e-meeting, usernames and passwords for discussion forum boards, use of drop box, etc.

The e-meeting participants shall sign in at the meeting to indicate their presence. The convenor shall produce a list of who signed in at the e-meeting in the meeting report.

To avoid unnecessary delays in distribution of documents created during the meeting (e.g., working documents and drafting material), and to provide full and unrestricted document access to all participants at all times, such documents should be made immediately available to all participants from TIES.

5.2.2 E-meeting conference calls

The e-meeting shall start with a conference call (maximum duration two hours) to agree, for example, on:

- the meeting agenda;
- allocation of contributions and working documents;
- the reaffirmation of the meeting's objectives;

- items of procedure (e.g., deadlines to complete specific activities during the meeting);
- any other urgent matters requiring real-time discussion.

Approximately halfway through the e-meeting, a conference call (checkpoint) may be arranged (maximum duration two hours) with the meeting participants. The purpose of this call is to briefly review progress so far and the organization for the remainder of the meeting.

The e-meeting may be closed by a conference call (maximum duration two hours) to agree on:

- the conclusions and agreements of the meeting;
- further work.

5.2.3 E-meeting documentation

All contributions to the meeting should be made available on TIES as indicated in 3.5. Documents generated during the meeting shall be made available to all participants in an expeditious manner with the assistance of the TSB, the e-meeting convener or other e-meeting participants who have write privileges on TIES.

All interim meeting documentation (including working draft material created at the request of the meeting chairman in the course of drafting activity) shall be "Working Documents" (WDs) which exist for the duration of the meeting only in accordance with normal ITU-T procedures.

5.2.4 E-meeting drafting activities

Establishment of drafting activities must be agreed by meeting participants. A leader of the drafting activity should be identified. Drafting activities should take place during the course of the e-meeting using any means agreed by those involved in the drafting activity. Results of a drafting activity are to be submitted for approval to the e-meeting before closure of the e-meeting. When a drafting group concludes its work and submits its results to the e-meeting for approval, that drafting activity ceases.

A suggested approach for e-mail activities as a means to conduct a drafting activity is given in Appendix B.

5.2.5 Conclusion of the meeting

The substance of the report shall be agreed before the conclusion of the meeting. The report of the meeting should be made available to the Special Study Group within a short time of the completion of the meeting, with an objective of one week after the end of the meeting. The availability of the report should be announced using a suitable e-mail reflector maintained by the TSB. It is the responsibility of the e-meeting convenor to do this.

Appendix A

Suggestions for reducing the size of files to be downloaded

The following suggestions should be considered to assist delegates in minimizing the time and effort needed to download files for e-meetings:

When using Microsoft Word, do not use the "Fast Save" option. This reduces file size by consolidating changes into the main part of the file instead of appending a list of changes to the text which are processed when the file is displayed.

- Manage Microsoft Word style sheets associated with a document to avoid style proliferation that may result from consolidating documents from multiple sources.
- When documents include diagrams that exist elsewhere and are unchanged, do not include them but insert a brief text reference to where the existing unchanged diagram may be found. This minimizes repetitive downloading of often significant data volume associated with diagrams.
- When diagrams or graphics need to be inserted, create the diagram or graphic in a separate file and then use "Insert/Picture/From File..." instead of "Edit/Copy" followed by "Edit/Paste" or "Edit/Paste Special...". The latter approach may result in file size changes on the order of ten times the size of the graphic compared to the former approach.
- Use ellipses (...) or other descriptive means to indicate skipped text to avoid repeating unchanged text when proposing text changes.
- Avoid including multiple proposals in one document; these should be handled in multiple
 documents in order to minimize the amount of information in each document and therefore to
 minimize the time needed to download any one document.
- Consider using commonly available compression tools to minimize the file size.
- When creating pdf files, select options to avoid unnecessarily high levels of resolution and the associated file size impacts from graphics included in these documents.

Appendix B

Suggested approach for e-mail activities as a means to conduct a drafting activity

Where drafting requires it, e-mail discussion may be held during the meeting; considering that all participants in the e-meeting agree. These e-mail discussions shall be open to all e-meeting participants, and be specific based on a single thread of discussion. The discussion thread shall be indicated at the beginning of the e-mail title, in the e-mail header, to allow ease of e-mail management and tracing of the discussion thread in common e-mail clients. The syntax of the discussion thread shall be indicated by [abcde] (where abcde = text string). The abcde text string discussion thread indicator shall be chosen by the e-meeting drafting activity contact point in liaison with the e-meeting chairman. The discussion thread shall be closed before the closure of the e-meeting drafting activity. The results of these e-mail activities shall report to the e-meeting drafting activity contact point.

Several discussion (more than one) threads may take place in one e-meeting drafting activity; however, these should be minimized as many threads will make participation very difficult and nearly impossible (the suggested limit is (X) where X=5). It is not recommended to hold complete e-meetings (rapporteurs, working party or study group) by e-mail as the number of discussion threads will become too many and it will become extremely difficult to draw clear conclusions afterwards.

ITU-T Recommendation A.11

Publication of ITU-T Recommendations and WTSA proceedings

(2000; 2004)

1 Introduction

Under No. 98 of the ITU Convention, the Secretary-General is charged with the task of publishing Recommendations, and Recommendation A.12 of the ITU Telecommunication Standardization Sector (ITU-T) 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 format¹.
- 2.4 Instructions 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 each assembly, an ITU-T Book should be published with the contents restricted to the following in principle:
- Resolutions and Opinions adopted by the assembly;

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 the assembly, with their titles and general areas of work;
- titles of the Questions (continuing or newly approved for study) and their allocation;
- reports of the committees of the assembly;
- list of participants and list of documents at the 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 the Telecommunication Standardization Bureau (TSB) should observe the annexed guidelines (see Annex A) when managing the continuing process of publishing Recommendations during the upcoming study period.
- **4.2** The Director of TSB should report to the next WTSA and to the intervening meetings of TSAG on any difficulties encountered in the timely publication of texts, with proposals for remedial action.

5 Relation with the Council

The Director of TSB should invite the 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

(to Recommendation A.11)

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 Recommendation 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;
- DVD 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 permanently in an archive an official (non-electronic) copy of all Recommendations that are or have been valid.
- **A.7** The generally accessible online database of Recommendations should contain versions of Recommendations currently in force and versions previously in force since the 1988 Blue Book.
- **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

(2000; 2004)

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 Recommendations of the ITU Telecommunication Standardization Sector (ITU-T) 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 Telecommunication management, including TMN and network maintenance
 - 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, open system communications and security
- Y Global information infrastructure, Internet protocol aspects and next-generation networks
- 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, the study group(s) responsible for its approval and a record of revisions shall be clearly indicated.
- 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 Author's 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

(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.

Recommendation A.23

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

(1993; 1996)

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

- 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;
- 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;
- 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" in Annex A should be respected in the drafting of common texts.

¹ The Guide is published as a separate booklet and is available from TSB.

Supplement 2 to A-series Recommendations

Guidelines on interoperability experiments

(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.

Supplement 3 to ITU-T A-series Recommendations

IETF and ITU-T collaboration guidelines

(2001)

1 Scope

This Supplement provides guidance to aid in the understanding of collaboration on standards development between ITU-T and the Internet Society (ISOC)/Internet Engineering Task Force (IETF).

In IETF, work is done in Working Groups (WG), mostly through open, public mailing lists rather than face-to-face meetings. WGs are organized into Areas, each Area being managed by two co-Area Directors. Collectively, the Area Directors comprise the Internet Engineering Steering Group (IESG).

In ITU-T, work is defined by study Questions which are worked on mostly through meetings led by Rapporteurs. Questions are generally grouped within Working Parties (WPs) led by a WP Chairman. Working Parties report to a parent Study Group led by an SG Chairman.

2 Introduction

The telecommunication industry is faced with an explosion in growth of the Internet and other IP (Internet Protocol) based networks. Operators, manufacturers and software/application providers alike are reconsidering their business directions and standards development organizations and forums and consortia are facing an immense challenge to address this situation.

These challenges were considered by TSAG in September 1998 and IETF shortly thereafter, when it was initially recognized that ITU-T and ISOC/IETF were already collaborating in a number of areas, and that this collaboration must be strengthened within the context of changes in work emphasis and direction within ITU-T on studies related to IP-based networks.

For example, many Study Groups already address aspects of IP-based networks. There are many topics of interest to ITU-T Study Groups in the IP area that should be investigated (e.g. signalling, routing, security, numbering and addressing, integrated management, performance, IP telecom interworking, access). Since many of these topics are also being investigated by IETF, there is a requirement for close collaboration.

The current level of cooperation between ITU-T and IETF should be built upon to ensure that the competence and experience of each organization is brought to bear in the most effective manner and in collaboration with the other.

This Supplement provides guidelines for collaboration between ITU-T and IETF.

3 Guidance on collaboration

This clause builds on existing collaborative processes, and details some of the more important guidance points that each organization should be aware of for effective collaboration.

3.1 How to interact on ITU-T or IETF work items

Study Groups that have identified work topics that are IP-related should evaluate the relationship with topics defined in IETF. Current IETF Working Groups and their charters (IETF definition of the scope of work) are listed in the IETF archives (see 3.5).

A Study Group may decide that development of a Recommendation on a particular topic may benefit from collaboration with IETF. The Study Group should identify this collaboration in its work plan (specifically in that of each Question involved), describing the goal of the collaboration and its expected outcome.

An IETF Working Group should also evaluate and identify areas of relationship with ITU-T and document the collaboration with the ITU-T Study Group in its charter.

The following clauses outline a process that can be used to enable each group to learn about the other's new work items.

3.1.1 How ITU-T learns about existing IETF work items

The responsibility is on individual Study Groups to review the current IETF Working Groups to determine if there are any topics of mutual interest. Should a Study Group believe that there is an opportunity for collaboration on a topic of mutual interest, it should contact both the IETF Working Group Chair and the Area Director(s) responsible.

3.1.2 How ITU-T learns about proposed new IETF work items

IETF maintains a mailing list for the distribution of proposed new work items among standards development organizations. IETF forwards draft charters for all new and revised Working Groups and Birds Of a Feather session announcements to the IETF NewWork mailing list. An ITU-T mail exploder is subscribed to this list.

It is recommended that each Study Group subscribes to this ITU-T exploder, which is maintained by TSB. Members of the SG-specific listname may include the SG Chairman, SG Vice Chairmen, Working Party Chairmen, concerned Rapporteurs, other experts designated by the SG and the SG Counsellor. This will enable the SGs to monitor the new work items for possible overlap or interest to their Study Group. It is expected that this mailing list will see a few messages per month. Each SG Chairman, or designated representative, may provide comments on these charters by responding to the IESG mailing list at iesg@ietf.org clearly indicating their ITU-T position and the nature of their concern. Plain-text e-mail is preferred on the IESG mailing list.

It should be noted that the IETF turnaround time for new Working Group charters is two weeks. As a result, the mailing list should be consistently monitored.

3.1.3 How IETF learns about ITU-T work items

The ITU-T work programme is documented in the Questions of each Study Group. These can be found on the ITU-T website.

Study Groups should send updates to the IETF NewWork mailing list as they occur.

Area Directors or WG Chairs should provide comments to the relevant SG Chairman in cases of possible overlap of interest.

3.2 Representation

ISOC, including its standards body IETF, is a Sector Member of ITU-T. As a result, ISOC delegates are therefore afforded the same rights as other ITU-T Sector Members (see 3.2.1). Conversely, ITU-T delegates may participate in the work of IETF as representatives of ITU-T (see 3.2.2). To promote collaboration, it is useful to facilitate communication between the organizations as further described below.

3.2.1 IETF recognition at ITU-T

Participants from IETF may participate in ITU-T meetings as ISOC delegates if the appropriate IETF Working Group (or area) has approved their attendance. This approval will be communicated to TSB in the form of a registration for a particular ITU-T meeting by the Internet Architecture Board (IAB) Chair.

3.2.2 ITU-T recognition at ISOC/IETF

ITU-T Study Group Chairmen can authorize one or more members to attend an IETF meeting as an official ITU-T delegate speaking authoritatively on behalf of the Study Group (or a particular Rapporteur Group). The Study Group Chairman communicates the ITU-T list of delegates by e-mail to the Working Group Chair, with a copy to the Area Directors, and also to the Study Group.

Each ITU-T Study Group Chairman, or a designated representative, can attend IETF meetings with no meeting fee, due to the reciprocal membership agreement between ITU and ISOC.

3.2.3 Communication contacts

To foster ongoing communication between ITU-T and IETF, it is important to identify and establish contact points within each organization. Contact points may include:

1) ITU-T Study Group Chairman and IETF Area Director

An IETF Area Director is the individual responsible for overseeing a major focus of activity with a scope similar to that of an ITU-T Study Group Chairman. These positions are both relatively long-term (lasting several years) and offer the stability of contact points between the two organizations for a given topic.

2) ITU-T Rapporteur and IETF Working Group Chair

An IETF Working Group Chair is an individual who is assigned to lead the work on a specific task within one particular Area with a scope similar to that of an ITU-T Rapporteur. These positions are working positions (lasting a year or more) that typically end when the work on a specific topic ends. Collaboration here is very beneficial to ensure the actual work gets done.

3) Other contact points

It may be beneficial to establish additional contact points for specific topics of mutual interest. These contact points should be established early in the work effort, and in some cases the contact point identified by each organization may be the same individual.

Note that the current IETF Area Directors and Working Group chairs can be found in the IETF Working Group charters. The current ITU-T Study Group Chairmen and Rapporteurs are listed on the ITU-T web page.

3.2.4 Communication

Informal communication between contact points and experts of both organizations is encouraged. However, note that formal communication from an ITU-T Study Group, Working Party or Rapporteur to an associated IETF contact point must be explicitly approved and identified as coming from the Study Group, Working Party or Rapporteur Group, respectively. Formal communication from ITU-T to IETF should be addressed to the appropriate Working Group Chairs and Area Directors with a copy to the e-mail address "statements@ietf.org". These communications are placed by IETF onto a statements liaison-web page at http://www.ietf.org/IESG/liaison.html. An individual at IETF is assigned responsibility for dealing with each communication that is received. The name and contact information of the responsible person is listed with the links to the communications on this web page.

Conversely, formal communication from an IETF Working Group or Area Director must also be explicitly approved and identified before forwarding to any ITU-T contact. This approval is indicated in IETF communication by copying the appropriate Working Group Chairs and Area Directors.

Formal communication is intended to allow the sharing of positions between IETF and ITU-T outside of actual documents (as described in 3.3). This would cover such things as comments on documents and requests for input. The approved communication is simply e-mailed from one body's contact point to another (the appropriate mailing lists, as described in 3.2.5, may be copied).

3.2.5 Mailing lists

All IETF Working Groups and all ITU-T Study Group Questions have associated mailing lists.

In IETF, the mailing list is the primary vehicle for discussion and decision-making. It is recommended the ITU-T experts interested in particular IETF Working Group topics subscribe to and participate in these lists. IETF WG mailing lists are open to all subscribers. The IETF Working Group mailing list subscription and archive information are noted in each Working Group's charter.

In ITU-T, TSB has set up formal mailing lists for Questions, Working Parties and other topics within Study Groups (more detail can be found on the ITU website). These mailing lists are typically used for discussion of ITU-T contributions. Note that individual subscribers to this list must be affiliated with an ITU-T member (at this time, there is no blanket inclusion of all IETF participants as members; however, as a member, ISOC may designate representatives to subscribe). Alternatively, ITU-T members operate personal mailing lists on various topics with no restrictions on membership (e.g. IETF participants are welcome).

3.3 Document sharing

During the course of ITU-T and IETF collaboration, it is important to share working drafts and documents among the technical working groups. Initial proposed concepts and specifications typically can be circulated by e-mail (often just repeating the concept and not including the details of the specification) on both the IETF and ITU-T mailing lists. In addition, working texts (or URLs) of draft Recommendations or RFCs (Internet Drafts) may also be sent between the organizations as described below.

Internet Drafts are available on the IETF website. ITU-T can make selected ITU-T documents available in a common FTP area on the ITU-T website.

Although a communication can point to a URL where a non-ASCII document (e.g. Word) can be downloaded, Word attachments to an IETF mailing list are discouraged. It should also be recognized that the official version of all IETF documents uses ASCII.

3.3.1 IETF to ITU-T

IETF documents (e.g. Internet Drafts) can be submitted to a Study Group as a Contribution from ISOC. In order to ensure that IETF has properly authorized this, the IETF Working Group must agree that the specific drafts are of mutual interest, that there is a benefit in forwarding them to ITU-T for review, comment and potential use and that the document status is accurately represented in the cover letter. Once agreed, the appropriate Area Directors would review the Working Group request and give approval. The contributions would then be forwarded (with the noted approval) to TSB for circulation as a Study Group Contribution (see 3.2.4).

3.3.2 ITU-T to IETF

A Study Group or Working Party may send texts of draft new or revised Recommendations, clearly indicating their status, to IETF as contributions in the form of Internet Drafts. Internet Drafts are IETF temporary documents that expire six months after being published. The Study Group or Working Party must decide that there is a benefit in forwarding them to IETF for review, comment and potential use. Terms of reference for Rapporteur Group meetings may authorize Rapporteur Groups to send working documents, in the form of Internet Drafts, to IETF.

In these cases, the document editor would be instructed to prepare the contribution in Internet Draft format (in ASCII and optionally postscript format as per RFC 2223) and submit it to the Internet Draft editor (e-mail: internet-drafts@ietf.org). Alternatively, the Study Group, Working Party or Rapporteur Group could agree to post the document on a website and merely document its existence with a short Internet Draft that contains a summary and the document URL. The URL can point to a Word document as long as it is publicly available and with the understanding that it will not be able to be published as an RFC in that format.

Both the Rapporteur and the Document Editor should be identified as contacts in the contribution. The contribution must also clearly indicate that the Internet Draft is a working document of a particular ITU-T Study Group.

3.3.3 ITU-T and IETF

It is envisaged that the processes of 3.3.1 and 3.3.2 will often be used simultaneously by both an IETF Working Group and an ITU-T Study Group to collaborate on a topic of mutual interest.

It is also envisaged that the outcome of the collaboration will be the documentation in full by one body and its referencing by the other (see 3.4 for details). That is, common or joint text is discouraged because of the current differences in procedures for document approval and revision.

Where complementary work is being undertaken in both organizations that will result in Recommendations or RFCs, due allowance should be given to the differing perspectives, working methods, and procedures of the two organizations. That is, each organization should understand the other organization's procedures and strive to respect them in the collaboration.

3.4 Simple cross-referencing

ITU-T Rec. A.5 describes the process for including references to documents of other organizations in ITU-T Recommendations. Information specific to referencing IETF RFCs is found at http://www.itu.int/itudoc/itu-t/sdo/ref-a.5/isocietf.html.

IETF RFC 2026, specifically section 7.1.1, describes the process for referencing other open standards (like ITU-T Recommendations) in IETF RFCs.

3.5 Additional items

3.5.1 Several URLs to IETF procedures are provided here for information:

IETF RFC 2223 – Instructions to RFC Authors, October 1997

http://www.ietf.org/rfc/rfc2223.txt

IETF RFC 2026 – The Internet Standards Process – Revision 3, October 1996

http://www.ietf.org/rfc/rfc2026.txt

IETF RFC 2418 – IETF Working Group Guidelines and Procedures, September 1998

http://www.ietf.org/rfc/rfc2418.txt

Current list and status of all IETF RFCs:

ftp://ftp.ietf.org/rfc/rfc-index.txt

Current list and description of all IETF Internet Drafts:

ftp://ftp.ietf.org/internet-drafts/1id-abstracts.txt

 Current list of IETF Working Groups and their charters (includes Area Directors and Chair contacts, mailing list information, etc.):

http://www.ietf.org/html.charters/wg-dir.html

RFC Editor pages about publishing RFCs:

http://www.rfc-editor.org/howtopub.html

Current list of liaisons:

http://www.ietf.org/IESG/liaison.html

Intellectual Property Rights Notices:

http://www.ietf.org/ipr.html

3.5.2 Current ITU-T information can be found on the ITU website (includes contacts, organization, Recommendations for purchase, mailing list information, etc.):

– ITU-T main page:

http://www.itu.int/ITU-T

List of all ITU-T Recommendations:

http://www.itu.int/publication/itu-t/

– ITU-T Study Group main page for Study Group NN (where NN is the 2-digit SG number):

http://www.itu.int/ITU-T/studygroups/comNN/index.html

– ITU-T Special Study Group on IMT-2000 and beyond:

http://www.itu.int/ITU-T/studygroups/ssg/index.html

Intellectual property policies, forms and databases:

http://www.itu.int/ITU-T/dbase/patent/index.html

- ITU-T operational matters including:
 - ITU-T Recommendation A.1 (2000), Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T).
 - ITU-T Recommendation A.2 (2000), Presentation of contributions relative to the study of questions assigned to ITU-T.
 - ITU-T Recommendation A.4 (2002), Communication process between ITU-T and forums and consortia.

- ITU-T Recommendation A.5 (2001), Generic procedures for including references to documents of other organizations in ITU-T Recommendations.
- ITU-T Recommendation A.8 (2000), Alternative/approval process for new and revised Recommendations.

http://www.itu.int/itudoc/itu-t/rec/A

- ITU-T procedures including:
 - Resolution 1 Rules of procedure of the ITU-T Telecommunication Standardization Sector (ITU-T)
 - Resolution 2 Study Group responsibility and mandates

http://www.itu.int/itudoc/itu-t/wtsa-res/index.html

- Author's Guide for drafting ITU-T Recommendations:
 - http://www.itu.int/itudoc/itu-t/guide/64657.html
- Templates for contributions:

http://www.itu.int/itudoc/itu-t/com2/template/w2000tem/index.html

PART 3

Study Groups, TSAG and Tariff Groups and appointed Chairmen and Vice-Chairmen of the ITU Telecommunication Standardization Sector

Study Group 2 - Operational aspects of service provision, networks and performance

Chairman:	Mrs Marie-Thérèse Alajouanine	(F)
Vice-Chairmen:	Ms Gihane Belhoussain	(MRC)
	Mr Sherif Guinena	(EGY)
	Mr Les Homan	(UK)
	Mr Hong-Lim Lee	(KOR)
	Mr Mark T. Neibert	(USA)

Study Group 3 – Tariff and accounting principles including related telecommunication economic and policy issues

Chairman:	Mr Ki-Shik Park	(KOR)
Vice-Chairmen:	Mr Edmond J. Blausten Mr Ágoston Földvári Mr Alexander Kushtuev Mr Matano Ndaro Mr Cleveland Thomas Mr Seiichi Tsugawa	(USA) (HNG) (RUS) (KEN) (TRD) (J)

Study Group 4 – Telecommunication management

Chairman:	Mr David Sidor	(USA)
Vice-Chairmen:	Mr Baker Baker	(SYR)
	Mr Dmitry Cherkesov	(RUS)
	Mr Nobuo Fujii	(J)
	Mr Feng Qi	(CHN)

Study Group 5 - Protection against electromagnetic environment effects

Chairman:	Mr Roberto Pomponi	(I)
Vice-Chairmen:	Mr György Varjú Mr Ahmed Zeddam	(HNG) (F)

Study Group 6 - Outside Plant and Related Indoor Installations

Chairman:	Mr Francesco Montalti	(I)
Vice-Chairmen:	Mr Carlos José Lauria Nunes da Silva Mr Alexandre Tsym	(B) (RUS)

Study Group 9 - Integrated broadband cable networks and television and sound transmission

Chairman:	Mr Richard R. Green	(USA)
Vice-Chairmen:	Mr Shuichi Matsumoto	(J)
	Mr Charles Sandbank	(UK)
	Mr Yuriy Shavdiya	(RUS)

Study Group 11 - Signalling requirements and protocols

Chairman:	Mr Yukio Hiramatsu	(J)
Vice-Chairmen:	Mr Leslie Gary Graf	(AUS)
	Ms Jane Humphrey	(UK)
	Mr Andrey Koucheriavy	(RUS)
	Mr Hyeong-Ho Lee	(KOR)
	Mr Alain Le Roux	(F)
	Mr Feng Wei	(CHN)

Study Group 12 – Performance and quality of service

Chairman:	Mr Jean-Yves Monfort	(F)
Vice-Chairmen:	Mr Klemens P.F. Adler	(D)
	Mr Paul Coverdale	(CAN)
	Mr Charles A. Dvorak	(USA)
	Mr Jean-Jacques Massima Landji	(GAB)

Study Group 13 – Next generation networks

Chairman:	Mr Brian Moore	(UK)
Vice-Chairmen:	Mr Haitham Chedyak Mr Lintao Jiang Mr Chae-Sub Lee Mr Olivier Le Grand Mr Naotaka Morita Mr Helmut Schink Mr Neal Seitz Mr Joe Zebarth	(SYR) (CHN) (KOR) (F) (J) (D) (USA) (CAN)

Study Group 15 – Optical and other transport network infrastructures

Chairman:	Mr Yoichi Maeda	(J)
Vice-Chairmen:	Mr Gastone Bonaventura	(I)
	Mr Andrew Nunn	(UK)
	Mr Stephen J. Trowbridge	(USA)
	Mr Shaohua Yu	(CHN)

Study Group 16 – Multimedia terminals, systems and applications

Chairman:	Mr Pierre-André Probst	(SUI)
Vice-Chairmen:	Mr Paul Barrett	(UK)
	Ms Claude Lamblin	(F)
	Mr Yushi Naito	(J)
	Mr István Sebestyén	(D)

Study Group 17 – Security, languages and telecommunication software

Chairman:	Mr Herbert Bertine	(USA)
Vice-Chairmen:	Mr Jianyong Chen	(CHN)
	Mr Byoung-Moon Chin	(KOR)
	Mr Arkadiy Kremer	(RUS)
	Mr Arve Meisingset	(NOR)
	Mr Ostap Monkewich	(CAN)
	Mr Yu Watanabe	(J)

Study Group 19 – Mobile telecommunication networks

Chairman:	Mr John Visser	(CAN)
Vice Chairmen:	Mr Peter Adams Mr Maurice Ghazal Mr Young-Kyun Kim Mr Kiritkumar P. Lathia Mr Patrick Masambu	(UK) (LBN) (KOR) (I) (UGA)
	Mr Bruno Ramos	(B)
	Mr Motoshi Tamura	(J)
	Mr Konstantin Trofimov	(RUS)

TSAG - Telecommunication Standardization Advisory Group

Chairman:	Mr Gary Fishman	(USA)
Vice-Chairmen:	Mr Jacques Boulvin	(F)
	Mr Nabil Kisrawi	(SYR)
	Mr Andrea Macchioni	(I)
	Mr Oleg Mironnikov	(RUS)
	Mr Haruo Okamura	(J)
	Mr Aboubakar Zourmba	(CME)

TAF - Tariff Group for Africa

Chairman:	Mr Modibo Traore	(MLI)
Vice Chairmen:	Mr Abossé Akue-Kpakpo	(TGO)
	Mr Emmanuel Elop	(CME)
	Mr Mphoeng Tamasinga	(BOT)

TAL – Tariff Group for Latin America

Chairman:	Mr Carlos Antonio Cancelli	(ARG)
Vice Chairmen:	Mr Xavier Barragán	(EQA)
	Mr Pedro Oliva Brunet	(CUB)
	Mr Vanderlei Campos	(B)

TAS – Tariff Group for Asia and Oceania¹

Chairman: Mr Sahib Dayal Saxena (IND)

Vice Chairman: Mr Byoung Nam Lee (KOR)

TEUREM - Tariff Group for Europe and the Mediterranean Basin

Chairman:

Vice Chairmen:²

TAS Group could appoint an additional Vice Chairman from Arab countries at its first meeting.

WTSA-2004 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 telecommunications and Service and Operational aspects of numbering, including service definition
2/2	Routing and Interworking Plans for Fixed and Mobile Networks
3/2	Human factors related issues for improvement of the quality of life through international telecommunications
4/2	Operational Aspects of Telecommunication Network Service Quality
5/2	Network and Service Operations
6/2	Traffic engineering for mobile communications
7/2	Traffic engineering

Study Group 3 – Tariff and accounting principles including related telecommunication economic and policy issues

Question	Title
1/3	Development of charging and accounting/settlement mechanisms for international telecommunications services, including adaptation of existing D-series Recommendations to the evolving market environment
2/3	Study of economic and policy factors relevant to the efficient provision of international telecommunication services
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

Question	Title
1/4	Terms and definitions
2/4	Designations 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	Management principles and architecture
7/4	Requirements for business to business and customer to business management interfaces
8/4	Framework for the management of Next Generation Networks including the convergence of voice, data and multimedia for wire-line and wireless
9/4	Management interface methodology and infrastructure management information models
10/4	Application specific information models
11/4	Protocols for management interfaces
12/4	Telecommunications management and OAM project

Study Group 5 – Protection against electromagnetic environment effects

Question	Title
1/5	Co-location, unbundling and interoperability in telecommunications networks
2/5	EMC related to broadband access networks
3/5	Radio-frequency environmental characterization and health effects related to mobile equipment and radio systems
4/5	Resistibility of communication equipment
5/5	Lightning protection of telecommunication systems
6/5	Bonding configurations and earthing of telecommunication systems in the global environment
7/5	EMC prediction through mathematical modelling
8/5	Home networks
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	Safety in the telecommunications networks
12/5	Maintenance and enhancement of existing EMC recommendations
13/5	Protective components and assemblies
14/5	Terminology and Publications
15/5	Security of telecommunication and information systems regarding electromagnetic environment
16/5	EMC requirements for the Information Society

Study Group 6 – Outside Plant and Related Indoor Installations

Question	Title
1/6	Environmental and Safety Procedures for Outside Plant
2/6	Infrastructure and installation techniques for cables and equipment
3/6	Technical aspects related to the unbundling and sharing of outside plant elements in copper and optical networks
4/6	Support systems for infrastructure and network elements management
5/6	Copper cables, networks and fiber-optic connection hardware for broadband access
6/6	Optical fibre cable network maintenance
7/6	Optical fibre cable construction and function
8/6	Development of optical networks in the access area
9/6	Joint closures, termination, and distribution frames, outdoor enclosures and passive components

Study Group 9 – Integrated broadband cable networks and television and sound transmission

Question	Title
1/9	Transmission of digital television and sound programme signals for contribution, primary distribution and secondary distribution
2/9	Measurement and control of the Quality of Service (QoS) for television transmission on contribution and distribution networks
3/9	Methods and practices for conditional access, protection against unauthorized copying and against unauthorized redistribution ("redistribution control" for digital cable television distribution to the home)
4/9	Application programming interfaces (API) for advanced cable television and sound programme distribution within the scope of Study Group 9
5/9	Functional requirements for a universal integrated receiver or set-top box for the reception of cable television and other services
6/9	Recommended functional characteristics for the interconnection of cable television networks with the public switched network and other delivery systems
7/9	Digital programme insertion for compressed bit streams
8/9	Cable television delivery of digital services and applications that use Internet Protocols (IP) and/or packet-based data
9/9	Voice and video IP applications over cable television networks
10/9	The extension of cable-based services over broadband in Home Networks
11/9	Requirements and methods for sound and television transmission over IP networks "webcasting"
12/9	Transmission of multichannel analogue and/or digital television signals over optical access networks
13/9	IP transport for streaming or transfer of very large files containing television and audio signals over contribution or primary distribution networks
14/9	Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia services within the terms of Study Group 9
15/9	Transmission of Large Screen Digital Imagery programmes for contribution and distribution purposes

Study Group 11 – Signalling requirements and protocols

Question	Title
1/11	Network signalling and control functional architectures in emerging NGN environments
2/11	Application control and signalling requirements and protocols
3/11	Session control and signalling requirements and protocols
4/11	Bearer control and signalling requirements and protocols
5/11	Resource control and signalling requirements and protocols
6/11	Assistance in preparation of a handbook on the deployment of packet based networks
7/11	Signalling and control requirements and protocols to support attachment in NGN environments
8/11	Protocol Test Specifications for NGN

Study Group 12 – Performance and quality of service

Question	Title
1/12	Work programme. Definitions, Handbooks, Guides and Tutorials
2/12	Speech transmission characteristics and measurement methods for terminals and gateways interfacing packet-switched (IP) networks
3/12	Speech transmission characteristics of speech terminals for fixed circuit-switched, mobile and packet-switched (IP) networks
4/12	Hands-free communication in vehicles
5/12	Telephonometric methodologies for handset and headset terminals
6/12	Analysis methods using complex measurement signals including their application for speech enhancement techniques and hands-free telephony
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	Perceptual-based objective methods for voice, audio and visual quality measurements in telecommunication services
10/12	Transmission planning and performance considerations for voiceband, data and multimedia services
11/12	IP based multimedia services (e.g. voice, video, data) end to end transmission planning for multiple interconnected networks (e.g cellular, wireless, wireline networks)
12/12	Performance evaluation of services based on speech technology
13/12	Multimedia QoS/QoE performance requirements and assessment methods
14/12	In-service non-intrusive assessment of voice transmission performance
15/12	QoS and performance coordination
16/12	Broadband and IP-related resource management
17/12	Performance of IP-based networks
18/12	Transmission error and availability performance
19/12	Call processing performance

Study Group 13 – Next generation networks

Question	Title
1/13	Project coordination and release planning for NGN
2/13	Requirements and implementation scenarios for emerging services in NGN
3/13	Principles and functional architecture for NGN
4/13	Requirements and framework for QoS for NGN
5/13	OAM and network management for NGN
6/13	NGN mobility and fixed-mobile convergence
7/13	Network and service interworking in NGN environment
8/13	Service scenarios and deployment models of NGN
9/13	Impact of IPV6 to an NGN
10/13	Interoperability of satellite with terrestrial and Next Generation Networks (NGNs)
11/13	General network terminology
12/13	Frame relay
13/13	Public data networks
14/13	Protocols and service mechanisms for multi-service data networks (MSDN)

Study Group 15 – Optical and other transport network infrastructures

Question	Title
1/15	Coordination of Access Network Transport standards
2/15	Optical systems for fiber access networks
4/15	Transceivers for customer access and in-premises phone line networking systems on metallic pairs
9/15	Transport equipment and network protection/restoration
10/15	General characteristics of optical transport networks
11/15	Signal structures, interfaces and interworking for transport networks
12/15	Technology specific transport network architectures
13/15	Network synchronization and time distribution performance
14/15	Management and control of 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
20/15	Optical fibres and cables for the access network to and in buildings and homes
21/15	Core network architecture
22/15	Technology specific transport plane protection switching and survivability
23/15	Adaptations of packet data over TDM/WDM bearer networks

Study Group 16 – Multimedia services, systems and terminals

Question	Title
1/16	Multimedia systems, terminals and data conferencing
2/16	Real-Time Audio, Video, and Data Communication over Packet-Switched Networks
3/16	Multimedia Gateway Control Architectures and Protocols
4/16	Advanced multimedia communication service features on top of the ITU-T defined multimedia system platforms
5/16	Control of NAT and Firewall Traversal for H.300-Series Multimedia Systems
6/16	Video coding
9/16	Variable Bit Rate Coding of Speech Signals
10/16	Software tools for signal processing standardization activities and maintenance and extension of existing voice coding standards
11/16	Voiceband Modems and Protocols: Specification and Performance Evaluation
14/16	Facsimile terminals (Group 3 and Group 4): Specification and Performance Evaluation
15/16	Circuit multiplication equipment and systems
16/16	Speech enhancement in signal processing network equipment
17/16	Voice gateway equipment
18/16	Interaction aspects of signal processing network equipment
20/16 (A/16)	Mediacom
21/16 (B/16)	Multimedia Architecture
22/16 (C/16)	Multimedia applications and services
23/16 (E/16)	Media coding
24/16 (F/16)	Quality of Service and End-to-end Performance in Multimedia Systems
25/16 (G/16)	Multimedia Security in Next-Generation Networks (NGN-MM-SEC)
26/16 (H/16)	Accessibility to Multimedia Systems and Services
27/16 (I/16)	Telecommunications for Disaster Relief (TDR) Aspects of Multimedia Applications and Services
28/16 (J/16)	Multimedia framework for e-health applications
29/16 (K/16)	Mobility for Multimedia Systems and Services

Study Group 17 – Security, languages and telecommunication software

Question	Title
1/17	End-to-end Multicast Communications with QoS Managing Facility
2/17	Directory Services, Directory Systems, and Public-key/Attribute Certificates
3/17	Open Systems Interconnection (OSI)
4/17	Communications Systems Security Project
5/17	Security Architecture and Framework
6/17	Cyber Security
7/17	Security Management
8/17	Telebiometrics
9/17	Secure Communication Services
10/17	Abstract Syntax Notation One (ASN.1) and other Data Languages
11/17	Specification and Implementation Languages
12/17	Requirements Languages
13/17	System Design Languages Framework and Unified Modelling Language
14/17	Testing Languages, Methodologies and Framework
15/17	Open Distributed Processing (ODP)

Study Group 19 – Mobile telecommunication networks

Question	Title
1/19	Service and network capability requirements and network architecture
2/19	Mobility management
3/19	Identification of existing and evolving IMT-2000 systems
4/19	Preparation of a handbook on IMT-2000
5/19	Convergence of evolving IMT-2000 networks with evolving fixed networks