

WORLD TELECOMMUNICATION S T A N D A R D I Z A T I O N ASSEMBLY PROCEEDINGS

JOHANNESBURG, 21-30 OCTOBER 2008





ITU-T

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

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Johannesburg, 21-30 October 2008



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 Proceedings

(Johannesburg, 2008)

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PART 1

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RESOLUTION 1

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

(Johannesburg, 2008)1

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that the functions, duties and organization of the ITU Telecommunication Standardization Sector (ITU-T) are stated in Article 17 of the ITU Constitution and Articles 13, 14, 14A, 15 and 20 of the ITU Convention;
- b) that, in accordance with the above articles of the Constitution and Convention, ITU-T shall study technical, operating and tariff questions and adopt Recommendations with a view to standardizing telecommunications on a worldwide basis;
- c) that the ITU-T Recommendations 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;
- d) 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 telecommunications;
- e) that general working arrangements of ITU-T are stated in the Convention;
- f) that the General Rules of Conferences, Assemblies and Meetings of the Union adopted by the Plenipotentiary Conference apply to the World Telecommunication Standardization Assembly (WTSA);
- g) that, in accordance with No. 184A of the Convention, 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;
- h) 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* e), f) and g) above shall be further elaborated by the provisions of this resolution and in the resolutions to which they refer, bearing in mind that in the 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; Florianópolis, 2004).

World Telecommunication Standardization Assembly

- 1.1 The World Telecommunication Standardization Assembly (WTSA), in undertaking the duties assigned to it in Article 18 of the ITU Constitution, Article 13 of the ITU Convention and the General Rules of Conferences, Assemblies and Meetings of the Union, shall conduct the work of each assembly by setting up committees and group(s) to address organization, work programme, budget control, editorial matters, and to consider other specific matters if required.
- 1.2 It shall establish a Steering Committee, presided over by the chairman of the assembly, and composed of the vice-chairman of the assembly and the chairmen and vice-chairmen of the committees and any group(s) created by the assembly.
- **1.3** WTSA shall establish a Budget Control Committee and an Editorial Committee, the tasks and responsibilities of which are set out in the General Rules of Conferences, Assemblies and Meetings of the Union (General Rules, Nos. 69-74):
- a) The "Budget Control Committee", *inter alia*, examines the estimated total expenditure of the assembly and estimates the financial needs of ITU-T up to the next WTSA and the costs entailed by the execution of the decisions of the assembly.
- b) The "Editorial Committee" perfects the wording of texts arising from WTSA deliberations, such as resolutions, without altering their sense and substance, and aligns the texts in the official languages of the Union.
- **1.4** In addition to the Steering, Budget Control and Editorial committees, the two following committees are set up:
- a) The "Committee on Working Methods of ITU-T", which submits to the plenary meeting reports including proposals on the ITU-T working methods for implementation of the ITU-T work programme, on the basis of the TSAG reports submitted to the assembly and the proposals of ITU Member States and ITU-T Sector Members.
- b) The "Committee on the ITU-T Work Programme and Organization", which submits to the plenary meeting reports including proposals on the programme and organization of the work of ITU-T consistent with ITU-T strategy and priorities, on the basis of the TSAG reports submitted to the assembly and the proposals of ITU Member States and ITU-T Sector Members. It shall specifically:
 - i) propose a set of study groups;
 - ii) review the Questions set for study or further study;
 - iii) produce a clear description of the general area of responsibility within which each study group may maintain existing and develop new Recommendations, in collaboration with other groups, as appropriate;
 - iv) allocate Questions to study groups, as appropriate;
 - v) decide, when a Question or 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
 - to adopt an alternative arrangement;
 - vi) review, and adjust as necessary, the lists of Recommendations for which each study group is responsible;

- vii) propose the establishment, where needed, of other groups in accordance with Nos. 191A and 191B of the Convention.
- **1.4.1** The chairmen of study groups and the chairman of TSAG and the chairmen of other groups set up by WTSA should make themselves available to participate in the Committee on the Work Programme and Organization.
- **1.5** The plenary meeting of a WTSA may set up other committees in accordance with No. 63 of the General Rules.
- 1.6 All committees and groups referred to in 1.2 to 1.5 above shall normally cease to exist with the closing of WTSA except, if required and subject to the approval of the assembly and within the budgetary limits, the Editorial Committee. The Editorial Committee may therefore hold meetings after the closing of the assembly to complete its tasks as assigned by the assembly.
- 1.7 Prior to the inaugural meeting of WTSA, in accordance with No. 49 of the General Rules, the heads of delegation shall meet to prepare the agenda for the first plenary meeting and make proposals for the organization of the assembly, including proposals for chairmanships and vice-chairmanships of WTSA and its committees and group(s).
- **1.8** 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).
- **1.9** 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:
- **1.9.1** WTSA shall consider reports from the Director of the Telecommunication Standardization Bureau (TSB) and, pursuant to No. 187 of the Convention, from the study groups and TSAG, on the activities during the previous study period, including a report from TSAG on the fulfilment of any specific functions that were assigned 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.
- **1.9.2** 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) or TSAG proposing such action should include information on why such action is proposed.
- **1.9.3** WTSA shall receive and consider the reports, including proposals of the committees it has established, and take final decisions on those proposals and on reports submitted to it by those committees and groups. On the basis of the proposals by the Committee on the Work Programme and Organization of ITU-T, it shall set up study groups and, where appropriate, other groups, and, taking into account consideration by the heads of delegation, appoint the chairmen and vice-chairmen of study groups, of TSAG and of any other groups it has established, taking account of Article 20 of the Convention and Section 3 below.
- **1.10** In accordance with No. 191C of the Convention, WTSA may assign specific matters within its competence to TSAG indicating the action required on these matters.

1.11 Voting

Should there be a need to vote at WTSA, the vote will be conducted according to the relevant sections of the Constitution, Convention and the General Rules.

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** To facilitate their work, study groups may set up working parties, joint working parties and rapporteur groups to deal with the tasks assigned to them.
- **2.1.3** A joint working party shall submit draft Recommendations to its lead study group.
- **2.1.4** A regional group may be established within a study group to deal with Questions and studies of particular interest to a group of Member States and Sector Members in an ITU region.
- **2.1.5** A study group may be set up by WTSA in order to carry out joint studies with the ITU Radiocommunication Sector (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 receive the formal report of the work of the study group. A report for information may also be prepared for the Radiocommunication Assembly.
- **2.1.6** 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 is 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 maintain the overall framework and to coordinate, assign (recognizing the mandates of the study groups) and prioritize the studies to be carried out by the study groups, and to ensure the preparation of consistent, complete and timely Recommendations. The lead study group shall inform TSAG 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, an ITU-T Sector Member or by entities authorized in this respect by a Member State 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 planned and organized after consultation with the Director of TSB and if they are within the credits allocated to ITU-T by the Council.

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

- **2.2.2** For meetings held outside Geneva, the provisions of Resolution 5 (Kyoto, 1994) of the Plenipotentiary Conference as well as of ITU Council Decision 304 shall apply. Invitations to hold meetings of the study groups or their working parties away from Geneva shall be accompanied by a statement indicating the host's agreement to defray the additional expenditure involved and that it will provide at least adequate premises and the necessary furniture and equipment free of charge, except that in the case of developing countries equipment need not necessarily be provided free of charge if the government of the host so requests.
- **2.2.3** Should an invitation be cancelled for any reason, it shall be proposed to Member States or to other duly authorized entities that the meeting be convened in Geneva, in principle on the date originally planned.

2.3 Participation in meetings

- **2.3.1** Member States and other duly authorized entities shall be represented in the study groups and 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 satisfactory solutions to the Questions under study. Exceptionally, however, registration by Member States and other duly authorized entities³ 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 Study Group 3 regional groups shall, in principle, be limited to delegates and representatives of Member States and operating agencies (for the definition of these terms see the Annex to the Constitution) in the region. However, each Study Group 3 regional group may invite other participants to attend all or part of a meeting to the extent that these other participants would be eligible to attend the meetings of the full study group.
- **2.3.3** The meetings of regional groups of other study groups shall, in principle, be limited to delegates and representatives from Member States, Sector Members and Associates of the concerned study group in the region. However, each regional group may invite other participants to attend all or part of a meeting, to the extent that these other participants would be eligible to attend the meetings of the full study group.

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 activities for which it is the lead study group.

³ See Article 19 of the Convention.

Study group management

- **3.1** The study group chairmen perform the duties required of them within their study groups or within joint coordination activities.
- **3.2** Appointment of chairmen and vice-chairmen shall be primarily based upon demonstrated competence both in technical content of the study group concerned and in 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.
- 3.3 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 a study group vice-chairman.
- **3.4** On the basis of 3.2 above, appointed vice-chairmen should be considered first in the appointment of working party chairmen. However, that does not prevent other competent experts being appointed as working party chairmen.
- 3.5 To the extent possible, and taking into account the need for demonstrated 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.
- **3.6** In principle, a chairman, vice-chairman or working party chairman, on accepting this role, is expected to have the necessary support of the Member State or Sector Member 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 or their designated representatives. The Director of TSB or the Director's designated representatives shall participate in TSAG. The chairmen of the study groups and other groups, according to the case, or their designated representatives (e.g. vice-chairmen) shall also participate in TSAG.
- 4.2 TSAG's principal duties are to review priorities, programmes, operations, financial matters and strategies for ITU-T's activities, to review progress in the implementation of ITU-T's 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 (ITU-R) and Telecommunication Development (ITU-D) Sectors and the General Secretariat, and with other standardization organizations, forums and consortia outside ITU.

- 4.3 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 the coordination of that work with other Sectors), giving due regard to the cost and availability of resources within TSB and the study groups. TSAG shall monitor the activities of any joint coordination activities and may also recommend the establishment of such activities, if appropriate. TSAG may also advise on further improvements to ITU-T working methods. TSAG shall monitor the activities of the lead study groups and advise on the progress report as presented to TSAG. TSAG shall endeavour to ensure that the programmes of work across the study groups are successfully completed.
- 4.4 WTSA may assign temporary authority to TSAG between two consecutive WTSAs 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 assigned to it, pursuant to No. 197I of the Convention, 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 specified period.
- **4.5** TSAG shall hold regular scheduled meetings, included on the ITU-T timetable of meetings. The meetings should take place as necessary, but at least once a year⁴.
- **4.6** 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.
- **4.7** In general, the same rules of procedure that apply to study groups shall also apply to TSAG and its meetings. 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.
- 4.8 A report for the Director on its activities shall be prepared by TSAG after each meeting. This report is to be made available within an objective of six weeks after the closure of the meeting and is to be distributed in accordance with normal ITU-T procedures.
- 4.9 TSAG shall prepare a report for the assembly on the matters assigned to TSAG by the previous WTSA. At its last meeting prior to WTSA, TSAG shall, pursuant to No. 197H of the Convention, prepare a report which summarizes its activities since the previous WTSA. This report shall offer advice on the allocation of work, and proposals on ITU-T working methods and on strategies and relations with other relevant bodies inside and outside ITU, as appropriate. The TSAG report to WTSA should also include proposals for Resolution 2, i.e. the titles of study groups with their responsibilities and mandates. These reports shall be submitted to the assembly by the Director.

Duties of the Director

5.1 The duties of the Director of TSB are outlined in Article 15 and relevant provisions of Article 20 of the Convention. These duties are further elaborated in this resolution.

⁴ 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 5.4.

- 5.2 The Director 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.
- 5.3 The Director shall manage 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.
- **5.4** The Director shall provide the necessary liaison between ITU-T and other Sectors and the General Secretariat of ITU and with other standards development organizations (SDOs).
- 5.5 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.
- 5.6 The Director shall prepare the financial estimates in accordance with relevant provisions of the Financial Regulations and Financial Rules, taking into account the relevant results of WTSA, including priorities for the work of the Sector.
- 5.7 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.
- 5.8 The Director shall submit to WTSA a 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.
- 5.9 In addition, the Director may, within the limits specified in 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.
- **5.10** 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.
- **5.11** 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 the Director 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 the Director of the study groups or other groups in which they wish to participate in an advisory capacity.

5.12 Administrations of Member States, Sector Members and other participating organizations are invited 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.

- **5.13** 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.
- **5.14** 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.
- **5.15** In consultation with the chairmen of study groups and the chairman of TSAG, the Director shall 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.
- **5.16** The Director shall seek to foster cooperation and coordination with the other standardization organizations for the benefit of all members.

Contributions

6.1 Contributions shall be submitted and formatted in accordance with Recommendations ITU-T A.1 and A.2, respectively.

SECTION 7

Development and approval of Questions

7.1 Development of Questions

Development of a draft Question for approval and inclusion in the work programme of ITU-T may be processed, preferably:

- a) through a study group and TSAG;
- b) through a study group and further consideration in the relevant committee of WTSA, when the study group meeting is its last prior to a WTSA;
- c) through a study group where urgent treatment is justified;

or,

through WTSA (see 7.1.10).

- **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 to this resolution. 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 and urgency 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 at the study group meeting when the proposed Question is discussed that the criteria in 7.1.5 have been satisfied.
- **7.1.7** TSAG shall be made aware by liaison statement from the study groups of all proposed Questions, 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 shall review 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 of the Questions by TSAG 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** A study group may agree to commence work on a draft Question before its approval.
- **7.1.10** If, despite the above provisions, a Member State or Sector Member proposes a Question directly to a WTSA, the latter either approves the Question or invites the Member State or Sector Member to submit the proposed Question to the next meeting of the relevant study group(s) to allow time for its thorough examination.
- **7.1.11** The Director shall take account of the relevant provisions of WTSA Resolution 17 in responding to any request submitted by developing countries⁵ through the Telecommunication Development Bureau (BDT), particularly with regard to matters connected with training, information, examination of questions which are not covered by the ITU-D study groups, and technical assistance required for the examination of certain questions by the ITU-D study groups. In order to allow for the specific characteristics of countries with economies in transition, developing countries, and especially the 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 BDT, particularly with regard to matters connected with training, information, examination of questions which are not covered by the ITU-D study groups, 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), the approval procedure for new or revised Questions is set out in 7.2.2 and 7.2.3 below.

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⁵ These include the least developed countries, small island developing states and countries with economies in transition.

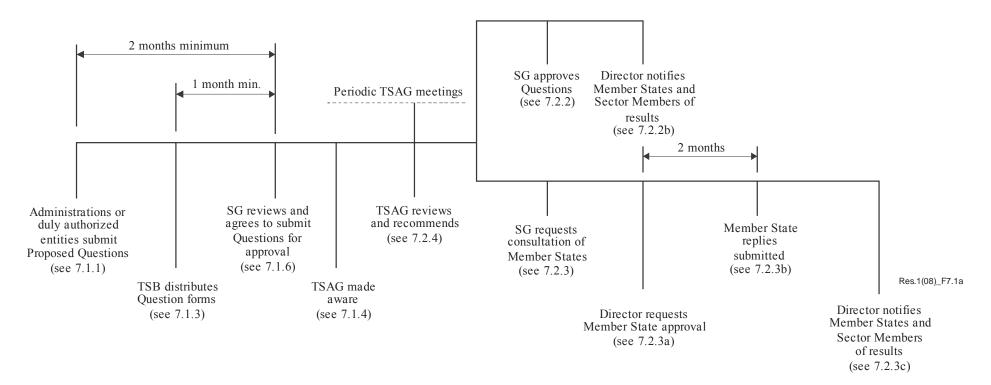


Figure 7.1a / Approval of questions between WTSAs

- **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 entities should be recorded in the meeting report, together with the type of support to which they are committing.
- a) The proposed Question, once approved, shall have the same status as Questions approved at a WTSA.
- b) The Director shall notify the results by circular.
- **7.2.3** Alternatively, if the support as described in 7.2.2 has been offered, but consensus of the study group to approve a new or revised Question is not achieved, the study group may request approval by consultation of the Member States.
- a) The Director shall request Member States to notify the Director within two months whether they approve or do not approve the proposed new or revised Question.
- b) A proposed Question is approved and has 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, TSAG shall review the work programme of ITU-T and recommend revisions as necessary.
- **7.2.5** In particular, TSAG shall review any new or revised Question to determine whether it is in line with the mandate of the study group. TSAG may then endorse the text of any proposed new or revised Question or may recommend that it be modified. TSAG will note the text of any new or revised Question 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 shall inform the Member States and Sector Members of the list of proposed Questions, as agreed by TSAG.
- **7.3.3** The proposed Questions may be approved by WTSA in accordance with the General Rules.

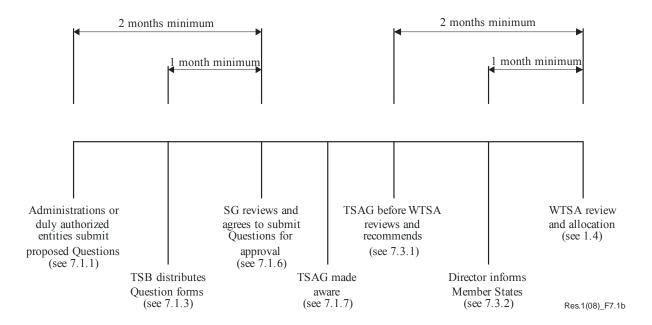


Figure 7.1b - Approval of Questions at WTSA

7.4 Deletion of Questions

Study groups may decide in each individual case which of the following alternatives is the most appropriate for the deletion of a Question.

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

7.4.2 Deletion of a Question by WTSA

Upon the decision of the study group, the chairman shall include in his or her report to WTSA the request to delete a Question. WTSA will decide as appropriate.

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 1.11 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.

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 (e.g. a contribution, or if submitted after the expiry of the deadline for a contribution, a written document that is then reflected in a temporary document) 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 (Recommendation ITU-T A.8, clause 3.1), or determined (see 9.3.1 below).

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 (traditional approval process) are found in this section of Resolution 1. According to No. 246B of the 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 (alternative approval process) are found in Recommendation ITU-T A.8. In accordance with the Convention, the status of Recommendations approved is the same for both methods of approval.
- **9.1.2** In the interests of speed and efficiency, approval should normally be sought as soon as the relevant texts are mature, by a formal consultation in which the Director of TSB asks Member States to delegate authority to the relevant study group to proceed with the approval process and subsequent agreement at a formal meeting of the study group.

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

9.1.3 In accordance with No. 247A of 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, when they have been developed to a mature state. See Figure 9.1 for the sequence of events.

NOTE – A Study Group 3 regional group shall decide on its own to apply this procedure for the limited purpose of establishing regional tariffs. Any Recommendation adopted according to this procedure shall only apply to the Member States that are part of the regional group. 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 Study Group 3 regional group will be consulted by the Director 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) 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 achieve 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 shall explicitly announce the intention to apply the approval procedure set out in this resolution when convening the meeting of the study group. Such requests 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 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 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, shall be sent by the Director to all Member States and Sector Members so as to be received 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 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 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** Recommendations are to be elaborated in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC available at http://www.itu.int/ITU-T/ipr/. For example:
- **9.3.8.1** Any party participating in the work of ITU-T should, from the outset, draw the attention of the Director of TSB to any known patent or to any known pending patent application, either of their own or of other organizations. The "Patent Statement and Licensing Declaration" form from the ITU-T website is to be used.
- **9.3.8.2** ITU-T non-member organizations that hold patent(s) or pending patent application(s), the use of which may be required in order to implement an ITU-T Recommendation, can submit a "Patent Statement and Licensing Declaration" to TSB using the form available at the ITU-T website.
- **9.3.9** 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.

- **9.3.10** 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.
- **9.3.11** The Director shall inform the next WTSA of all cases notified in conformity with 9.3.10 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 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 to this resolution).
- **9.4.3** The Director shall inform 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 (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 per cent 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 shall 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 per cent of the replies received by the due date support consideration for approval at the study group meeting, the Director shall 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 shall 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 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 state 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 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 language, with an indication that the Recommendation may not be in its final publication form.
- **9.6.2** Should minor, purely editorial amendments or corrections 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 languages as soon as practicable, indicating, as necessary, a date of entry into effect. However, in accordance with Recommendation ITU-T A.11, minor amendments may be covered by corrigenda rather than a complete reissue. Also, where appropriate, texts may be grouped to suit market needs.
- **9.6.4** Text shall be added to the cover sheets of all new and revised Recommendations urging users to consult the 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 via the ITU-T website."
- **9.6.5** See also Recommendation ITU-T A.11 concerning the publication of lists of new and revised Recommendations.

9.7 Correction of defects

When a study group identifies the need for 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. Implementers' guides shall be agreed by the study group or agreed by one of its existing working parties with the concurrence of the study group chairman. Implementers' guides shall be made available by posting on the ITU-T website with open access.

9.8 Deletion of Recommendations

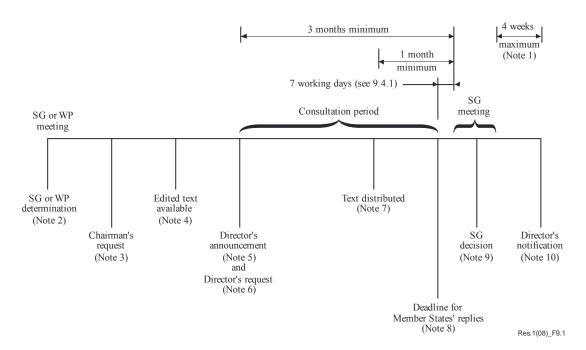
Study groups may decide in each individual case which of the following alternatives is the most appropriate for the deletion of Recommendations.

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 should consider the request and act as appropriate.

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, either 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 shall be included in another circular, and TSAG shall be informed by a report from the Director. In addition, the Director shall publish a list of deleted Recommendations whenever appropriate, but at least once by the middle of a study period.



- NOTE 1 Exceptionally, an additional period of up to four weeks would be added if a delegation requested more time under 9.5.5.
- NOTE 2 SG or WP DETERMINATION: The study group or working party determines that work on a draft Recommendation is sufficiently mature and requests the SG 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 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 official 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 proposal¹
- Reasons or experience motivating the proposed Question or proposal
- Draft text of Question or proposal
- Specific task objective(s) with expected time-frames for completion
- Relationship of this study activity to other:
 - Recommendations
 - Questions
 - study groups
 - relevant standardization bodies

Guidelines for drafting Question text are available on 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 via the ITU-T website.

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

RESOLUTION 2

ITU-T study group responsibility and mandates

(Helsinki, 1993; Geneva, 1996; Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

the resolutions adopted by this assembly which contain many instructions and implications for the work of the relevant study groups,

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 and telecommunication management

Responsible for studies relating to:

- principles of service provision, definition and operational requirements of service emulation;
- numbering, naming, addressing and identification requirements and resource assignment including criteria and procedures for reservation, assignment and reclamation;
- routing and interworking requirements;
- human factors;
- operational and management aspects of networks including network traffic management, designations, and transport-related operations procedures;
- operational aspects of interworking between traditional telecommunication networks and evolving networks;
- evaluation of feedback from operators, manufacturing companies and users on different aspects of network operation;
- management of telecommunication services, networks, and equipment via management systems, including support for next-generation networks (NGN) and the application and evolution of the telecommunication management network (TMN) framework;
- ensuring the consistency of the format and structure of IdM identifiers; and
- specifying interfaces to management systems to support the communication of identity information within or between organizational domains.

Study Group 3

Tariff and accounting principles including related telecommunication economic and policy issues

Responsible, among others, for studies relating to tariff and accounting matters (including costing methodologies) for international telecommunication services and study of related telecommunication economic, accounting 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 telecommunications on a sound basis.

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.

Responsible for studies on the existing copper network outside plant and related indoor installations.

Study Group 9

Television and sound transmission and integrated broadband cable networks

Responsible for studies relating to:

- use of telecommunication systems for contribution, primary distribution and secondary distribution of television, sound programmes and related data services including interactive services;
- 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.

Study Group 11

Signalling requirements, protocols and test specifications

Responsible for studies relating to signalling requirements and protocols, including those for IP-based networks, NGN, mobility, some multimedia related signalling aspects, ad hoc networks (sensor networks, RFID, etc.), QoS, and internetwork signalling for ATM, N-ISDN and PSTN networks. This also includes reference signalling architectures and test specifications for NGN and emerging networks (e.g., USN).

Study Group 12

Performance, QoS and QoE

Responsible for Recommendations on performance, quality of service (QoS) and quality of experience (QoE) for the full spectrum of terminals, networks and services ranging from speech over fixed circuit-based networks to multimedia applications over networks that are mobile and packet based. Included in this scope are the operational aspects of performance, QoS and QoE.

A special focus is given to interoperability to ensure end-to-end users' satisfaction.

Study Group 13

Future networks including mobile and NGN

Responsible for studies relating to the requirements, architecture, evolution and convergence of future networks. Also includes 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, public data network aspects and network aspects of IdM. Responsible for studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications (IMT), wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia network functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT.

Study Group 15

Optical transport networks and access network infrastructures

Study Group 15 is responsible in ITU-T for the development of standards on optical transport networks and access network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, test, instrumentation and measurement techniques, and 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 coding, systems and applications

Responsible for studies relating to ubiquitous applications, multimedia capabilities for services and applications for existing and future networks, including NGN and beyond. This encompasses accessibility, multimedia architectures, terminals, protocols, signal processing, media coding and systems (e.g. network signal processing equipment, multipoint conference units, gateways and gatekeepers).

Study Group 17 Security

Responsible for studies relating to security including cybersecurity, countering spam and identity management. Also responsible for the application of open system communications including directory and object identifiers, and for technical languages, the method for their usage and other issues related to the software aspects of telecommunication systems.

PART 2 – LEAD STUDY GROUPS IN SPECIFIC AREAS OF STUDY

- SG 2 Lead study group for service definition, numbering and routing Lead study group on telecommunications for disaster relief/early warning Lead study group on telecommunication management SG 5 Lead study group on electromagnetic compatibility and electromagnetic effects 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 Lead study group on test specifications SG 12 Lead study group on quality of service and quality of experience SG 13 Lead study group for future networks and NGN
- Lead study group on mobility management and fixed-mobile convergence

 SG 15 Lead study group on access network transport

 Lead study group on access network transport
- Lead study group on optical technology
 Lead study group on optical transport networks
- SG 16 Lead study group on multimedia coding, systems and applications
 Lead study group on ubiquitous applications ("e-everything", such as e-health)
 Lead study group on telecommunication/ICT accessibility for persons with disabilities
- SG 17 Lead study group on telecommunication security
 Lead study group on identity management (IdM)
 Lead study group on languages and description techniques

Annex B

(to Resolution 2)

Points of guidance to study groups for the development of the post-2008 work programme

- **B.1** This annex provides points of guidance to study groups for the development of the post-2008 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, to the extent practicable, ensure compatibility with the International Telecommunication Regulations and related intergovernmental agreements. 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 necessary, the chairman's delegated representative), in consultation with Study Group 2's membership, 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 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.

As the lead study group on telecommunication management, Study Group 2 also has the responsibility for the development and maintenance of a consistent ITU-T work plan, prepared with the cooperation of relevant ITU-T study groups, on activities associated with telecommunication management and with operations, administration and management (OAM). In particular, this work plan will focus on activities involving two types of interfaces:

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

In support of market-acceptable FCAPS interface solutions, Study Group 2 studies will identify service provider and network operator requirements and priorities for telecommunication management, continue the evolution of the telecommunication management framework currently based on telecommunication management network (TMN) and NGN concepts, and address the management of NGN as well as the mixed circuit-switched and packet-switched network environment present during the transition to NGN.

Study Group 2 FCAPS interface solutions will specify reusable management information definitions via protocol-neutral techniques, continue management information modelling for the major telecommunication technologies, such as optical and IP-based networking, and extend management technology choices consistent with market needs, industry recognized value, and major, emerging technical directions.

To support the generation of such interface solutions, Study Group 2 will strengthen the collaborative relationships with standards development organizations (SDOs), forums, consortia and other experts as appropriate.

Additional studies will also cover network and service operational requirements and procedures, including support for network traffic management, support for the Service and Network Operations (SNO) group, and designations for interconnections among network operators.

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 5

Study Group 5 will develop Recommendations, Handbooks and other publications related to:

- protection of telecommunication networks and equipment from interference and lightning;
- electromagnetic compatibility (EMC); and
- safety and health effects connected with electromagnetic fields produced by telecommunication installations and devices.

Study Group 5 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.

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 and middleware 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 will hold collocated meetings with Study Group 16. The work of Study Group 9 on quality assessment will be coordinated with Study Group 12.

Study Group 11

Study Group 11 will develop Recommendations related to signalling requirements and protocols, including those for IP-based networks, NGN, mobility, some related signalling aspects, ad hoc networks (sensor networks, RFID, etc.), QoS and internetwork signalling for ATM, N-ISDN and PSTN networks. This also includes reference signalling architectures and test specifications for NGN and emerging networks (e.g., USN).

In addition, Study Group 11 will develop Recommendations on the following subjects:

- 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;
- reference signalling architecture and test specifications for NGN and emerging networks (e.g., USN) to assure interoperability.

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 will hold collocated meetings with Study Group 13.

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 equipment, and networks with IP segments).

As the lead study group on QoS and QoE, 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 and QoE coordination (as lead study group or as a coordination project);
- Quality of Service Development Group (QSDG).

The work of Study Group 9 on quality assessment will be coordinated with Study Group 12.

Study Group 13

The key areas of competence of Study Group 13 include:

- Communication networks aspects: study for requirements, functional architectures and their capabilities of future networks including NGN according to a layered approach such as transport (access and core), transport control, service control and service/application support functions including support of mobility.
- Mobile aspects: studies relating to network aspects of mobile telecommunication networks, including International Mobile Telecommunications (IMT), wireless Internet, convergence of mobile and fixed networks, mobility management, mobile multimedia functions, internetworking, interoperability and enhancements to existing ITU-T Recommendations on IMT. This study will incorporate harmonization with relevant standards that are developed in mobile-related standards development organizations.
- Content distribution networks aspects: study for the requirements, functions and mechanisms to support distribution of contents which are requested by end users. This will include capabilities to support content finding/metadata, content distribution, rights management and media coding. This study will incorporate broadcasting and other standards integration within the context of future networks including NGN and mobile communication networks.
- Ad hoc networks aspects: study of requirements, functions and mechanisms needed to support
 configuration of ad hoc networks used for identifying service discovery and activation, and context
 description/distribution including peer-to-peer networking. This study should be based on
 preliminary work in Study Groups 13 and 19 performed during the previous study period.
- Common function aspects: study of functions and relevant capabilities including NGN-specific identity management functional architecture that supports value-added identity services, the secure exchange of identity information and the application of bridging/interoperability between a diverse set of identity information formats. Also to be studied are any identity management threats within the NGN and the mechanisms to counter them. In addition, Study Group 13 will study the protection of personally identifiable information (PII) in the NGN to ensure that only authorized PII is disseminated within the NGN, as well as future networks.

This study also will cover regulatory implications including telecommunications for disaster relief and emergency communications.

In order to assist countries with economies in transition, developing countries, and especially the least developed countries, in the application of IMT 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 13 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 13 will hold collocated meetings with Study Group 11.

Study Group 15

Study Group 15 is the focal point in ITU-T for the development of standards on optical transport networks and access network infrastructures, systems, equipment, optical fibres and cables, and their related installation, maintenance, test, instrumentation and measurement techniques, and 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

Within this framework, the study group will also handle the reliability and security aspects of the entire range of fibre and cable performance, field deployment and the integrity of installations. The activity on the construction of infrastructure will perform the investigation and standardization of new techniques to allow faster, more cost-effective and safer cable installation, also taking into account social issues such as the reduction of excavation, the problems caused to traffic and the generation of noise. Maintenance and physical infrastructure management will be also addressed, taking into account the advantages of emerging technologies, such as RFID and ubiquitous sensor 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, operations, administration and maintenance (OAM), 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) and vehicle gateway for ITS;
- operation of multimedia systems and applications, including interoperability, scalability and interworking over different networks;
- high-layer protocols and middleware for multimedia systems and applications, including IPTV,
 USN and ID triggered multimedia/multimode applications and services for NGN and beyond;
- media coding and signal processing;
- multimedia and multimode terminals;
- terminals, network signal processing equipment, 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 for persons with disabilities;
- ubiquitous applications ("e-everything", such as e-health, e-business, e-government, multimedia emergency communication for disaster relief);
- studies on appropriate character sets, especially for non-Latin scripts and languages.

Study Group 16 will hold collocated meetings with Study Group 9.

Study Group 17

Study Group 17 is responsible for studies relating to security, including cybersecurity, countering spam and identity management. Also responsible for the application of open system communications including directory and object identifiers, 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 telecommunication and ICT security such as security architecture and frameworks; the fundamentals of protection including threats, vulnerabilities and risks; authentication and identity management, incident handling and forensics; and security aspects of communication applications. In addition, Study Group 17 provides overall coordination of security work in ITU-T.

Study Group 17 is responsible for studies relating to the development of a generic identity management model that is independent of network technologies and supports the secure exchange of identity information between entities. This work also includes studying the process for discovery of authoritative sources of identity information; generic mechanisms for the bridging/interoperability of a diverse set of identity information formats; identity management threats, the mechanisms to counter them, the protection of personally identifiable information (PII) and to develop mechanisms to ensure that access to PII is only authorized when appropriate.

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, URN, and TTCN, will be developed in line with the requirements of and in cooperation with the relevant study groups such as SG 2, SG 9, SG 11, SG 13, SG 15 and SG 16.

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, OMA, will also be considered in order to get the maximum synergy and to minimize the efforts in the development of new Recommendations.

Annex C

(to Resolution 2)

List of Recommendations under the responsibility of the respective study groups and TSAG in the 2009-2012 study period

Study Group 2

E-series, except those in conjunction with Study Group 17 or under the responsibility of Study Group 12

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

Recommendations of the I.220-, I.230-, I.240-, I.250-series and I.750-series

G.850-series

M-series

O.220-series

Q.513, Q.800 – Q.849, Q.940-series

Maintenance of the S-series

V.51/M.729

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

Z.300-series

Study Group 3

D-series

Study Group 5

K-series

L.9, L.18, L.19, L.62, L.71, L.75, L.76

Study Group 9

J-series

N-series

P.900-series

Study Group 11

Q-series, except those under the responsibility of Study Groups 2, 13, 15 and 16

Maintenance of the U-series

X.600 - X.609

Study Group 12

E.420 - E.479, E.800 - E.859

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

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 and 15, and those having double/triple numbering in other series

Q.933, Q.933 *bis*, Q.10xx-series, and Q.1700-series, 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 2, 12, 13 and 16

I.326, I.414, I.430-series, I.600-series and I.700-series, except I.750-series

L-series, except those under the responsibility of Study Group 5

O-series (including O.41/P.53), except those under the responsibility of Study Group 2

Q.49/O.22 and Q.500-series, except Q.513 (see SG 2)

Maintenance of the R-series

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

V.38, V.55/O.71, V.300

Y.1300 - Y.1309, Y.1320 - Y.1399, Y.1501, and Y.1700-series

Study Group 16

F.700-Series

G.160-series, G.190-series, G.710 – G.729 (except G.712), G.760-series (including G.769/Y.1242), G.776.1, G.799.1/Y.1451.1

H-series

T-series

Q.115-series

V-series, except those under the responsibility of Study Groups 2 and 15

X.26/V.10 and X.27/V.11

Study Group 17

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

F.400-series; F.500 – F.549

X-series, except those under the responsibility of Study Groups 2, 11, 13, 15, and 16

Z-series except Z.300-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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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;
- 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, along the lines of cooperation in the field of telecommunication security between Study Group 17 and its counterparts in ISO and IEC,

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 Recommendation ITU-T 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,

- 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 requested by ISO and IEC, as it becomes available;
- 3 to request the Director of TSB to examine and update the programme of cooperation and priority of the study items among ITU-T, ISO and IEC and highlight this information on the ITU-T website on a regular basis;
- 4 to request the Director of TSB, the study groups and the Telecommunication Standardization Advisory Group to consider and propose further improvements to the procedures for cooperation between ITU-T and ISO and IEC, including setting the priorities for such cooperation;
- 5 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 Recommendation ITU-T A.23 and the Guidelines for Cooperation therein apply;
- for other activities where coordination between ITU-T and ISO and IEC is required (for example in relation to any mutual agreements, such as the Memorandum of Understanding on standardization in the field of electronic business), clear means of coordination shall be established and regular coordination contacts made;
- 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;
- 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:
- 9 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that postal and telecommunication administrations and the relevant operating agencies authorized by Member States 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),

- 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

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

noting

- a) the multifarious difficulties encountered by the developing countries in ensuring their effective and efficient participation in the work of ITU-T;
- b) the decision by the ITU Council to provide free access to ITU-T Recommendations and the success of this initiative to benefit developing countries,

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 a large gap between developed and developing countries in the area of telecommunication standardization;
- c) that regional preparatory meetings for the World Telecommunication Standardization Assembly (WTSA) have helped in identifying and coordinating regional views on issues considered to be of particular relevance to each region, and in developing common regional proposals for submission to WTSA;
- d) that recent reports from the Telecommunication Standardization Bureau (TSB) on the pilot project that made ITU-T Recommendations available free of charge online indicate its early success in assisting participation from developing countries in the standardization process,

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

a) Nos. 190 and 196 of the ITU Convention, Resolution 25 (Rev. Antalya, 2006), § 5 of Annex 1 to Resolution 71 (Rev. Antalya, 2006), Resolution 123 (Rev. Antalya, 2006), Resolution 22 (Rev. Antalya, 2006), Resolution 136 (Antalya, 2006) and Resolution 137 (Antalya, 2006) of the Plenipotentiary Conference;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

b) Resolutions 44 and 45 of this assembly,

resolves

- to request the Director of TSB to cooperate with the ITU regional offices, including the possibility of holding ITU-T meetings in the regions;
- 2 to request the Director of TSB to strengthen cooperation and coordination with the relevant regional organizations, in particular those of developing countries;
- 3 subject to approval by the Council, to provide administrations of developing countries with free electronic copies of available documents, such as:
- a) ITU handbooks, directives, etc., related to the understanding and implementation of ITU-T Recommendations, particularly with respect to planning, operation and maintenance of telecommunication networks;
- b) the ITU collection of basic texts, to improve and enhance participation of developing countries in the standardization process,

instructs the Director of the Telecommunication Standardization Bureau

to provide, subject to a decision of the Council, 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 their studies in respect of their priority questions, such as, but not limited to, VoIP, mobile technology, multimedia, emergency and disaster relief, security of networks, next-generation networks (NGN), the transition from IPv4 to IPv6, triple and quadruple play and cybersecurity;
- encouraging and supporting the establishment and operation of flagship groups addressing the above questions;
- working with Sector Members, manufacturers, academia and research and development organizations in particular, on exchanging information on new technologies and requirements of developing countries, and on providing technical assistance to encourage the establishment of standardization programmes in academia and research and development organizations in the field of information and communication technology;
- 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 and Associates from developing countries;
- assisting developing countries in examining interconnection, numbering, naming, addressing and refiling, in accordance with ITU-T Recommendations;
- providing additional support to help bridge the standardization gap between the developed and the developing countries;
- continuing and consolidating the efforts on NGN deployment studies and standards-development
 activities, particularly those designed for rural areas and for bridging the digital divide and the
 development divide, including, for example, the upgrading of skills necessary for migration to
 NGN,

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;
- 3 to develop methods for increasing the awareness of ITU-T Recommendations, taking account of ways and means to increase usage of ITU-T Recommendations in developing countries;
- 4 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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,

- 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 to this resolution 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 to this resolution).

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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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 numbering plans, especially the E.164 plan, and in particular in Resolution 133 (Rev. Antalya 2006) of the Plenipotentiary Conference where it resolves to instruct the Secretary-General and the Directors of the Bureaux: "2 to take any necessary action to ensure the sovereignty of ITU Member States with regard to Recommendation ITU-T E.164 numbering plans whatever the application in which 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 country codes, telex destination codes, signalling area/network codes, data country codes, mobile country codes, identification) 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 this resolution and the work programme approved by this assembly for study groups of the ITU Telecommunication Standardization Sector (ITU-T);
- c) the ongoing deployment of next-generation networks (NGN) and IP-based networks;
- d) that several international telecommunication numbering, naming, addressing and identification resources are developed and maintained by ITU-T study groups and are in widespread use;
- e) 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;
- f) 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:
- i) be known, recognized and applied by all;
- ii) be used to build and maintain confidence of all in the related services;
- iii) address misuse of such resources;
- g) 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

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

b) the global growth of mobile and Internet subscribers and the convergence of telecommunication services,

resolves to instruct

- 1 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
- 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 the allocation of numbering, naming, addressing and identification resources, and the provisions of the relevant E-, F-, Q- and X-series ITU-T Recommendations, and those to be adopted with respect to identification;

- 2 Study Group 2, in liaison with the chairmen of the other relevant study groups, to provide to 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, including numbering, naming, addressing and identification resources;
- 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 *resolves to instruct* 2 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 ITU 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 ITU-T 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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 relevance and responsiveness;
- 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 (Rev. Antalya, 2006) of the Plenipotentiary Conference resolves that WTSA shall continue, in accordance with its responsibilities, and subject to available financial resources, to promote the continued evolution of the standardization sector and adequately address strategic issues in standardization by means such as, but not limited to, the strengthening of TSAG;
- e) that Resolution 122 (Rev. Antalya, 2006) instructs the Director of the Telecommunication Standardization Bureau (TSB) to consider, in consultation with relevant bodies, and the ITU membership, and in coordination with the ITU Radiocommunication Sector and the ITU Telecommunication Development Sector, where appropriate, organizing a worldwide standardization round table and coordination meeting, possibly in conjunction with WTSA, for one day immediately prior to the assembly;
- f) that the Global Standards Symposium (GSS) was held in conjunction with this assembly to consider bridging the standardization gap and examining global ICT standards challenges;
- g) that TSAG continues to make proposals for enhancing the operational efficiency of ITU-T, for improving the quality of ITU-T Recommendations and for methods of coordination and cooperation;
- h) that TSAG can help improve coordination of the study process and provide improved decision-making processes for the important areas of ITU-T activities;
- i) that flexible administrative procedures, including those related to budgetary considerations, are needed in order to adapt to rapid changes in the telecommunication environment;
- j) 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;
- k) 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;

- l) 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;
- m) that TSAG, in providing advice to study groups, may take account of the advice of other groups,

noting

- a) that Article 13 of the ITU 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,

- to assign to TSAG the following specific matters within its competence between this assembly and the next assembly to act in the following areas in consultation with the Director of TSB, as appropriate:
- a) maintain up-to-date, efficient and flexible working guidelines;
- b) assume responsibility, including development and submission for approval under appropriate procedures, for the ITU-T 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, including focus 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, but work on a specific mandate;
- 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 and encourage the utilization, for example, of 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 developing countries, including the least developed countries, small island developing states and countries with economies in transition, 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;
- 3 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, establish an appropriate mechanism to facilitate the examination of their consideration, for example assigning Questions, coordinating the work of study groups or establishing coordination groups or other groups, and nominate their chairmen and vice-chairmen;
- 5 that TSAG consider the result of this assembly concerning GSS and take follow-up actions, as appropriate;
- 6 that a report on the above TSAG activities shall be submitted to the next WTSA.

Assistance to regional groups of Study Group 3

(Geneva, 1996; Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that regional 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 tariff and accounting matters 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 countries¹;
- d) that, for determining rates, national network costs, at both international or regional ends of the relation, are one of the most important components;
- e) that Study Group 1 of the ITU Telecommunication Development Sector (ITU-D) has been instructed to study, *inter alia*, the question of balanced national tariff structures in the developing countries;
- f) that the existing regional groups of Study Group 3 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 current and future regional groups of Study Group 3 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 of computerized application tools related to their cost methodology by the members of the regional groups of Study Group 3;
- take appropriate steps to facilitate meetings of the current and future regional groups of Study Group 3 and promote the necessary synergies between the two Sectors.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

Alternative calling procedures on international telecommunication networks

(Geneva, 1996; Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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. Doha, 2006) 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, including least developed countries, small developing island states and countries with economies in transition;
- 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. Antalya, 2006) of the Plenipotentiary Conference;
- 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. Antalya, 2006) 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;
- to request competent ITU-T study groups to continue, through contributions from Member States, Sector Members and Associates, to study alternative calling procedures, such as refiling and callback, and issues related to caller identification, taking into account the importance of such studies as they are related to next-generation networks (NGNs) and network degradation,

recognizing

a) that call-back, refiling, non-identification¹ and other alternative calling procedures, which may be potentially harmful, are permitted in some countries and not in others;

¹ The lack of sufficient information to allow identification of the origin of the call.

- b) that call-back, refiling, non-identification 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, non-identification and other alternative calling procedures, which may be potentially harmful, affect the revenue of operating agencies authorized by Member States, which may seriously hamper, in particular, the efforts of developing countries, including the least developed countries, small island developing states and countries with economies in transition, for the sound development of their telecommunication networks and services;
- d) that distortions in traffic patterns resulting from call-back, refiling, non-identification 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, refiling or matters related to caller identification in its territory,

noting

that in order to minimize the effect of alternative calling procedures:

- a) operating agencies authorized by Member States should, within their national law, make every effort to establish the level of collection charges on a cost-oriented basis, taking into account Article 6.1.1 of the International Telecommunication Regulations and Recommendation ITU-T D.5;
- administrations and operating agencies authorized by Member States should vigorously pursue the implementation of Recommendation ITU-T D.140 and the principle of cost-oriented accountingrates and accounting rate shares,

- that administrations and operating agencies authorized by Member States 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 operating agencies authorized by Member States 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 and non-identification;
- to request Study Group 3 to study the economic effects of call-back on the effort of developing countries, including the least developed countries, small island developing states and countries with economies in transition, 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 operating agencies authorized by Member States for consultation on call-back

In the interest of global development of international telecommunications, it is desirable for administrations and operating agencies authorized by Member States 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 operating agencies authorized by Member States and call-back providers in its territory using whatever official means are available
Administration X should instruct operating agencies authorized by Member States operating in its territory as to the policy position, and those operating agencies authorized by Member States should take steps to ensure that their international operating agreements comply with that position	Operating agencies authorized by Member States in Y should cooperate in considering any necessary modifications to international operating agreements
	Administration Y and/or operating agencies authorized by Member States 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 operating agencies authorized by Member States 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.
Operating agencies authorized by Member States in country X will cooperate in the implementation of such steps.	o, main a maintai to the networks in order.

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 operating agencies authorized by Member States 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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,

recognizing

that organizations and entities from developing countries¹ have found great difficulty in playing an active role in ITU-T activities and, as a consequence, in meeting the goals of Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference,

- 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 taking part in any decision-making or liaison activities which are to be handled separately, in accordance with No. 248B of the Convention;
- 3 that the amount of the financial contribution for Associates be based upon the contributory unit for Sector Members as determined by Council for any particular biennial budgetary period,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

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 out in Nos. 241B, 241C, 241D and 241E of the Convention;
- 2 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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 66 (Rev. Minneapolis, 1998) of the Plenipotentiary Conference:
- g) the budgetary difficulty developing countries have in participating actively in face-to-face ITU-T meetings,

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 many 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 ITU-T 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, including a global, unified and consolidated view of document traceability; 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;
- take action, in order to provide appropriate electronic participation or observation facilities (e.g. webcast, audioconference, webconference/document sharing, videoconference, etc.) in ITU-T meetings for delegates unable to attend face-to-face meetings,
- 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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. Antalya, 2006) 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

the relevant outputs of the World Summit on the Information Society (WSIS) regarding ITU-T, particularly § 44 of the WSIS Geneva Declaration of Principles, which recognizes that, "Standardization is one of the essential building blocks of the Information Society",

resolves to invite Member States and Sector Members

to continue contributing 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 adopted in Resolution 71 (Rev. Antalya, 2006) and the evolution of the telecommunication environment, including:
- setting appropriate priorities during the course of the study period in order to achieve the Sector's objectives 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 current plan and proposing the necessary changes, as required;

- 2 to prepare proposals to assist in preparation of the Union's draft strategic plan for the coming study period that duly reflect:
- the seven main objectives in the current strategic plan that continue to be relevant;
- new and converging technologies, their priority outcomes and the need to develop, rapidly and reliably, appropriate global standards;
- ongoing and new changes in the telecommunication environment;
- the need to define clearly, and establish broadly, formal relationships with the broadest practicable population of international, regional and other standardization bodies, based on guidelines already agreed in relevant ITU-T A-series Recommendations, and to implement the relevant conclusions of the Global Standards Symposium (GSS), in accordance with Resolution 122 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- the ongoing evolution in the role of ITU-T to an increasingly inclusive and market-oriented organization that coordinates and cooperates with, and draws upon the work of, other relevant entities, in order to accelerate the efficient development of internationally useful standards;
- the implementation of Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference on bridging the standardization gap between developed and developing countries, including the least developed countries, small island developing states and countries with economies in transition.

Voluntary contributions

(Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) Resolution 71 (Rev. Antalya, 2006) of the Plenipotentiary Conference on the strategic plan for the Union 2008-2011, targeting ambitious strategic objectives in the activities of the ITU Telecommunication Standardization Sector (ITU-T);
- b) Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference, which invites Member States and Sector Members to make voluntary contributions to the fund for bridging the standardization gap;
- c) Decision 5 (Rev. Antalya, 2006) of the Plenipotentiary Conference and the annexes thereto, limiting expenditure of the Union for the period 2008 to 2011;
- d) Resolution 44 of this assembly on bridging the standardization gap between developed and developing countries¹, which describes the sources from which funds will be raised for the purpose of bridging the standardization gap,

recalling

- a) that the ITU Constitution, Convention and Financial Regulations stipulate that the Secretary-General 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,

- to encourage the financing of specific projects, focus groups or other new initiatives, including any activities which help achieve the objectives of Resolution 44 of this assembly on bridging the standardization gap, 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.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

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

(Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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, and the need to promote more efficient participation by the developing countries¹;
- e) that 1.8 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,

These include the least developed countries, small island developing states and countries with economies in transition.

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 the procedures given in Annex A to this resolution and the qualifications given in Annex B to this resolution;
- 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 and that 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 the Telecommunication Standardization Bureau (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 to this resolution.
- 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 and TSAG 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.

- 3 These procedures should be applied for appointments made by TSAG under delegated authority (see Resolution 22 of this assembly).
- 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 developing countries, including the least developed countries, small island developing states and countries with economies in transition.

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;
- availability²;
- 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 ITU in general and of ITU-T in particular;

² 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.

- managerial skills;
- availability³.

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

(Montreal, 2000; Florianópolis 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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 International Mobile Telecommunications (IMT);
- c) that Study Group 8 of the ITU Radiocommunication Sector (ITU-R) has had the ITU-R responsibility for the future development of IMT (now handled by ITU-R Study Group 5);
- d) that the ITU-T study groups involved in the standardization of IMT 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 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 former ITU-R Study Group 8 (now ITU-R Study Group 5) has proposed to ITU-T study groups the development of a roadmap for each Sector to independently manage and advance their work on IMT, 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 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 for developing countries, including the least developed countries, small island developing states and countries with economies in transition,

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) Recommendation ITU-T A.4, on the communication process between ITU-T and forums and consortia;
- c) Recommendation ITU-T A.5, on generic procedures for including references to documents of other organizations in ITU-T Recommendations;
- d) Recommendation ITU-T A.6, on cooperation and exchange of information between ITU-T and national and regional standards development organizations;
- e) Resolutions ITU-R 47-1, 50-1, 56 and 57 on the role of ITU-R in the ongoing development of IMT,

resolves

- that ITU-T maintain a roadmap for all of its standardization activities relating to IMT;
- that the effective coordination currently established between ITU-T, ITU-R and ITU-D for activities relating to IMT 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 the Radiocommunication Bureau (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.

Regulatory aspects of ITU-T work

(Montreal, 2000; Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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,

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, when determining whether a Question or Recommendation has policy or regulatory implications, particularly Questions or Recommendations which relate to tariff and accounting issues and relevant numbering and addressing issues, study groups shall more generally consider possible topics such as:
- the right of the public to correspond;
- protection of telecommunication channels and installations;
- use of the limited natural resources of numbering and addressing;
- naming and identification;
- 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, or Questions or Recommendations where there is any doubt about their scope;
- 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.

Regional preparations for WTSAs

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that many regional telecommunication organizations have coordinated their preparations for this and preceding assemblies;
- b) that many common proposals have been submitted to this and preceding assemblies 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 plenipotentiary conferences, world radiocommunication conferences and world telecommunication development conferences;
- b) that regional preparatory meetings for the World Telecommunication Standardization Assembly (WTSA) have helped in identifying and coordinating regional views on issues considered to be of particular relevance to each region, and in developing common regional proposals for submission to WTSAs,

taking into account

the efficiency benefits that WTSAs have gained from an increased amount and level of prior preparation by the Member States.

noting

- a) that many regional telecommunication organizations have expressed the need for the Union to cooperate more closely with them;
- b) that, consequently, the Plenipotentiary Conference (Minneapolis, 1998) resolved that the Union should develop stronger relations with regional telecommunication organizations, as emphasized in the first objective of the ITU strategic plan 2008-2011,

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 maintain the organization, within the financial limitations established by the Plenipotentiary Conference, of 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,

invites the Secretary-General, in cooperation with the Directors of the Bureaux of the three Sectors

- 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, including support for the organization of a "Bridging the Standardization Gap Forum" per region to address major issues of the next WTSA of interest to developing countries¹;
- 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, and formal regional preparatory meetings if a region so requests;
- ii) the identification of major issues to be resolved by the next WTSA;
- iii) the development of coordination methods;
- iv) the organization of information sessions on expected work for WTSA;
- 3 to submit, no later than the 2009 session of the ITU Council, a report on feedback from Member States concerning WTSA regional preparatory meetings, their results and 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, if possible, informal interregional meetings in order to arrive at interregional common proposals.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

Bridging the standardization gap between developing and developed countries¹

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference on bridging the standardization gap between developing and developed countries 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 on follow-up and implementation of the operative paragraphs of this resolution supporting coordination in this respect at the regional level through regional offices and organizations;
- b) that Resolution 139 (Antalya, 2006) of the Plenipotentiary Conference invites Member States to rapidly implement Resolution 37 (Rev. Doha, 2006) of the World Telecommunication Development Conference on bridging the digital divide,

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 Recommendations, conformity assessment 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";
- d) that the disparity between developing and developed countries in standardization has three components: the disparity of voluntary standardization, the disparity of mandatory technical regulations and the disparity of conformity assessment,

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 is related to bridging the standardization gap between developed and developing countries;
- c) that ITU has made significant advances in defining the standardization gap, the role and importance of bridging it and ways to measure the progress towards this goal;
- d) that ITU's programmes for fostering partnerships, under the patronage of ITU-T, continue to strengthen and expand the assistance ITU provides its members, particularly developing countries,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

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 development and application of standards;
- c) the relevant conclusions of the Global Standardization Symposium,

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;
- to encourage more highly developed countries to establish cooperation programmes with developing countries in the drafting of national technical regulations and conformity assessment procedures as a way of assimilating information technologies and telecommunications and incorporating them into world standardization activities, and to establish regulatory cooperation programmes through the Telecommunication Developing Bureau (BDT);
- that due to the insufficient resources in the regular budget for essential assistance to developing countries, including for bridging the standardization gap, the annual budget structure should be improved in order to identify and include a separate expenditure line item for bridging standardization gap activities, while at the same time voluntary contributions towards a fund for bridging the standardization gap should be encouraged, and a management mechanism for this fund should be implemented by TSB in close coordination with BDT for the purpose of implementing the action plan,

instructs the Director of the Telecommunication Standardization Bureau

- 1 to work closely with the Directors of BDT and the Radiocommunication Bureau (BR) on implementing the objectives of the action plan annexed to this resolution;
- 2 to establish an implementation group within TSB, which organizes, mobilizes resources, coordinates efforts and monitors work related to the action plan;
- 3 to report on the implementation of this plan to future WTSAs with a view to reviewing this resolution and introducing the appropriate amendments in the light of implementation outcome,

invites the Director of the Telecommunication Standardization Bureau

to work closely with the Directors of BDT and BR in order to encourage the formation of partnerships under the patronage of ITU-T as one of the means for financing the action plan,

instructs study groups and the Telecommunication Standardization Advisory Group

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 (Rev. Antalya, 2006) 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.
- Developing methods, tools and indicators for accurate measurement of the results and the level of effectiveness of the efforts and activities applied in bridging the standardization gap.
- Creating methods to increase the access of developing countries to essential technical information in order to enhance their knowledge and capacity (i) to implement global standards, (ii) to effectively contribute to the work of ITU-T, (iii) to include their own specificities and necessities in the global standard-making process, and (iv) to influence global standard-making discussions by having active roles in ITU-T study groups.

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

1) Objective

To assist developing countries 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 developing countries in:

- Reviewing/assessing the existing national standards 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, in particular on manufactured products and interconnection, with emphasis on Recommendations having regulatory and policy implications.

Actions to be performed by TSB with BDT cooperation

- Compiling and maintaining a database containing information on new technologies that are standardized
- Organizing training courses on the application of specific Recommendations and on methods of examining compliance of manufactured products with these 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 frequent seminars, workshops and study group meetings in developing countries.
- In close collaboration with BDT and BR, providing training courses on standardization to developing countries.
- Providing more internship, secondment and short-term employment, etc., opportunities for developing countries at ITU.
- Establishing and maintaining a forum, moderated by a group of experts, to support and provide advice to standardization bodies in developing countries.
- Encouraging the election of more candidates from developing countries to ITU-T study groups chairmanship and vice-chairmanship positions.

IV Programme 4: Flagship groups for bridging the standardization gap

- 1) Objective
- Developed country experts participating in the work of a specific study group voluntarily join a number of developing country representatives in a small group, in order to support these representatives 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 in a specific domain.

2) Activities

- TSB shall support and encourage the establishment of such flagship groups and encourage developed country experts to join these groups, e.g. by providing recognition awards or symbolic compensation to those experts providing sensible assistance. The activities of which such flagship groups should serve to improve the quality of standardization activities in developing countries.
- Details of each flagship group should be posted on the ITU-T website. Those details could include structure, experts, *modus operandi* (e.g. e-forum), 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 partnerships and others means:
 - Partnership contributions.
 - Voluntary contributions by industry participating in the telecommunication market of developing countries.
 - Voluntary contributions by others.
 - Additional budget allocated by ITU.

- b) Management of funds by TSB:
 - The Director of TSB, in close coordination with BDT, 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 ITU-related activities including, but not limited, to assistance and consultation, training, surveying and participation in ITU-T meetings, as well as studying, compliance examination, interconnection and interoperability programmes for developing countries (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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

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, bearing in mind the particular concerns of the developing countries, including the least developed countries, small island developing states and countries with economies in transition, shall 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 (Rev. Antalya, 2006) 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 developing countries, including the least developed countries, small island developing states and countries with economies in transition, 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 2009-2012 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 Resolutions 122 and 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference;

- d) that operational coordination can be effected by means of joint coordination activities (JCAs), 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 for high-priority standardization issues, including:

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

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 and work related to more than one study group 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 developing countries, including the least developed countries, small island developing states and countries with economies in transition, 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, particularly on high-priority standardization issues that are being studied in more than one study group, including inviting coordination groups to hold the necessary meetings to achieve the objectives set for them;
- 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 and joint standardization topics.

Country code top-level domain names

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) relevant parts of Resolution 102 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- b) Resolution 133 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- c) relevant outcomes of the two phases of the World Summit on the Information Society;
- d) the evolving role of the World Telecommunication Standardization Assembly, in accordance with Resolution 122 (Rev. Antalya, 2006) 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 Member States represent the interests of the population of the country or territory for which a ccTLD has been delegated, as noted in *recognizing g*) of Resolution 102 (Rev. Antalya, 2006);
- c) that countries should not be involved in decisions regarding another country's ccTLD, as noted in *recognizing h*) of Resolution 102 (Rev. Antalya, 2006);
- d) that intergovernmental organizations have had, and should continue to have, a facilitating role in the coordination of Internet-related public policy issues;
- e) 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;
- f) that ITU has a record of successfully handling similar issues,

instructs Study Group 2

to continue studies, and to work with Member States and Sector Members, in their respective roles, 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 (multilingual) domain names

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) relevant parts of Resolution 102 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- b) Resolution 133 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- c) relevant outcomes of the two phases of the World Summit on the Information Society (WSIS);
- d) the evolving role of the World Telecommunication Standardization Assembly, in accordance with Resolution 122 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- e) the ITU strategic plan for the period 2008-2011 reflecting the important role of multilingualism in enabling the full participation of all countries in the work of ITU, in building a global information society that is open to all, and in achieving the goals and objectives of WSIS,

considering

- a) that there needs to be further in-depth discussion of the political, economic and technical issues related to internationalized (multilingual) domain names 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, especially as to the use of non-Latin character sets;
- e) the ongoing activities of other relevant organizations,

resolves to instruct Study Group 16 and other relevant study groups

to study internationalized (multilingual) domain names, and to continue to liaise and cooperate with appropriate entities, whether intergovernmental or non-governmental, in this area,

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, Sector Members and concerned regional groups to contribute to these activities.

ENUM

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) Resolution 133 (Rev. Antalya, 2006) of the Plenipotentiary Conference, in particular:
- i) the continuing progress towards integration of telecommunications and the Internet;
- ii) the existing role and sovereignty of ITU Member States with respect to allocation and management of their country code numbering resources as enshrined in Recommendation ITU-T E.164;
- the paragraph instructing the Secretary-General and the Directors of the Bureaux to take any necessary action to ensure the sovereignty of ITU Member States with regard to Recommendation ITU-T E.164 numbering plans whatever the application in which they are used;
- b) the evolving role of the World Telecommunication Standardization Assembly, as reflected in Resolution 122 (Rev. Antalya, 2006) 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,

resolves to instruct 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 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 proper implementation of this resolution.

Cybersecurity

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) the crucial importance of the information and communication technologies (ICT) 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 of such networks;
- e) that the type and number of cyberincidents, including attacks from worms, viruses, malicious intrusions and thrill-seeker intrusions are on the increase,

considering further

- a) that Recommendation ITU-T X.1205 "Overview of Cybersecurity" provides a definition, a description of technologies, and network protection principles;
- b) that Recommendation ITU-T X.805 provides a systematic framework for identifying security vulnerabilities that, together with many new security-related deliverables from ITU and other organizations, can assist in risk assessment and in the development of mechanisms to mitigate risks;
- c) that the ITU Telecommunication Standardization Sector (ITU-T) and the Joint Technical Committee for Information Technology (JTC 1) of the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) already have a significant body of published materials and ongoing work that is directly relevant to this topic, which needs to be taken into account,

recognizing

- a) the relevant outcomes of the World Summit on the Information Society (WSIS) identified ITU as the facilitator and moderator for Action Line C5 (Building confidence and security in the use of ICTs);
- b) the *resolves* paragraph of Resolution 130 (Rev. Antalya, 2006) of the Plenipotentiary Conference on strengthening the role of ITU in building confidence and security in the use of information and communication technologies, and the instruction to intensify work within the ITU study groups;
- c) that Programme 3 adopted by the World Telecommunication Development Conference (Doha, 2006) (WTDC-06) includes cybersecurity as one of its priority activities, and that Question 22/1 of the ITU Telecommunication Development Sector (ITU-D) addresses the issue of securing information and communication networks through the identification of best practices for developing a culture of cybersecurity;
- d) that the ITU Global Cybersecurity Agenda (GCA) promotes international cooperation aimed at proposing strategies for solutions to enhance confidence and security in the use of ICTs,

recognizing further

- a) that new cyberattacks such as phishing, pharming, botnets, distributed denials of service, etc., are emerging and having serious impacts;
- b) that the source of attack for spoofed IP addresses needs to be identifiable,

noting

- a) 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 (GSC) group;
- b) that there is a need for national, regional and international strategies and initiatives to be harmonized to the extent possible, in order to avoid duplication and to optimize the use of resources;
- c) that cooperation and collaboration among organizations addressing security issues can promote progress and contribute to building and maintaining a culture of cybersecurity,

resolves

- that ITU-T continue to evaluate existing and evolving new Recommendations, and especially signalling and telecommunication 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 telecommunication infrastructure:
- that ITU-T continue to raise awareness, within its area of operation and influence, of the need to defend information and telecommunication systems against the threat of cyberattack, and continue to promote cooperation among appropriate international and regional organizations in order to enhance exchange of technical information in the field of information and telecommunication network security;
- that ITU-T should work closely with ITU-D, particularly in the context of Question 22/1;
- 4 that ITU-T Recommendations, including X.805 and X.1205, ISO/IEC products/standards and other relevant deliverables from other organizations, be used as a framework for assessing networks and protocols for security vulnerabilities and to share experiences;
- 5 that concerned parties are invited to work together to develop standards and guidelines in order to protect against cyberattacks such as botnet, etc., and facilitate tracing the source of an attack;
- 6 that global, consistent and interoperable processes for sharing incident-response related information should be promoted;
- that ITU-T study groups continue to provide regular updates to the Telecommunication Standardization Advisory Group on progress in evaluating existing and evolving new Recommendations;
- that ITU-T study groups continue to liaise with other bodies active in this field, such as ISO/IEC JTC1, the Organisation for Economic Co-operation and Development (OECD), the Asia-Pacific Economic Cooperation Telecommunication and Information Working Group (APEC-TEL) and the Internet Engineering Task Force (IETF),

instructs the Director of the Telecommunication Standardization Bureau

to prepare, in building upon the information base associated with the *ICT Security Standards Roadmap* and the ITU-D efforts on cybersecurity, and with the assistance of other relevant organizations, an inventory of national, regional and international initiatives and activities to promote, to the maximum extent possible, the worldwide harmonization of strategies and approaches in this critically important area;

to report annually to the ITU Council, as specified in Resolution 130 (Rev. Antalya, 2006), on progress achieved in the actions outlined above,

further instructs the Director of the Telecommunication Standardization Bureau

- to continue to follow up WSIS cybersecurity activities, in cooperation with relevant stakeholders, as a way to share information on national, regional and international and non-discriminatory cybersecurity-related initiatives globally;
- to continue to cooperate with the Secretary-General's initiative on cybersecurity, and with the Telecommunication Development Bureau in relation to any item concerning cybersecurity in accordance with WTDC Resolution 45 (Doha, 2006), and to ensure coordination among these different activities,

invites Member States, Sector Members and Associates, as appropriate

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

Countering and combating spam

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) relevant provisions of the Basic Instruments of ITU;
- b) that the "Declaration of Principles" of the World Summit on the Information Society (WSIS) states in § 37 that:

"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";

c) that the WSIS "Plan of Action" states in § 12 that:

"Confidence and security are among the main pillars of the information society" and calls for "appropriate action on spam at national and international levels",

recognizing further

- a) that developing Recommendations to combat spam falls within Goal 4 of the strategic plan for the Union for 2008-2011 (Part I, § 3) set out in Resolution 71 (Rev. Antalya, 2006) of the Plenipotentiary Conference;
- b) the report of the chairman of the two ITU WSIS thematic meetings on countering and combating 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 to accelerate the studies
- iv) education
- v) international cooperation,

considering

- a) that spam has become a widespread problem causing potential loss of revenue to Internet service providers, telecommunication operators, mobile telecommunication operators and business users;
- b) that spam creates problems of information and telecommunication network security, and is increasingly being used as a vehicle for phishing and spreading viruses, worms, spyware and other forms of malware, etc.;
- c) that spamming is used for criminal, fraudulent or deceptive activities;
- d) that spam is a global problem that requires international cooperation in order to find solutions;
- e) that addressing the issue of spam is a matter of urgency;
- f) that many countries, in particular developing countries, including the least developed countries, small island developing states and countries with economies in transition, need help when it comes to countering spam;

- g) that relevant Recommendations of the Telecommunication Standardization Sector (ITU-T) and relevant information from other international bodies are available which could provide guidance for future development in this area, particularly with regard to lessons learned;
- h) that technical measures to counter spam represent one of those approaches mentioned in recognizing further b) above,

noting

the important technical work carried out to date in Study Group 17 and in particular Recommendations ITU-T X.1231 (Technical strategies for countering spam), X.1240 (Technologies involved in countering e-mail spam) and X.1241 (Technological framework for countering e-mail spam),

resolves to instruct the relevant study groups

- to continue to support ongoing work, in particular in Study Group 17, related to countering spam (e.g., e-mail) and to accelerate their work on spam in order to address existing and future threats within the remit and expertise of ITU-T, as appropriate;
- to continue collaboration with the relevant organizations (e.g., the Internet Engineering Task Force (IETF)), in order to continue developing, as a matter of urgency, technical Recommendations with a view to exchanging best practices and disseminating information through joint workshops, training sessions, etc.,

further instructs Study Group 17

to report regularly to the Telecommunication Standardization Advisory Group on the progress of this resolution,

instructs the Director of the Telecommunication Standardization Bureau

- to provide all necessary assistance with a view to expediting such efforts;
- to continue to cooperate with the Secretary-General's initiative on cybersecurity and with the Telecommunication Development Bureau in relation to any item concerning cybersecurity in accordance with Resolution 45 (Doha, 2006) of the World Telecommunication Development Conference, and to ensure coordination among these different activities,

invites Member States, Sector Members and Associates

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.

Establishment of a workshop and seminar coordination group

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that it is a priority for countries, particularly developing countries¹, to participate in, and to have access to detailed information on, workshops and seminars 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;
- e) the approval of Recommendation ITU-T A.31 by this assembly,

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 workshops and seminars, 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 workshops and seminars and for disseminating the related outcomes and documentation;
- c) the need to continuously monitor user 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;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

- 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;
- 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 (Rev. Antalya, 2006), 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 workshop and seminar coordination group (WSG), under the supervision of TSAG, to be specifically responsible for agile monitoring of technological evolution, transparent oversight of the organization of workshops and seminars, and continued dissemination of outcomes and related documentation,

instructs the Telecommunication Standardization Advisory Group

to implement this resolution, to continue to refine WSG's working methods and to appoint the WSG management team, composed of a chairman, and six vice-chairmen from the Americas, Europe, the Commonwealth of Independent States (CIS), Africa, Asia-Pacific and the League of Arab States, to provide regional balance,

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 WSG 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; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that Resolution 123 (Rev. Antalya, 2006) 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, tariff and accounting principles, next-generation networks (NGN), security, quality, mobility and multimedia, are of considerable strategic significance for developing countries¹ during the next study cycle,

recognizing

- a) the highly satisfactory results obtained by the regional approach within the framework of the activities of Study Groups 2, 3 and 12;
- b) the high level of participation and involvement of developing countries, in the meetings of Study Groups 2, 3 and 12;
- c) the encouraging start of regional groups² established in accordance with this resolution,

noting

- a) the need to increase the participation of developing countries in the work of 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;
- e) the need to encourage more inclusive participation in the work of ITU-T, e.g., by academia and experts working in the field of standardization of telecommunication/information and communication technologies, particularly from developing countries;
- f) the budgetary limitations, especially in developing country institutions, for attendance at ITU-T events of specific interest to them,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

² Regional groups are open, without exclusion, to the participation of all members belonging to the specific region where the regional group is created.

bearing in mind

- a) that the application of the organizational set-up and working methods of Study Groups 2, 3 and 12 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 (Rev. Antalya, 2006);
- b) that a common and coordinated approach in regard to standardization could serve to foster the promotion of standardization activities in developing countries,

resolves

to support, within available or otherwise contributed resources and on a case-by-case basis, the creation of regional groups,

invites the regions

- to develop draft terms of reference and working methods for regional groups, which are to be approved by the parent study group;
- 2 to pursue the creation of regional groups with a view to disseminating knowledge of standardization and encouraging the submission of written contributions to the parent study group reflecting the priorities of the relevant region,

invites the regional groups thus created

- 1 to disseminate information about telecommunication standardization and to submit written contributions to the parent study group reflecting the priorities of the relevant region;
- 2 to cooperate closely with the relevant respective regional organizations,

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

- 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 meetings and workshops of those groups;
- 3 to report on the effectiveness of regional groups to the ITU Council,

further invites the regional groups thus created

to cooperate closely with the relevant respective regional organizations, and to report on their work in their regions.

Mainstreaming gender in ITU-T activities

(Florianópolis, 2004; Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

noting

- a) Resolution 70 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on the inclusion of a 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 a 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;
- d) that there is a need to ensure that women can participate actively in all activities of the ITU Telecommunication Standardization Sector (ITU-T);
- e) that the Secretary-General has issued an updated ITU English Language Style Guide, which addresses the use of non-discriminatory language,

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, including the use of genderneutral language, in the work of all ITU-T activities and groups, including the Telecommunication Standardization Advisory Group (TSAG) and the ITU-T study groups; that the gender perspective should be taken into account in the implementation of all relevant outcomes of this assembly,

instructs 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 the participation of qualified women and men in standardization activities as well as in leadership positions;
- 3 to encourage the participation and leadership of women in all aspects of ITU-T activities, and note the proportional representation by gender;
- 4 to conduct an annual review on progress made in the Sector in advancing gender mainstreaming, and to share findings with TSAG and the next world telecommunication standardization assembly,

invites the Secretary-General

to encourage ITU staff to take account of the gender-neutral guidelines of the ITU English Language Style Guide and to avoid, as much as possible, the use of gender-specific terms,

invites Member States and Sector Members

to submit candidatures to chairman/vice-chairman posts to support the active involvement of women experts in standardization groups and activities, and in their own administrations and delegations.

Roles of TSAG and ITU-T study group vice-chairmen from developing countries¹

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that Resolution 123 (Rev. Antalya, 2006) 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 139 (Antalya, 2006) of the Plenipotentiary Conference invites Member States to undertake concerted action in order to achieve the objectives of Resolution 37 (Rev. Doha, 2006) of the World Telecommunication Development Conference;
- c) that, as a result of Resolution 44 of this assembly, there is increased awareness, interest and participation of ITU members from developing countries in standardization activities;
- d) that, despite the achievements towards bridging the standardization gap during the period 2005-2008, there is still a need for more focus, especially in the area of active involvement of officials from developing countries in the leadership of the Telecommunication Standardization Advisory Group (TSAG), the study groups of the ITU Telecommunication Standardization Sector (ITU-T) and their working parties,

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 TSAG vice-chairmen, who are appointed on a regional representation basis, as well as study group vice-chairmen from developing countries, can be charged with specific responsibility, which can further enhance more active participation of, especially, developing countries in the standardization work of ITU-T;
- c) that ITU can further improve both the quality and quantity of participation in standardization, by instituting terms of reference (ToR) for regional representatives appointed to the leadership positions in TSAG and ITU-T study groups that specifically include the responsibility to:
 - i) mobilize all ITU members in the region to participate in the ITU standardization activities
 - ii) make activity reports to the regional countries, in particular on standardization activities
 - iii) make mobilization and participation reports to the ITU body concerning the region
 - iv) chair any regional group established,

taking into account

a) that developing countries could benefit from increased participation, through instituting such ToR;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

b) that the regional representatives, who are nearer the ITU Member States in the region, are in the best location to mobilize the ITU Member States within their region for better participation, which results in a reduction of the standardization gap,

resolves

- that all vice-chairmen from developing countries be charged with the responsibility to:
 - i) mobilize all ITU members in the region to participate in the ITU standardization activities
 - ii) make mobilization and participation reports to the ITU body concerning the region
 - iii) prepare and submit a mobilization programme for the regions that they represent at the first meeting of TSAG or a study group;
- that the ITU regional offices shall assist the vice-chairmen, within the offices' budgets, to mobilize members within their respective regions for increased standardization participation,

instructs the Director of the Telecommunication Standardization Bureau

- to work closely with the Director of the Telecommunication Development Bureau (BDT) on availing the support needed for regional mobilization for standardization;
- taking into account financial constraints and existing and planned BDT activities, to include in the Telecommunication Standardization Bureau (TSB) budget proposal to the ITU Council funds identified for the implementation of this resolution;
- 3 to assist in institutionalizing these terms of reference in the working of TSAG and ITU-T study groups, to ensure that the specific ToR are made known to aspiring vice-chairmen before their appointment.

Strengthening coordination and cooperation among ITU-R, ITU-T and ITU-D on matters of mutual interest

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that a basic principle for cooperation and collaboration among the ITU Radiocommunication (ITU-R), Telecommunication Standardization (ITU-T) and Telecommunication Development (ITU-D) Sectors is the need for avoiding duplication of activities of the Sectors, and ensuring that work is undertaken efficiently and effectively;
- b) that there is a growing number of issues of mutual interest and concern to all Sectors including the following: electromagnetic compatibility (EMC); International Mobile Telecommunications (IMT); middleware; audiovisual delivery; accessibility for persons with disabilities; emergency communications; ICTs and climate change; and cybersecurity,

recognizing

- a) that there is a need to improve the participation of developing countries¹ in the work of ITU, as outlined in Resolution 5 (Rev. Doha, 2006) of the World Telecommunication Development Conference;
- b) that one such mechanism the Inter-sectoral Emergency Telecommunication Team has been established to ensure close collaboration within the Union as a whole, as well as with interested entities and organizations outside ITU, on this key priority issue for the Union;
- c) that all advisory groups are collaborating in the implementation of Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference on bridging the standardization gap between developing and developed countries,

taking into account

- a) that mechanisms for cooperation, beyond those already established, need to be identified to address a growing number of subjects of mutual interest and concern in ITU-R, ITU-T and ITU-D;
- b) the ongoing consultation among representatives of the three advisory bodies in the discussion of modalities for enhancing cooperation among the advisory groups,

resolves

to invite the Radiocommunication (RAG), Telecommunication Standardization (TSAG) and Telecommunication Development (TDAG) advisory groups to assist in the identification of subjects common to the three Sectors and mechanisms to enhance cooperation and collaboration in all Sectors on matters of mutual interest;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

to invite the Directors of the Radiocommunication (BR), Telecommunication Standardization (TSB) and Telecommunication Development (BDT) Bureaux to collaborate and report to the respective Sector advisory bodies on options for improving cooperation at the secretariat level to ensure that close coordination is maximized.

Encourage the creation of national computer incident response teams, particularly for developing countries¹

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

that Resolution 123 (Rev. Antalya 2006) 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,

recognizing

- a) the highly satisfactory results obtained by the regional approach within the framework of Resolution 54 of this assembly;
- b) the increasing level of computer use and computer dependency in information and communication technologies (ICT) within developing countries;
- c) the increasing attacks and threat on ICT networks through computers;
- d) the work carried out by the ITU Telecommunication Development Sector (ITU-D) under Question 22/1 of ITU-D Study Group 1 on this subject,

noting

- a) that there is still a low level of computer emergency preparedness within many countries, particularly developing countries;
- b) that the high level of interconnectivity of ICT networks could be affected by the launch of an attack from networks of the less-prepared nations, which are mostly the developing countries;
- c) the importance of having an appropriate level of computer emergency preparedness in all countries;
- d) the need for establishment of computer incident response teams (CIRTs) on a national basis and the importance of coordination within and among the regions,

bearing in mind

that well-functioning CIRTs in developing countries will serve to improve the level of developing countries' participation in world computer emergency response activities and contribute to achieving an effective global ICT infrastructure,

resolves

to support the creation of national CIRTs in Member States, where CIRTs are needed and are currently absent,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

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

- 1 to identify best practices to establish CIRTs;
- 2 to identify where CIRTs are needed;
- 3 to collaborate with international experts and bodies to establish national CIRTs;
- 4 to provide support, as appropriate, within existing budgetary resources;
- 5 to facilitate collaboration between national CIRTs, such as capacity building and exchange of information, within an appropriate framework,

invites the Member States

- 1 to consider the creation of a national CIRT as a high priority;
- 2 to collaborate with other Member States and with Sector Members,

invites Member States and Sector Members

to cooperate closely with the ITU Telecommunication Standardization Sector and ITU-D in this aspect.

Enhancing participation of telecommunication operators from developing countries¹

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) that the participation by operators from developing countries in standardization activities is weak;
- b) that the majority of these operators are subsidiaries of developed countries' telecommunication companies which are Sector Members;
- c) that the strategic objectives of Sector Members from developed countries participating in activities of the ITU Telecommunication Standardization Sector (ITU-T) do not necessarily include the participation of their subsidiary entities;
- d) that those developing countries' telecommunication operators are placing particular emphasis on information and communication technology (ICT) operation and infrastructure deployment, to the disadvantage of standardization activities;
- e) the impact of ITU Recommendations on the activities of Sector Members,

taking into account

the strategic plan of the Union adopted in both Resolution 71 (Rev. Antalya, 2006) and Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference,

considering

- a) that developing countries would benefit from effective participation by their operators in ITU-T activities:
- b) that this participation by the operators would contribute to enhancing capacity building in the developing countries, increase their competitiveness, and support innovation in the markets of developing countries.

resolves to invite the Director of the Telecommunication Standardization Bureau

- to encourage Sector Members from the developed countries to promote the participation in ITU-T activities of their subsidiaries installed in developing countries;
- 2 to develop mechanisms to support the effective participation by telecommunication operators from developing countries in standardization activities,

invites Member States

to encourage their Sector Members to participate in ITU-T activities.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

Responding to the challenges of the evolution of the numbering system and its convergence with IP-based systems/networks

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) Resolution 133 (Rev. Antalya, 2006) of the Plenipotentiary Conference, with regard to the continuing progress towards integration of telecommunications and the Internet;
- b) Resolution 101 (Rev. Antalya, 2006) of the Plenipotentiary Conference, in particular:
 - i) that the increased use of the Internet introduces new, additional applications in telecommunication services, based on its highly advanced technology;
 - ii) that studies are ongoing in the ITU Telecommunication Standardization Sector (ITU-T) on IP-based network issues, including service interoperability with other telecommunication networks, numbering, signalling requirements and protocol aspects, security and infrastructure component costs, and issues associated with the evolution to next-generation networks (NGN), including the migration from existing networks to NGN;
 - iii) the *resolves* paragraph to the effect that ITU shall fully embrace the opportunities for telecommunication/information and communication technology development that arise from the growth of IP-based services;
- c) the evolving role of the World Telecommunication Standardization Assembly, as reflected in Resolution 122 (Rev. Antalya, 2006) of the Plenipotentiary Conference,

noting

- a) the trial work in Study Group 2, i.e., investigating the evolutionary aspect of the numbering system, including the "future of numbering", considering NGN as the working environment of the numbering system in the future;
- b) the emerging issues concerning administrative control for international telecommunication service-based numbers;
- c) the forthcoming issues on the convergence of numbering, naming, addressing and identification systems along with the development of NGN, and associated issues on security, signalling, portability and migration;
- d) the lack of principles, or of a roadmap, for the evolution of international telecommunication resources, which would be expected to help the timely, predictable deployment of advanced identification technologies,

resolves to instruct Study Group 2, within the mandate of ITU-T

- to study, in liaison with the other relevant study groups, the necessary requirements for the structure and maintenance of telecommunication identification/numbering resources in relation to the deployment of IP-based networks and the transition to NGN;
- 2 to ensure the development of the administrative requirements for identification/numbering resource management systems in NGNs;

3 to develop guidelines, as well as a framework, for the evolution of the international telecommunication numbering system and its convergence with IP-based systems, in coordination with related study groups and associated regional groups, so that a basis for any new application can be provided,

instructs relevant study groups

to support the work of Study Group 2, to ensure that such applications are based on appropriate guidelines, as well as a framework, for the evolution of the international telecommunication numbering system, and to help investigate their impact on the numbering system,

instructs the Director of the Telecommunication Standardization Bureau

to take appropriate action to facilitate the foregoing work regarding the evolution of the numbering system or its converged applications,

invites Member States and Sector Members

to contribute to these activities, taking into consideration their national concerns and experiences.

Misappropriation of international telecommunication numbering resources

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recalling

- a) Resolution 29 of this assembly concerning alternative calling procedures on international telecommunication networks, which (citing ITU Council Resolution 1099) urged the ITU Telecommunication Standardization Sector (ITU-T) to develop, as soon as possible, the appropriate Recommendations concerning alternative calling procedures;
- b) Recommendation ITU-T E.156, which sets out guidelines for ITU-T action on reported misuse of E.164 numbering resources, and Recommendation ITU-T E.156 Supplement 1, which provides a best practice guide on countering misuse of E.164 numbering resources;
- c) the purposes of the Union to foster collaboration among the membership for the harmonious development of telecommunications and to enable the offering of services at lowest cost,

recognizing

- a) that the fraudulent misappropriation of national telephone numbers and country codes is harmful;
- b) that the blocking of calls by barring the country code to a country in order to avoid fraud is harmful;
- c) relevant provisions of the ITU Constitution and Convention,

resolves to invite Member States

- to consider providing a mechanism to allow their national regulator to request carriers to release routing information in cases of fraud, within the constraints of national laws and regulatory frameworks;
- 2 to encourage administrations and national regulators to collaborate and share information on fraudulent activities related to misuse of international numbering resources and to consider sharing information about these activities;
- 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 2, in order to promote a new and more effective basis for dealing with fraudulent activities due to number misappropriation, which would help limit the negative effects of these fraudulent activities and the blocking of international calls to developing countries¹;
- 4 to encourage administrations and international telecommunication operators to implement ITU-T Recommendations in order to mitigate the adverse effects of fraudulent number misappropriation and blocking of calls to certain developing countries,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

resolves further

- that administrations and operating agencies authorized by Member States should take all reasonable measures, within the constraints of their national laws and regulatory frameworks, to obtain information necessary to address issues related to number misappropriation and misuse;
- that administrations and operating agencies authorized by Member States should take note of and consider, within the constraints of their national laws and regulatory frameworks, the "Suggested guidelines for regulators, administrations and operating agencies authorized by Member States for dealing with number misappropriation", in accordance with the attachment to this resolution;
- that Member States and national regulators should take note of instances of activities related to the misuse of international numbering resources, in accordance with Recommendation ITU-T E.164, through ITU-T resources;
- 4 to request Study Group 2 to study all aspects and forms of misappropriation of international country codes, with a view to amending Recommendation ITU-T E.156 and its Supplement 1;
- 5 to request Study Group 3 to study the economic effects of call blocking on developing countries.

Attachment

(to Resolution 61)

Suggested guidelines for regulators, administrations and operating agencies authorized by Member States for dealing with number misappropriation

In the interest of global development of international telecommunications, it is desirable for regulators, administrations and operating agencies authorized by Member States to cooperate with others and to take a collaborative and reasonable approach to avoid the blocking of country codes. Cooperation and subsequent actions would have to take account of the constraints of national regulatory frameworks and laws. It is recommended that the following guidelines be applied in country X (the location of the calling party), country Y (the country through which the call is routed) and country Z (the country to which the call was originally destined) regarding number misappropriation.

Country X (location of call origination)	Country Y (country through which the call is routed)	Country Z (country to which the call was originally destined)
		On receipt of a complaint, the national regulator finds the information: name of the carrier from which the call originated, time of the call and called number, and passes this information to the national regulator in country X.
When a complaint is received, the first information that is required is the name of the carrier from which the call originated, the time of the call and the called number.		
Once the call details are known, the national regulator requests relevant information from the carrier from which the call originated, to determine the next carrier through which the call was routed.		
Once the relevant information has been found, the national regulator is to advise the national regulator of the next country of the call details (including the call detail record) and request the national regulator to request further information.	The national regulator asks the other carriers for relevant information. This process continues until the information on where the call was misappropriated is found.	
Cooperation from national regulators, as appropriate, to manage these issues.	Cooperation is required from entities involved, to attempt to bring a criminal case against the perpetrators.	Cooperation is encouraged between and among national regulators involved, to resolve these issues.

Dispute settlement

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that Internet penetration rates remain low in developing countries¹, in particular in comparison with the penetration rates of mobile telephony, and that the growth rates of Internet penetration in developing countries are also very low when compared with the growth rates of mobile telephony;
- b) the increasing imbalance under the current circumstances between developed and developing countries, in terms of economic growth and technological progress;
- c) that numerous explanations have been put forward to explain the phenomena mentioned above,

recognizing

- a) that the continuing social and economic underdevelopment of a large part of the world is one of the most serious problems affecting not only the countries concerned, but also the international community as a whole;
- b) that the development of telecommunication/information and communication technologies infrastructure and services is a precondition for social and economic development;
- c) that the uneven access to telecommunication facilities globally results in a widening of the gap between the developed and the developing world in terms of economic growth and technological progress;
- d) that many countries have agreed to the dispute settlement clause for interconnection in the World Trade Organization reference paper on the principles and definitions on the regulatory framework for the basic telecommunication services,

noting

the contribution from Study Group 3 to the second meeting of the Internet Governance Forum;

resolves to instruct Study Group 3

- 1 to expedite its work on international connectivity, in order to facilitate the implementation of relevant resolutions:
- to collect data with respect to the implementation and practical effects of the implementation of relevant resolutions and D-series Recommendations of the ITU Telecommunication Standardization Sector (ITU-T),

invites Member States

to encourage each party to include in a negotiation or agreement related to, or arising out of, international connectivity matters a dispute settlement clause in such agreements;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

- 2 to encourage all operating agencies domiciled within their territories to implement relevant ITU-T Recommendations;
- 3 to contribute to ITU-T's further work in the areas mentioned in this resolution,
 - instructs the Director of the Telecommunication Standardization Bureau
- to report annually to the ITU Council with respect to the implementation of this resolution;
- 2 to provide all necessary support, within the existing budget, to Study Group 3 for its further work on this matter.

Studies regarding nomadic telecommunication services and applications

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) that nomadic telecommunication capabilities may be either a distinct class of service or additional capabilities for fixed and mobile networks;
- b) that there are issues in providing nomadic services that need to be resolved,

noting

that nomadism is defined in Recommendation ITU-T Q.1761 and that Recommendation ITU-T Q.1706 contains requirements for next-generation networks (NGN),

resolves

- to request the Telecommunication Standardization Advisory Group to treat the study of nomadism as an important and urgent area of study for many ITU developing countries¹, and to take the necessary actions (as indicated in Resolution 45 of this assembly) to ensure a well coordinated programme of work on nomadism across all the relevant study groups;
- 2 to request appropriate ITU-T study groups to address service definition, numbering, regulatory and infrastructure aspects to support nomadic services;
- in particular, to request relevant ITU-T study groups to study, develop and recommend techniques for implementation of the following relevant capabilities for handling national or regional services:
 - i) basic capability to be routed to the correct called address (e.g. emergency call centre), based on current location;
 - ii) basic capability plus calling line identification, to allow call-back from the called address;
 - iii) enhanced capability including location identification,

invites Member States, Sector Members and Associates

to submit contributions to relevant study groups in order to progress the work.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

IP address allocation and encouraging the deployment of IPv6

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) Resolution 102 (Rev. Antalya, 2006) of the Plenipotentiary Conference, and its instructions to the Director of the Telecommunication Standardization Bureau;
- b) the results of the ITU workshop on IPv6, which took place on 4-5 September 2008;
- c) that IPv4 to IPv6 migration is an important issue for Member States and Sector Members,

noting

- a) that IP addresses are fundamental resources that are essential for the future development of telecommunication/information and communication technologies IP-based networks and for the world economy;
- b) that many countries believe that there are historical imbalances related to IPv4 allocation;
- c) that large contiguous blocks of IPv4 addresses are becoming scarce and that it is urgent to promote migration to IPv6,

considering

- a) that, among the relevant stakeholders in the Internet community, there is a need to continue discussions related to IPv6 deployment so that countries better understand these important issues;
- b) that IPv6 deployment is an important issue for Member States and Sector Members,

resolves

to instruct Study Groups 2 and 3, each according to its mandate, to study the allocation and economic aspects of IP addresses, taking into consideration the challenges and issues identified in the report of the chairman of the 4-5 September 2008 workshop on IPv6,

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

to initiate a project to assist developing countries¹, responding to their regional needs as identified by the Telecommunication Development Bureau (BDT); this project should be carried out jointly by the Telecommunication Standardization Bureau (TSB) and BDT, taking into consideration the involvement of those partners willing to participate and to bring their expertise;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

- to establish a website that provides information about global activities related to IPv6, to facilitate awareness-raising and the importance of IPv6 deployment for all ITU members and interested entities, and provides information related to training events being undertaken by relevant entities in the Internet community (e.g. regional Internet registries (RIR), local Internet registries (LIR), operator groups and the Internet Society (ISOC));
- 3 to promote awareness of the importance of IPv6 deployment, to facilitate joint training activities, involving appropriate experts from the relevant entities, and to provide information to developing countries,

further instructs the Director of the Telecommunication Standardization Bureau

to study the question of IPv6 address allocation and registration for interested members and, especially, developing countries and to report to the 2009 session of the ITU Council,

invites Member States and Sector Members

to contribute to these activities.

Calling party number delivery

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

concerned

- a) that there appears to be a trend to suppress the transmission across international boundaries of calling party identification, in particular the country code and the national destination code;
- b) that such practices have an unfavorable effect on security and economic issues;
- c) that work in Study Group 2 on this topic needs to be expedited,

noting

relevant Recommendations of the ITU Telecommunication Standardization Sector (ITU-T), in particular:

- i) ITU-T Q.731.x-series concerning stage 3 descriptions for number identification supplementary services using Signalling System No. 7;
- ii) ITU-T Q.731.7, Stage 3 description for number identification supplementary services using Signalling System No. 7: Malicious call identification (MCID);
- iii) ITU-T I.251.3, Number identification supplementary services: Calling Line Identification Presentation;
- iv) ITU-T I.251.4, Number identification supplementary services: Calling Line Identification Restriction;
- v) ITU-T I.251.7, Number identification supplementary services: Malicious call identification;
- vi) ITU-T E.164, The international public telecommunication numbering plan;
- vii) ITU-T Q.764, Signalling System No. 7 ISDN User Part signalling procedures;
- viii) ITU-T Q.1912.5, Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control protocol or ISDN User Part,

resolves

- that international calling party number delivery shall, consistent with technical capabilities and national legal and regulatory frameworks, be provided based on the relevant ITU-T Recommendations;
- that the delivered calling party numbers shall, consistent with technical capabilities and national legal and regulatory frameworks, be prefixed with country codes to identify in which country the calls are originated before they are delivered from an originating country to a receiving country;
- that, in addition to the country code, the delivered calling party number shall, consistent with technical capabilities and national legal and regulatory frameworks, include the national destination code, or sufficient information to allow proper billing and accounting, for each call;
- 4 that the calling party number shall, consistent with technical capabilities and national legal and regulatory frameworks, be transmitted transparently by transit networks (including hubs),

instructs

- the concerned study groups, in particular Study Group 2, to expedite work on Recommendations that would provide additional detail and guidance for the implementation of, at least, the principles listed above;
- the Director of the Telecommunication Standardization Bureau to report on the progress achieved by the study groups in implementing this resolution, which is intended to improve security and minimize fraud, and minimize technical harm as called for by Article 42 of the Constitution.

Creation of a technology watch function in the Telecommunication Standardization Bureau

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that it is desirable for the Telecommunication Standardization Bureau (TSB) to consider the creation of a technology watch function (TWF) to survey new technologies for possible new standardization activities in ITU and how such new technologies can be included within the ITU-T Telecommunication Standardization Sector (ITU-T) work programme;
- b) that the TWF needs to identify emerging technologies, as well as their likely impact on future standardization work for both developed and developing countries¹, with a view to identifying work items for possible new ITU-T Recommendations;
- c) that the rapid change of the telecommunication/information and communication technologies environment requires related technology watch and immediate reaction, in order to propose possible ITU-T standardization activities as early as possible;
- d) that the TWF should collaborate with other standards development organizations (SDOs) recognized by ITU, universities, academia and other related institutions,

recognizing

the encouraging results of this TWF in the last cycle,

resolves to instruct the Director of the Telecommunication Standardization Bureau

- 1 to formalize such a function within the Bureau;
- that the output of TWF, with relevant findings and analysis, shall be provided as soon as possible to the TSAG and to the Workshop and Seminar Coordination Group for their consideration and action in accordance with their mandates;
- 3 to publish the main results of this function as brief summaries on the ITU-T NEWSLOG webpage;
- 4 to report on the implementation of this resolution to the next world telecommunication standardization assembly, with a view to reviewing this resolution and introducing the appropriate amendments, in light of the implementation outcome.

¹ These include the least developed countries, small island developing states and countries with economies in transition.

Creation of a Standardization Committee for Vocabulary

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) the adoption by the Plenipotentiary Conference of Resolution 154 (Antalya, 2006) on the use of the six official languages of the Union on an equal footing, which instructs the Council and the General Secretariat on how to achieve equal treatment of the six languages;
- b) the decisions by the ITU Council centralizing the editing functions for languages in the General Secretariat (Conferences and Publications Department), calling upon the Sectors to provide the final texts in English only (this applies also to terms and definitions),

considering

- a) that it is important for the work of ITU, and in particular of the Telecommunication Standardization Sector (ITU-T), to continue liaising with other interested organizations about terms and definitions, graphical symbols for documentation, letter symbols and other means of expression, units of measurement, etc., with the objective of standardization of such elements, etc.;
- b) the difficulty of achieving agreement on terms of definitions when more than one ITU-T study group is involved as well as updating the existing SANCHO database, for terms and definitions already frozen at the end of the year 2005;
- c) that there is a continuing need for the publication of terms and definitions appropriate to the work of ITU-T;
- d) that unnecessary or duplicated work can be avoided by effective coordination and adoption of all work on vocabulary and related subjects carried out by the ITU-T study groups and other relevant ITU-T groups;
- e) that the long-term objective of the terminology work must be the preparation of a comprehensive vocabulary of telecommunications in the official languages of ITU;
- f) that it is essential that the terminology work done within ITU should be widely disseminated, as regards both terms and definitions;
- g) that texts on vocabulary and glossaries are not as a rule directly available to users interested in a particular ITU-T publication;
- h) that there are definitions contained in the Annexes to the ITU Constitution and Convention;
- i) the importance of avoiding misunderstanding within ITU and in particular with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), respectively, in the use of common terms and definitions;
- j) the excellent work carried out by International Telegraph and Telephone Consultative Committee (CCITT) in the past regarding terms and definitions,

- that the standardization of work on vocabulary within ITU-T shall be based on the proposals by the study groups in the English language, with the consideration, resolution and adoption of the translation into the other five official languages as proposed by the General Secretariat, and shall be ensured by the Standardization Committee for Vocabulary (SCV), comprising experts in the various official languages and members designated by interested administrations and other participants in the work of ITU-T, as well as the rapporteurs for vocabulary of the ITU-T study groups, the representative of the General Secretariat (Conferences and Publications Department) and the Telecommunication Standardization Bureau (TSB) editor for the English language;
- 2 that the terms of reference of SCV are given in Annex 1 to this resolution;
- that SCV should review and revise where necessary the existing database for terms and definitions in ITU, and in particular those used in SANCHO and any relevant update by ITU-T study groups adopted since the beginning of 2006;
- 4 that the chairman and the six vice-chairmen, each representing one of the official languages, should be nominated by the World Telecommunication Standardization Assembly;
- that, when proposing terms and definitions, the ITU-T study groups shall use the guidelines given in Annex 2 to this resolution, and invite the ITU General Secretariat to review these guidelines and provide any useful comments to SCV for its consideration, and after approval they will be sent to the study groups for implementation;
- 6 that the ITU-T study groups, within their terms of reference, should continue their work on technical and operational terms and their definitions in English only;
- that each ITU-T study group should appoint a permanent rapporteur for vocabulary to coordinate efforts regarding terms and definitions and related subjects and to act as a contact person for the study group in this domain;
- 8 that the responsibilities of the rapporteur for vocabulary are given in Annex 3 to this resolution;
- 9 that, where more than one ITU-T study group is defining the same terms and/or concept, efforts should be made to select a single term and a single definition which is acceptable to all of the ITU-T study groups concerned;
- that, when selecting terms and preparing definitions, the ITU-T study group shall take into account the established use of terms and existing definitions in ITU, in particular those appearing in SANCHO as well as those found in the International Electrotechnical Vocabulary (IEV);
- that the Telecommunication Standardization Bureau (TSB) should collect all new terms and definitions proposed by the ITU-T study group, and provide them to SCV, which shall act as an interface with IEC:
- that, in close collaboration with the ITU General Secretariat (Conferences and Publications Department), SCV shall communicate with individual rapporteurs for vocabulary and, if necessary, promote meetings of experts where inconsistencies are found between terms and definitions in ITU-T and IEC; these mediation efforts should seek agreement to the extent that such agreement is feasible, with remaining inconsistencies duly noted;
- that rapporteurs for vocabulary should take into account any available ITU Sector lists of emerging terms and definitions and draft IEV chapters, to seek consistency of the Sector terms and definitions wherever practicable;
- that SCV should discharge its responsibility by working electronically, with a possible short faceto-face meeting once per year, to which, in addition to the chairman, and the vice-chairmen, the

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representatives of the Conferences and Publications Department, the TSB editor for the English language and the study group rapporteurs for vocabulary shall be invited,

instructs the Director of the Telecommunication Standardization Bureau

- to nominate an editor for the English language, who will act as the secretary of SCV;
- 2 to facilitate the work of SCV by providing its chairman with the necessary support for organizing electronic meetings of SCV and the annual face-to-face meeting;
- 3 to collaborate with the General Secretariat in order for the output of SCV to be integrated in the database of terms and definitions of the whole ITU.

Annex 1

(to Resolution 67)

Terms of reference for the Standardization Committee for Vocabulary

- To adopt terms and definitions for vocabulary work for ITU-T in the six languages, in close collaboration with the General Secretariat (Conferences and Publications Department), the TSB editor for the English language as well as the relevant study group rapporteurs for vocabulary (see Annex 3), including graphical symbols for documentation, letter symbols and other means of expression, units of measurements, etc., within ITU-T and to seek harmonization among all concerned ITU-T study groups regarding terms and definitions.
- To liaise with the Conferences and Publications Department, and with other organizations dealing with vocabulary work in the telecommunication field, for example with ISO and IEC as well as the ISO/IEC Joint Technical Committee for Information Technology (JTC 1), in order to eliminate duplication of terms and definitions.
- 3 To provide study groups with relevant unified graphical symbols to be used in documentation, letter symbols, and other means of expression, units of measurement, etc., to be used in all study group documents, as well as with any updating of the Guidelines shown in Annex 2.

Annex 2

(to Resolution 67)

Guidelines for the preparation of terms and definitions

1 Terms

1.1 What is meant by a term?

A term is a word or a group of words used to express a definite concept.

1.2 Conciseness of terms

The term should be selected to be as concise as possible, without impairing the understanding of the text containing the term.

When a term is used in more than one field in a general vocabulary, the field of application may be added between brackets if justified.

1.3 Ambiguous terms

The occurrence of terms with more than one meaning is occasionally inevitable. When one term has several meanings, confusion can arise in the following cases:

- The meanings are very similar
- The terms appearing in the same text with different meanings.

In such cases, different terms should be found to express the different meanings of such ambiguous terms, unless their use is limited to the text of a Recommendation or Recommendations or a Supplement and it is not needed for any regulatory purposes and not generalized for the whole ITU.

1.4 Complex terms

A complex term should reflect the combination of concepts included in the definition. However, it need not include every constituent of the combination of concepts shown in the definition.

Care should be taken to avoid the unnecessary proliferation of terms and definitions where an already-defined qualifying term, used in conjunction with a simpler term, would suffice.

2 Definitions

2.1 What is meant by definition?

To define is to state clearly, accurately and precisely what is a concept.

2.2 Use of terms in definitions

The following general principles may be adopted for the terms used in a definition:

- all the terms which appear in a definition must either be well known or defined elsewhere in the text
- the term or terms representing a concept to be defined should not appear in the definition
- the meaning of a term must not be expressed using another term which is itself defined by means of the first term.

2.3 Accuracy of definitions

The degree of accuracy of definitions may depend on their intended use. Attempts to achieve greater accuracy may lengthen the text unnecessarily. This may involve the use of more specific and hence less familiar terms, thereby making the definition harder rather than easier to understand.

2.4 Formulation of definitions

The wording of the definition should clearly indicate whether the term is a substantive noun, a verb or an adjective.

2.5 Definitions with more than one term

Where more than one term applies to the same concept, the alternative term(s) may also be mentioned (separated by a semicolon), to the extent that this does not cause confusion.

2.6 Illustrations

Illustrations can often be used to clarify or explain a definition. The type of illustration used will depend on each specific case; examples of such illustrations may be found in the CCITT Blue Book Volume 1, Fascicule 1.3 of the IX Plenary Assembly 1988. In addition, that volume contains many agreed terms and definitions by that assembly.

3 Further references

For further and more specific guidance on the drafting of terms and definitions, reference may be made to ISO International Standard 704 "Principles and methods for terminology" (1987), and any relevant update of these principles – as well as any principles adopted by other recognized organizations – by ITU for such purposes.

Annex 3

(to Resolution 67)

Responsibilities of rapporteurs for vocabulary

- 1 The rapporteurs should study vocabulary and related subjects referred to them by:
 - working parties of their ITU-T study group;
 - the ITU-T study group as a whole;
 - the rapporteur for vocabulary of another ITU-T study group;
 - SCV.
- 2 The rapporteurs should be responsible for coordination of vocabulary and related subjects within their own ITU-T study groups and with other standardization groups, the objective being to achieve the agreement of the study groups concerned on the proposed terms and definitions.
- 3 The rapporteurs shall be responsible for liaison between their ITU-T study group and SCV, and encouraged to participate in any face-to-face meeting of SCV that may be held.

Implementation of Resolution 122 (Rev. Antalya, 2006) on the evolving role of the World Telecommunication Standardization Assembly

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) that Resolution 122 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on the evolving role of the World Telecommunication Standardization Assembly (WTSA), called also for the organization of the Global Standardization Symposium (GSS);
- b) the objective of Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on bridging the standardization gap between developed and developing countries¹;
- c) that the ITU Telecommunication Standardization Sector (ITU-T) is the unique international standardization organization, covering 191 Member States and over 800 Sector Members and Associates;
- d) the important conclusions of the GSS, 20 October 2008, covering the two above-mentioned resolutions, in particular:
 - to facilitate an exchange of views with high-level industry representatives on the standardization scenario and work according to the evolution of the industry and user needs, and
 - to carry out this work without affecting the unique status of ITU or the traditional contributiondriven working procedures of ITU-T,

considering

- a) that developing countries participate only in the standardization activities of ITU-T and could not participate in those increasingly fragmented global and/or regional standards development organizations (SDOs), as well as industry forums and consortia, and could not participate in the yearly meeting of SDOs;
- b) that ITU-T should strengthen its role and evolve, as required by Resolution 122 (Rev. Antalya, 2006), and should repeat the gathering of high-level, private-sector executives, along the lines of the GSS, but limited to the private sector, with the objective of strengthening the role of ITU-T by responding to the needs of such high-level executives in terms of their identified requirements and priorities for standardization activities within ITU-T, in order to strengthen its role, also taking into consideration the needs of developing countries.

noting

a) the excellent results of the Global Industry Leaders Forum (GILF), which was organized by the Director of the Telecommunication Development Bureau for high-level executives of the private sector, focusing on key challenges in achieving information and communication technology (ICT) development in developing countries and proposing approaches for addressing those challenges for developing countries;

These include the least developed countries, small island developing states and countries with economies in transition.

- b) that, in order to encourage industry participation in ITU-T and to discourage the proliferation of forums and consortia, standard-making today should respond to the needs of the high-level representatives of the ICT industry in a coordinated way;
- c) that Recommendations proposed in response to those coordinated needs will increase ITU's credibility and will respond to the needs of countries in minimizing technical solutions and reducing the proliferation of these solutions, which will also have economic advantages for developing countries,

resolves that the Director of the Telecommunication Standardization Bureau

- shall organize meetings for high-level industry executives in order to assist in identifying and coordinating standardization priorities and subjects, in order to minimize the number of forums and consortia;
- bring the needs of developing countries to these meetings by consulting them prior to these meetings using questionnaires;
- develop effective mechanisms to attract an increased number of high-level technology executives to participate in these meetings;
- 4 report on the progress of this resolution to the next WTSA, with lessons learned.

Non-discriminatory access and use of Internet resources

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

that one of the purposes of ITU laid down in Article 1 of the ITU Constitution is "to maintain and extend international cooperation among all its Member States for the improvement and rational use of telecommunications of all kinds",

considering further

approved documents of the World Summit on the Information Society (WSIS), Geneva 2003 and Tunis 2005, in its Declaration of Principles, especially §§ 11, 19, 20, 21 and 49 thereof,

noting

that § 48 of the WSIS Declaration of Principles recognized that: "The Internet has evolved into a global facility available to the public and its governance should constitute a core issue of the Information Society agenda. The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations. It should ensure an equitable distribution of resources, facilitate access for all and ensure a stable and secure functioning of the Internet, taking into account multilingualism",

recognizing

- a) that the second phase of WSIS (Tunis, November 2005) identified ITU as the possible moderator/facilitator for the following WSIS Action Lines from the Plan of Action: C2 (Information and communication infrastructure) and C5 (Building confidence and security in use of the ICTs);
- b) that the Plenipotentiary Conference (Antalya, 2006) entrusted the ITU Telecommunication Standardization Sector (ITU-T) with a range of activities aimed at implementing the WSIS (Tunis, 2005) outcomes, a number of those activities having to do with Internet-related issues;
- c) Resolution 102 (Rev. Antalya, 2006) of the Plenipotentiary Conference on ITU's role with regard to international public policy issues pertaining to the Internet and the management of Internet resources, including domain names and addresses;
- d) that management of the registration and allocation of Internet domain names and addresses must fully reflect the geographical nature of the Internet, taking into account an equitable balance of interests of all stakeholders,

taking into account

- a) that ITU-T is dealing with technical and policy issues related to IP-based networks, including the Internet and next-generation networks;
- b) that a number of the resolutions of this assembly deal with Internet-related issues,

resolves to invite Member States

- 1 to refrain from taking any unilateral and/or discriminatory actions that could impede another Member State from accessing public Internet sites, within the spirit of Article 1 of the Constitution and the WSIS principles;
- 2 to report to the Director of the Telecommunication Standardization Bureau on any incident referred to in 1 above,

instructs the Director of the Telecommunication Standardization Bureau

- to integrate and analyse the information on incidents reported from Member States;
- 2 to report this information to Member States, through an appropriate mechanism,

invites Member States and Sector Members

to submit contributions to the ITU-T study groups that contribute to the prevention and avoidance of such practices.

Telecommunication/information and communication technology accessibility for persons with disabilities

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing,

- a) studies under Question 4/2 of the ITU Telecommunication Standardization Sector (ITU-T) on human factors-related issues for improvement of the quality of life through international telecommunications;
- b) studies under ITU-T Question 26/16 on accessibility to multimedia systems and services, including the recent Recommendation ITU-T F.790 on telecommunication accessibility guidelines for older persons and persons with disabilities;
- c) studies under Question 20/1 of the ITU Telecommunication Development Sector (ITU-D) on access to telecommunication services for people with disabilities;
- d) ongoing work in the ITU Radiocommunication Sector (ITU-R) to bridge the digital disability divide;
- e) publication by the Telecommunication Standardization Advisory Group (TSAG) of the Guide for ITU study groups Considering end-user needs in developing Recommendations;
- f) the creation by ITU-T Study Group 2 of the Joint Coordination Activity on Accessibility and Human Factors for purposes of awareness, advice, assistance, collaboration, coordination and networking;
- g) the formation by the Internet Governance Forum of the Dynamic Coalition on Accessibility and Disability proposed by the Director of the Telecommunication Standardization Bureau (TSB);
- h) the partnership between ITU-T and the Dynamic Coalition on Accessibility and Disability for the purpose of maximizing the benefits to all sectors of the global community of electronic communications and online information through the Internet,

considering

- a) that the World Health Organization estimates that ten per cent of the world's population (more than 650 million people) are persons with disabilities, and that this percentage may increase due to factors such as the greater availability of medical treatment and longer life expectancy, and also because people may acquire disability through accident, wars and circumstances of poverty which are mostly prevalent in developing countries¹;
- b) that over the past 60 years, the approach to disability adopted by United Nations agencies, and by many Member States (through a changed emphasis in their laws, regulations, policies and programmes), has moved from a health and welfare perspective to a human-rights based approach, which recognizes that people with disabilities are people first, and that society places barriers upon them as opposed to their disabilities, and which includes the goal of full participation in society by persons with disabilities;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

- c) that the United Nations Convention on the rights of persons with disabilities, which came into force on 3 May 2008, requires States Parties (under §§ 2(g) and 2(h) of Article 9 on accessibility) to take appropriate measures:
 - i) 9(2)(g) "to promote access for persons with disabilities to new information and communications technologies and systems, including the Internet";
 - ii) 9(2)(h) "to promote the design, development, production and distribution of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost";
- d) that maximizing the accessibility and usability of telecommunication/information and communication technologies (ICT) services, products and terminals through universal design will increase their uptake by persons with disabilities and older persons, and thereby increase revenues;
- e) that United Nations General Assembly Resolution A/RES/61/106 adopting the Convention on the rights of persons with disabilities requests the Secretary-General (as § 5) "... to implement progressively standards and guidelines for the accessibility of facilities and services of the United Nations system, taking into account relevant provisions of the Convention, in particular when undertaking renovations",

recalling

- a) § 18 of the Tunis Commitment, made at the second phase of the World Summit on the Information Society (Tunis, 2005): "We shall strive unremittingly, therefore, to promote universal, ubiquitous, equitable and affordable access to ICTs, including universal design and assistive technologies, for all people, especially those with disabilities, everywhere, to ensure that the benefits are more evenly distributed between and within societies, ...";
- b) the Phuket Declaration on Tsunami Preparedness for Persons with Disabilities (Phuket, 2007), which emphasizes the need for inclusive emergency warning and disaster management systems using telecommunication/ICT facilities based on open, non-proprietary, global standards,

taking into account

- a) Resolution GSC-13/26 (UWG) on user needs, considerations and involvement (revised) of the twelfth Global Standards Collaboration meeting (Boston, 2008);
- b) publications and ongoing work of the Special Working Group on Accessibility of the Joint Technical Committee on Information Technology (JTC 1) of the International Organization for Standardization (ISO) and the International Electrotechnical Committee (IEC), as well as the Mandate 376 project teams, in identifying user needs and in developing a comprehensive inventory of existing standards as part of the ongoing effort to identify areas where research or new standards work is needed;
- c) activities relating to the development of new standards (e.g., ISO TC 159, JTC1 SC35, IEC TC100, ETSI TC HF, and W3C WAI), and the implementation and maintenance of existing standards (e.g. ISO 9241-171);
- d) formation of the Global Initiative for Inclusive ICTs (G3ICT), a flagship partnership initiative of the United Nations Global Alliance for ICT and Development (UN-GAID);
- e) various regional and national efforts to develop or revise guidelines and standards for telecommunication/ICT accessibility, compatibility and usability by persons with disabilities,

resolves

- that Study Group 2, Study Group 16 and the Joint Coordination Activity on Accessibility and Human Factors shall give high priority to work on the relevant Questions, in accordance with the accessibility guidelines, as shown in the Guide for ITU-T study groups Considering end-user needs in developing Recommendations and in the Telecommunication Accessibility Checklist for standards writers and accessibility guidelines, as shown in Recommendation ITU-T F.790;
- 2 to emphasize to all study groups the importance of universal design of accessible telecommunication/ICT services, products and terminals and to request their chairmen, at the start of each study group meeting, to remind meeting participants to take appropriate account of the guide and checklist,

invites Member States and Sector Members

- to consider developing, within their national legal frameworks, guidelines or other mechanisms to enhance the accessibility, compatibility and usability of telecommunication/ICT services, products and terminals;
- to consider introducing telecommunication relay services² to enable persons with hearing and speech disabilities to utilize telecommunication services that are functionally equivalent to telecommunication services for persons without disabilities;
- 3 to participate actively in accessibility-related studies in ITU-T, ITU-R and ITU-D, and to encourage and promote self-representation by persons with disabilities in the standardization process so as to ensure their experiences, views and opinions are taken into account in all the work of study groups,

invites the Director of the Telecommunication Standardization Bureau

- 1 to identify and document examples of best practice for accessibility in the field of telecommunication/ICT for dissemination among ITU Member States and Sector Members;
- to review the accessibility of ITU-T services and facilities and to consider making changes, where appropriate, pursuant to United Nations General Assembly Resolution A/RES/61/106, and to report to the ITU Council on these matters;
- 3 to work collaboratively on accessibility-related activities with the Directors of the Radiocommunication Bureau (BR) and the Telecommunication Development Bureau (BDT), in particular concerning awareness and mainstreaming of telecommunication/ICT accessibility standards, reporting findings to the Council as appropriate;
- 4 to work collaboratively on accessibility-related activities with ITU-D, in particular developing programmes that enable developing countries to introduce services that allow persons with disabilities to utilize telecommunication services effectively;
- to work collaboratively and cooperatively with other standardization organizations and entities, in particular, in the interest of ensuring that ongoing work in the field of accessibility is taken into account, in order to avoid duplication;
- to work collaboratively and cooperatively with disability organizations in all regions to ensure that the needs of the disabled community are taken into account in all standardization matters;

² Telecommunication relay services enable users of different modes of communication (e.g., text, sign, speech) to interact by providing convergence between the modes of communication, usually by human operators.

- to consider the development of an internship programme for people with disabilities who have expertise in the field of ICTs, to build capacity amongst people with disabilities in the standards-making process and to raise awareness within ITU-T of the needs of persons with disabilities;
- 8 to create a disability coordination point within ITU-T to assist the Director of TSB in reporting the findings of the review of ITU-T services and facilities,

instructs the Telecommunication Standardization Advisory Group

to revise the Guide for ITU study groups – Considering end-user needs in developing Recommendations, and relevant guidelines for end-user needs, in order to specifically include the needs of persons with disabilities, and to update this guide on a regular basis, based on contributions from Member States and Sector Members as well as the ITU-T study groups, as appropriate.

Admission of academia, universities and their associated research establishments to participate in the work of ITU-T

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that academia, universities and their associated research establishments have significant roles in research and development of emerging technologies, and that their participation in the work of the ITU Telecommunication Standardization Sector (ITU-T) is essential for ITU-T to remain at the cutting edge of technology standardization;
- b) that the application of this resolution is limited to those research establishments which do not receive substantial funding from major corporations,

recognizing

- a) Goal 3 of Resolution 71 (Rev. Antalya, 2006) of the Plenipotentiary Conference on the strategic plan for the Union for 2008-2011;
- b) that ITU-T held a consultation meeting on cooperation between ITU-T and universities, Geneva, 18-19 January 2007, to explore ways to improve cooperation between ITU-T and academia, universities and associated research establishments;
- c) that, as part of an initiative to encourage greater participation of universities and academia in the work of ITU-T, a Kaleidoscope Event was organized in Geneva on 12-13 May, 2008;
- d) that the decision has been taken by the ITU-T management to continue such events on a yearly basis, in order for ITU-T to remain the leader in standardization for emerging technologies;
- e) that the subject of "innovations in next generation networks" was the first in a series of academic conferences that aim at increasing the dialogue between academia and experts addressing standardization issues.

resolves to instruct the Director of the Telecommunication Standardization Bureau

- to explore and recommend, based in part on advice from the Telecommunication Standardization Advisory Group, various mechanisms, such as the use of voluntary financial and in-kind contributions, to encourage cooperation between ITU-T and academia, universities and their associated research establishments, as well as any possible additional modalities to facilitate their greater participation in the work of the Sector, including the study groups, that are not addressed by Resolution 1 of this assembly and relevant Recommendations; and
- to invite the ITU Council to consider the admission of academic institutions, universities and their associated research establishments in the work of ITU-T as Sector Members or Associates, at a reduced level of financial contribution, particularly academic institutions of developing countries¹.

These include the least developed countries, small island developing states and countries with economies in transition.

Measurement concerns related to human exposure to electromagnetic fields

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) the importance of telecommunications and information and communication technologies (ICT) for political, economic, social and cultural progress;
- b) that a significant part of the infrastructure needed to help bridge the digital divide between developed and developing countries¹ involves various wireless technologies;
- c) that there is a need to inform the public of the potential effects of exposure to electromagnetic fields (EMFs);
- d) that an enormous amount of research has been carried out regarding wireless systems and health, and many independent expert committees have reviewed this research;
- e) that the International Commission on Non-Ionizing Radiation Protection (ICNIRP), the International Electrotechnical Commission (IEC) and the Institute of Electrical and Electronics Engineers (IEEE) are three among a number of pre-eminent international bodies in establishing measurement methodologies for assessing human exposure to EMF, and they already cooperate with many standards bodies and industry forums;
- f) that the World Health Organization (WHO) has issued a fact sheet regarding base stations and wireless networks, referencing ICNIRP standards,

recognizing

- a) the work done within ITU Radiocommunication Sector (ITU-R) study groups on radiowave propagation, electromagnetic compatibility (EMC) and related aspects, including measurement methods;
- b) the work done within Study Group 5 of the ITU Telecommunication Standardization Sector (ITU-T) on techniques for taking radio-frequency (RF) measurements;
- c) that Study Group 5, in establishing measurement methodologies for assessing human exposure to RF energy, already cooperates with many participating standards organizations (PSOs),

recognizing further

- a) that some publications about EMF effects on health create doubt among the population, in particular in developing countries;
- b) that, in the absence of regulation, people, in particular in developing countries, become more and more doubtful and are increasingly opposing the deployment of radio installations in their neighbourhoods;
- c) that the cost of the equipment used for assessing human exposure to RF energy is very high, and that the equipment is more likely to be affordable only in developed countries;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

d) that implementing such measurement is essential for many regulatory authorities, in particular in developing countries, in order to monitor the limits for human exposure to RF energy, and that they are called upon to ensure those limits are met in order to license different services,

noting

the similar activities carried out by other national, regional and international standards development organizations (SDOs),

resolves

to invite ITU-T, in particular Study Group 5, to expand and accelerate its work and support in this domain, including but not limited to:

- i) disseminating information related to this topic through organizing workshops and seminars for regulators, operators and any interested stakeholders from developing countries;
- ii) continuing to cooperate and collaborate with other organizations working on this topic and to leverage their work;
- cooperating on these issues with ITU-R Study Groups 1 and 6, and with Study Group 2 of the ITU Telecommunication Development Sector (ITU-D) in the framework of Question 9-2/2;
- iv) regularly updating the Guide on the use of ITU-T publications on achieving EMC and safety, with particular emphasis on those relating to measurement methodologies, including specifications and requirements of equipment,

instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Directors of the other two Bureaux, and within the available financial resources

to assist developing countries in implementing this resolution using, among other things, the modalities listed in Resolution 44 of this assembly,

invites Member States and Sector Members

to contribute actively to the work of Study Group 5 in providing relevant and timely information in order to assist developing countries in providing information and addressing measurement concerns related to RF exposure and electromagnetic fields,

further invites Member States

to adopt suitable measures in order to ensure compliance with relevant international recommendations to protect health against the adverse effect of EMF.

Information and communication technologies and climate change

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) that the issue of climate change is rapidly emerging as a global concern and requires global collaboration;
- b) that the United Nations Intergovernmental Panel on Climate Change (IPCC) estimated that global greenhouse gas (GHG) emissions had risen by more than 70 per cent since 1970, having an effect on global warming, changing weather patterns, rising sea-levels, desertification, shrinking ice cover and other long-term effects:
- c) that ITU, at the United Nations Conference on Climate Change in Bali, Indonesia, on 3-14 December 2007, highlighted the role of information and communication technologies (ICTs) as both a contributor to climate change, and an important element in tackling the challenge;
- d) the work being undertaken following agreement to the Bali roadmap, and the importance of reaching international agreement on an effective post-2012 outcome;
- e) the role that ICTs and ITU can play in contributing to the implementation of such an agreement;
- f) the importance of promoting sustainable development and the ways in which ICTs can enable clean development;
- g) the initiatives taken in some regions,

considering also

- a) the ITU Telecommunication Standardization Sector (ITU-T) Technology Watch Briefing Report No. 3 (2007), which highlighted the issue of climate change and the role of ICTs;
- b) in addition to the work in ITU-T, the ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Development Sector (ITU-D) initiatives in considering climate change and the role of ICTs;
- c) that ITU Recommendations that focus on energy-saving systems and applications can play a critical role in the development of ICTs;
- d) the leadership of ITU-R, in collaboration with the ITU membership, in identifying the necessary radio-frequency spectrum for climate monitoring and disaster prediction, detection and relief, including the establishment of cooperative arrangements with the World Meteorological Organization (WMO) in the field of remote-sensing applications;
- e) the report entitled "Strategy for a climate-neutral United Nations", prepared by the Environment Management Group, and the endorsement by the Chief Executives Board (CEB) in October 2007 of the strategy committing the United Nations system to attain climate neutrality within three years;
- f) the standards-development activities on ICTs and climate change by, for example, relevant ITU-T study groups in work related to ubiquitous sensor networks (USN), which allow the detection, storage, processing and integration of situational and environmental information gathered from sensor devices connected to telecommunication networks;

- g) the outcomes of the Symposia on "ICTs and Climate Change", held in Kyoto, Japan, on 15-16 April 2008, and in London, United Kingdom, on 17-18 June 2008;
- h) the establishment of a Focus Group on ICTs and Climate Change by the Telecommunication Standardization Advisory Group (TSAG) at its July 2008 meeting,

noting

that, in the report of the conclusions from the Global Standards Symposium (GSS), it was recognized that the ICT industry and its members can set an example by committing to specific programmes, with objectives, that reduce overall GHG emissions (e.g., the power consumption of ICT devices) and to ensuring that the expansion of the global communications network is done in an environmentally-friendly manner,

recognizing

- a) that ICTs can make a substantial contribution to mitigating and adapting to the effects of climate change;
- b) that ICTs play a vital role in monitoring and addressing climate change by supporting basic scientific research, which has helped to bring the issue of climate change into the public domain and to raise awareness of future challenges;
- c) that a future high-bandwidth, lower-carbon information society offers a platform for economic, social and cultural development that is sustainable;
- d) that the adverse effects of climate change may be uneven in their impact and may fall disproportionately on the most vulnerable countries, mainly the developing countries¹, given their limited capacity to adapt;
- e) that ICTs contribute approximately 2-2.5 per cent of GHG emissions, which may grow as ICTs become more widely available;
- f) that ICTs can, however, be a major mitigating factor in efforts to moderate climate change and to limit and ultimately reduce GHG emissions through, for example, the development and introduction of energy-efficient devices, applications and networks;
- g) that the use of ICTs as a key component of energy-efficient work methods could include the reduction of emissions through, for example, paperless meetings, virtual conferencing, teleworking, etc., which in turn would be beneficial in terms of reducing the need to travel,

resolves

- to continue and further develop the ITU-T work programme initially launched in December 2007 on ICTs and climate change, as a high priority, in order to contribute to the wider global efforts to moderate climate change, as part of the United Nations processes;
- to take into account the progress already made in the international symposia on ICTs and climate change, held in Kyoto, Japan, 15-16 April 2008 and in London, United Kingdom, 17-18 June 2008, by distributing their outcomes as widely as possible;
- 3 to create, within ITU-T, a repository and knowledge base on the relationships between ICTs and climate change;

¹ These include the least developed countries, small island developing states and countries with economies in transition.

- 4 to promote the adoption of Recommendations for enhancing the use of ICTs to serve as a potent and cross-cutting tool to measure and reduce GHG emissions across economic and social activities;
- to increase awareness and promote information sharing on the role of ICTs in combating climate change, in particular by promoting the use of more energy-efficient² devices and networks and more efficient working methods, as well as ICTs that can be used to replace or displace higher energy consuming technologies/uses;
- to work towards the reductions in emissions of GHGs arising from the use of ICTs that are necessary to meet the goals of the United Nations Framework Convention on Climate Change (UNFCCC),

instructs the Telecommunication Standardization Advisory Group

- to review the results of the Focus Group on ICTs and Climate Change and take appropriate actions in accordance with Resolution 22 of this assembly, including, for example, the identification of possible structural mechanisms and a lead study group, and to progress the work on this topic by encouraging the involvement of all ITU-T study groups;
- 2 to ensure that study groups carry out a review of both the appropriate existing ITU-T Recommendations and all future Recommendations to assess their implications and the application of best practices in the light of climate change;
- 3 to consider possible changes to working procedures in order to meet the objective of this resolution, including extending the use of electronic working methods to reduce the climate-change impact, such as paperless meetings, virtual conferencing, teleworking, etc.,

invites all ITU-T study groups

- to develop appropriate Recommendations on climate-change issues within the mandate and competency of ITU-T, including telecommunication networks used for monitoring climate change, for example signalling and quality of service issues, taking into account any economic impact on all countries and in particular on developing countries;
- 2 to identify best practices and opportunities for new applications using ICTs to reduce the impact of climate change and to identify appropriate actions;
- 3 to commence such studies prior to the approval of the necessary Questions, taking into consideration the output of the Focus Group, in accordance with Resolution 1 of this assembly;
- 4 to liaise with the relevant ITU-R and ITU-D study groups and promote liaison with other standards development organizations in order to avoid duplication of work and to optimize the use of resources,

instructs the Director of the Telecommunication Standardization Bureau

- to report on progress on the application of this resolution annually to the ITU Council and to the 2012 world telecommunication standardization assembly;
- 2 to establish a calendar of events relevant to ICTs and climate change based on proposals by TSAG and in close collaboration with the other two Sectors;
- to organize, in close collaboration with the Directors of the Telecommunication Development (BDT) and Radiocommunication (BR) Bureaux, workshops and seminars for developing countries, to raise awareness and identify their needs in this domain, as they are the most vulnerable countries affected by climate change;

With respect to efficiency, promotion of efficient use of materials used in ICT devices and network elements should also be a consideration.

4 to report to TSAG on the progress regarding *invites the Secretary-General* below,

invites the Secretary-General

- to bring the content of this resolution to the attention of the Council and invite it to study the issue of climate neutrality for all ITU activities and take appropriate actions, taking into consideration the United Nations commitment to lead by example, to achieve climate-neutral status within three years;
- 2 to continue to cooperate and collaborate with other entities within the United Nations in formulating future international efforts for the effective addressing of climate change,

invites Member States, Sector Members and Associates

- to continue to contribute actively to the ITU-T work programme on ICTs and climate change;
- to continue or initiate public and private programmes that include ICTs and climate change, giving due consideration to relevant ITU-T Recommendations and relevant work;
- 3 to support and contribute to the wider United Nations process on climate change, such as the United Nations Climate Change conferences in Poznan, Poland (1-12 December 2008) and Copenhagen, Denmark (30 November-11 December 2009).

Admission of Sector Members¹ from developing countries in the work of ITU-T

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) that Article 1 of ITU Constitution establishes that the Union will facilitate the worldwide telecommunication standardization process with a satisfactory quality of service, and will promote and enhance participation of entities and organizations in the activities of the Union and foster a fruitful cooperation and partnership between them and Member States for the fulfilment of the overall objectives as embodied in the purposes of the Union;
- b) Goal 3 of Resolution 71 (Rev. Antalya, 2006) of the Plenipotentiary Conference on the strategic plan for the Union for 2008-2011;
- c) the spirit of Resolution 123 (Rev. Antalya, 2006) of the Plenipotentiary Conference on bridging the standardization gap between developing and developed countries;
- d) the objectives of Resolutions 17, 44 and 54 of this assembly,

considering

- a) that relevant entities or organizations from developing countries are interested in the standardization work of the ITU Telecommunication Standardization Sector (ITU-T), and would be willing to join if more favourable financial conditions existed for their participation in the work of ITU-T;
- b) that the aforementioned entities or organizations could have a relevant role in research and development of new technologies, and that the participation of entities from developing countries in the work of ITU-T helps to bridge the standardization gap,

resolves

to encourage the adoption of the necessary measures to enable new members from developing countries to join ITU-T and to be entitled to take part in the work of the ITU-T study groups and other groups within ITU-T, taking into consideration levels of financial contributions equal to those applied for developing countries for admission to the study groups in the ITU Telecommunication Development Sector (ITU-D),

instructs the Director of the Telecommunication Standardization Bureau

to propose to the ITU Council that it consider the admission of such a category in the work of ITU-T, based on an appropriate level of financial contribution equal to that applied to developing countries for admission to take part in the work of the study groups in ITU-D, and that it include its consideration of this matter in the work of the Council for preparation of the 2010 plenipotentiary conference.

Such Sector Members from developing countries shall not be affiliated in any way to any Sector Member of a developed country, and shall be limited to those Sector Members of developing countries (including the least developed countries, small island developing states and countries with economies in transition) having an income per capita according to the United Nations Development Programme not exceeding a threshold to be determined.

ITU-T's contribution in implementing the outcomes of the World Summit on the Information Society, and the establishment of a Dedicated Group on Internet-related Public Policy Issues as an integral part of the Council Working Group on the World Summit on the Information Society

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

considering

- a) the relevant outcomes of both phases of the World Summit on the Information Society (WSIS);
- b) the relevant resolutions and decisions related to the implementation of relevant outcomes of both phases of WSIS and to international Internet-related public policy issues adopted at the Plenipotentiary Conference (Antalya, 2006):
- i) Resolution 71 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on the strategic plan of the Union for 2008-2011;
- ii) Resolution 101 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on Internet protocol-based networks;
- iii) Resolution 102 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on ITU's role with regard to international public policy issues pertaining to the Internet and the management of Internet resources, including domain names and addresses;
- iv) Resolution 130 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on strengthening the role of ITU in building confidence and security in the use of information and communication technologies;
- v) Resolution 133 (Rev. Antalya, 2006) of the Plenipotentiary Conference, on the role of administrations of Member States in the management of internationalized (multilingual) domain names;
- vi) Resolution 140 (Antalya, 2006) of the Plenipotentiary Conference, on ITU's role in implementing the outcomes of WSIS:
- vii) Decision 9 (Antalya, 2006) of the Plenipotentiary Conference, on the convening of the fourth World Telecommunication Policy Forum;
- c) the role of the ITU Telecommunication Standardization Sector (ITU-T) in ITU implementation of relevant WSIS outcomes, adaptation of ITU's role and development of telecommunication standards in building the information society;
- d) that the management of the Internet encompasses both technical and public policy issues and should involve all stakeholders and relevant intergovernmental and international organizations in accordance with §§ 35 a)-e) of the Tunis Agenda,

considering further

- a) that the creation of a group, open for Member States only, is needed to promote enhanced cooperation and to foster the participation of governments in addressing international Internet public policy issues:
- b) that there is a perceived need to improve coordination, dissemination and interaction: (i) by avoiding duplication of efforts through focused coordination between ITU's relevant study groups that deal

with international Internet public policy issues; (ii) by disseminating relevant international Internet public policy information to the ITU membership, the General Secretariat and the Bureaux; (iii) by promoting an enhanced cooperation and technical-oriented interaction between ITU and other relevant international organizations and entities,

recognizing

- a) that all governments should have an equal role and responsibility for international Internet governance and for ensuring the stability, security and continuity of the Internet, while also recognizing the need for development of public policy by governments in consultation with all stakeholders, as expressed in § 68 of the Tunis Agenda;
- b) the need for enhanced cooperation in the future, to enable governments, on an equal footing, to carry out their roles and responsibilities in international public policy issues pertaining to the Internet, but not in the day-to-day technical and operational matters that do not impact on international public policy issues, as expressed in § 69 of the Tunis Agenda,

recognizing further

- a) that, using relevant international organizations, such cooperation should include the development of globally applicable principles on public policy issues associated with the coordination and management of critical Internet resources, in which regard the organizations responsible for essential tasks associated with the Internet are called upon to contribute to creating an environment that facilitates this development of public policy principles, as expressed in § 70 of the Tunis Agenda;
- b) the process towards enhanced cooperation, to be started by the United Nations Secretary-General, involving all relevant organizations by the end of the first quarter of 2006, will involve all stakeholders in their respective roles, will proceed as quickly as possible consistent with legal processes, and will be responsive to innovation; therefore relevant organizations should commence a process towards enhanced cooperation involving all stakeholders, proceeding as quickly as possible and being responsive to innovation; the same relevant organizations shall be requested to provide annual performance reports, as expressed in § 71 of the Tunis Agenda,

noting

- a) that ITU Council Resolution 1282 on ITU's role in implementing the WSIS outcomes instructs the Council Working Group on WSIS (WG-WSIS) to continue to provide inputs and guidance on the ITU implementation of WSIS outcomes and adaptation of ITU's role in building the information society, as part of its terms of reference outlined in the Annex to Council Resolution 1282;
- b) that the ITU Secretary-General created the ITU WSIS Task Force, whose role is to formulate strategies and coordinate ITU's policies and activities in relation to WSIS, as noted by Council Resolution 1282,

resolves

- to continue ITU-T's work on WSIS implementation and follow-up activities within its mandate;
- that ITU-T should carry out those activities that come within its mandate and participate with other stakeholders, as appropriate, in the implementation of all relevant action lines and other WSIS outcomes,

resolves to request the Council

to establish, as an integral part of WG-WSIS, a Dedicated Group on international Internet-related public policy issues, open only to all Member States, tasked to identify, study and develop matters related to international Internet-related public policy issues, to disseminate its outputs throughout ITU's membership, and to contribute to the work of WG-WSIS on international Internet-related public policy issues within the mandate of ITU pursuant to the relevant resolutions of the Plenipotentiary Conference (Antalya, 2006) and Council Resolution 1282,

requests the Secretary-General

to provide to this Dedicated Group on international Internet-related public policy issues all administrative and other necessary support for its effective functioning within the budgetary allocation of ITU,

instructs the Director of the Telecommunication Standardization Bureau

- to prepare an annual report to the Council on WSIS implementation and follow-up activities, taking into account input from relevant study groups, that provides a comprehensive summary of the activities undertaken by the Telecommunication Standardization Bureau (TSB) and the activities of ITU-T with respect to information and communication infrastructure and building confidence and security in the use of ICTs and with respect to activities relevant to WSIS outcomes and resolutions of the Plenipotentiary Conference (Antalya, 2006);
- to appoint focal points within TSB for relevant WSIS action lines within the mandate of ITU-T, working closely with other focal points in other Sectors of ITU and contributing to and facilitating the work of the ITU WSIS Task Force created by the ITU Secretary-General;
- 3 to take appropriate action to facilitate the activities in implementing this resolution,

invites Member States and Sector Members

- 1 to submit contributions to relevant ITU-T study groups and contribute to WG-WSIS on implementing WSIS outcomes within the ITU mandate;
- 2 to support and collaborate with the Director of TSB in implementing relevant WSIS outcomes in ITU-T,

invites Member States

to submit contributions to the Dedicated Group on international Internet-related public policy issues.

RESOLUTION 76

Studies related to conformance and interoperability testing, assistance to developing countries¹, and a possible future ITU Mark programme

(Johannesburg, 2008)

The World Telecommunication Standardization Assembly (Johannesburg, 2008),

recognizing

- a) that interoperability of international telecommunication networks was the main reason to create ITU in the year 1865 (International Telegraph Union), and that this remains one of the main goals in the ITU strategic plan;
- b) that conformity assessment is the accepted way of demonstrating that a product adheres to an international standard and is increasingly important in the context of World Trade Organization members' international standardization commitments under the Agreement on Technical Barriers to Trade;
- c) that Recommendations ITU-T X.290 to X.296 specify a general methodology for conformance testing of equipment to Recommendations of the ITU Telecommunication Standardization Sector (ITU-T);
- d) that conformance testing would increase the chance of interoperability of equipment conforming to ITU standards;
- e) that very few of the current ITU-T Recommendations identify interoperability or conformance testing requirements;
- f) that Resolution 123 (Rev. Antalya, 2006) 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;
- g) that technical training and institutional capacity development for testing and certification are essential issues for countries to improve their conformity assessment processes, to promote the deployment of advanced telecommunication networks and to increase global connectivity;
- h) that it is not appropriate for ITU itself to enter into certification and testing of equipment and services that many regional and national standards bodies also provide for conformance testing;
- i) 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";
- j) the excellent results achieved by ITU in implementing the mark for Global Mobile Personal Communications Systems (GMPCS),

further recognizing

that providing for interoperability should be the ultimate aim of future ITU-T Recommendations,

¹ These include the least developed countries, small island developing states and countries with economies in transition.

considering

- a) that there is an increasing number of complaints that equipment is often not fully interoperable with other equipment;
- b) that some countries, especially the developing countries, have not yet acquired the capacity to test equipment and provide assurance to consumers in their countries;
- c) that increased confidence in the conformance of information and communication technologies (ICT) equipment with ITU-T Recommendations would increase the chances of end-to-end interoperability of equipment from different manufacturers, and would assist developing countries in the choice of solutions,

noting

- a) that conformance and interoperability requirements to support testing are essential components for developing interoperable equipment that is based on ITU-T Recommendations;
- b) that considerable practical experience exists within the ITU-T membership regarding the production of relevant testing standards and the testing procedures on which the actions proposed in this resolution are based;
- c) the need to assist developing countries in facilitating solutions which will exhibit interoperability and reduce the cost of systems and equipment procurement by operators, particularly in the developing countries, whilst improving product quality;
- d) that when interoperability experiments or testing have not been performed, users may have suffered from the lack of interconnection performance between equipment from different manufacturers,

taking into account

- a) that ITU-T has in the past occasionally initiated conformity and interoperability tests, as reported in ITU-T A-series Recommendation, Supplement 2;
- b) that the ITU standardization resources are limited and interoperability testing requires specific technical infrastructure;
- c) that a different set of experts is required for interoperability testing standardization, product development, and product testing;
- d) that it is of advantage if interoperability testing is done by users of the standard who were not involved in the standardization process itself, rather than the standardization experts who have written the specifications;
- e) that collaboration with external testing bodies is therefore necessary,

resolves

- that ITU-T study groups develop the necessary conformance testing Recommendations for telecommunication equipment as soon as possible;
- 2 that ITU-T Recommendations to address interoperability testing shall be progressed as quickly as possible;
- 3 that ITU-T, in collaboration with the other Sectors as appropriate, shall develop a programme to:
- i) assist developing countries in identifying human and institutional capacity-building and training opportunities in conformity and interoperability testing;
- ii) assist developing countries in establishing regional or subregional conformity and interoperability centres suitable to perform conformity and interoperability testing as appropriate;

4 that conformance and interoperability testing requirements shall provide for verification of the parameters defined in the current and future ITU-T Recommendations for telecommunication/ICT equipment and services, and for interoperability testing to ensure full compatibility,

instructs the Director of the Telecommunication Standardization Bureau

- in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau, to conduct exploratory activities in each region in order to identify and prioritize the problems faced by developing countries related to achieving interoperability of ICT equipment and services;
- 2 based on results of *instructs the Director of the Telecommunication Standardization Bureau* 1 above, to study the following items:
- i) the overall effect on ITU and manufacturers
- ii) legal and national and international regulatory implications
- iii) cost of set-up of facility
- iv) location of testing facility
- v) measures to be taken to build the necessary human-resource capacities;
- to carry out the necessary studies with a view to introducing the use of ITU Mark for a possible future ITU Mark programme as a voluntary programme permitting manufacturers and service providers to make a visible declaration that their equipment conforms to ITU-T Recommendations, and to increasing the probability of interoperability, and to consider its possible application as an indication of a degree of interoperability capability in the future;
- 4 to study the financial and legal implications for ITU-T and for ICT industries, and all other concerns raised with regard to this proposal on the possible introduction of the ITU Mark for a possible future ITU Mark programme;
- 5 to involve experts and external entities as appropriate;
- 6 to submit the results of these studies to the 2009 session of the ITU Council for its consideration and required actions,

instructs the study groups

- to identify as soon as possible existing and future ITU-T Recommendations that would be candidates for interoperability, taking into account the needs of the membership (e.g. interoperability of next-generation network (NGN) equipment, terminals, audio/video codecs, access and transport network), that are capable of providing end-to-end interoperable services on a global scale, adding to their content, if necessary, specific requirements within their scope;
- to prepare those ITU-T Recommendations, identified in *instructs the study groups* 1 above, with a view to conducting conformity and interoperability tests as appropriate,

invites the Council

- 1 to consider the Director's report referred to in *instructs the Director of the Telecommunication Standardization Bureau* 6 above;
- to report as appropriate on this matter to the 2010 plenipotentiary conference, taking into account Resolution 158 (Antalya, 2006) of the Plenipotentiary Conference on financial issues for consideration by the Council,

invites Member States and Sector Members

- 1 to contribute to the implementation of this resolution;
- 2 to encourage national and regional testing entities to assist ITU-T in implementing this resolution.

PART 2

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

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Recommendation ITU-T A.1

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

(1996; 2000; 2004; 2006; 2008)

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 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 activity (JCA) 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 2.2).

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 the Telecommunication Standardization Advisory Group (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 registration information for these bodies to indicate participation in the meeting. Each Member State administration, Sector Member, Associate and regional or international organization should send to TSB a list of its participants 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 contributions has been submitted, no meeting should be held. The decision whether to cancel a meeting or not shall be taken by the Director, 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 WTSA 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, during 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 shall be recorded in the working party or study group meeting report, along with any affirmative responses.

1.4.7 Study groups shall establish and maintain a work plan, which includes target dates for consenting or determining each draft Recommendation.

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. When necessary, between scheduled meetings, the liaison statement may be prepared by an appropriate correspondence process and approved by the study group chairman in consultation with the study group management team.
- List the appropriate Question numbers of the originating and destination study groups.
- Identify the study group, 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.

OUESTIONS: 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 FOR ACTION TO: ITU-T SG 4 – WP 5/ FOR COMMENT TO: FOR INFORMATION TO: ITU-R SG11, ISO/IEC JTC 1/SC 6 APPROVAL: Agreed to at the rapporteur group meeting DEADLINE: Deadline for reply – 22 January 1998 John Jones, rapporteur for Q.45/15 CONTACT: Tel: +1 576 980 9987 **ABC** Company +1 576 980 9956 Fax: Anytown, CA USA email: ii@abcco.com

Figure 1-1 – 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 contributions (or equivalent) considered by the meeting.

The report should concisely present the following: organization of work; references to and possible summary of contributions and/or documents issued during a meeting; main results, including a status of new and/or revised Recommendations consented, determined or under development; 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.

- **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 official languages of the Union.
- **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. 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 ITU-T 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 ITU-T following agreement by a study group, or following agreement by a working party with concurrence of the study group chairman. 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 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 activities (JCAs)

2.2.1 A joint coordination activity (JCA) is a tool for management of the work programme of ITU-T when there is a need to address a broad subject covering the area of competence of more than one study group. A JCA may help to coordinate the planned work effort in terms of subject matter, time-frames for meetings, collocated meetings where necessary and publication goals including, where appropriate, release planning of the resulting Recommendations.

The establishment of a JCA aims mainly at improving coordination and planning. The work itself will continue to be conducted by the relevant study groups and the results are subject to the normal approval processes within each study group. A JCA may identify technical and strategic issues within the scope of its coordination role, but will not perform technical studies nor write Recommendations. A JCA may also address coordination of activities with recognized standards development organizations (SDOs) and forums, including periodic discussion of work plans and schedules of deliverables. The study groups take JCA suggestions into consideration as they carry out their work.

2.2.2 Any group (study group or TSAG) may propose that a JCA be established. The proposal to establish a JCA should first be discussed within the proposing group's management team, then among the relevant study group chairmen and the TSAG chairman. Discussions may be held with external SDOs and forum leaders.

If the study group proposing the establishment of the JCA has been designated as the lead study group by WTSA or TSAG according to Section 2 of WTSA Resolution 1, and if the subject is under their responsibility and mandate as described in WTSA Resolution 2, then a study group may establish a JCA on its own authority. If a study group meeting is pending within the next eight weeks, then an electronic notification¹ proposing the JCA, including the terms of reference (including scope, objectives and anticipated lifetime) and the chairman, is published four weeks prior to the study group meeting, giving opportunity for the membership to give their position at the meeting. If this is done at least four weeks prior to the study group meeting, following the resolution of any comments, the JCA may be established by the study group by consensus at its meeting. If a study group meeting is not pending within the next eight weeks, then an electronic notification as above is sent for the membership to give their position by electronic response. If the notification is sent less than four weeks before the study group meeting, no decision is taken at the study group meeting; the decision may be taken four weeks after the notification, excluding the meeting time. If necessary, the proposal is adjusted taking into consideration comments received and made available to the study group electronically for decision with a further four-week interval. If there are no substantive comments, the JCA is considered approved. TSAG will be informed for review, possible comment, and endorsement. TSAG may consider the terms of reference of the JCA in the context of the overall work programme of ITU-T and may provide comments to modify the terms of reference.

This electronic notification should be sent to the general e-mail reflector for the proposing study group and should also be a temporary document to the next meeting of the study group.

Where the lead study group has not yet been designated by WTSA or TSAG for the subject, or where the subject for the JCA is a broad subject potentially falling under the responsibility and mandate of a number of study groups as described in WTSA Resolution 2, then the proposal has to be made available to the membership for consideration. If a TSAG meeting is pending within the next eight weeks, then an electronic notification proposing the JCA, including the terms of reference (including scope, objectives and anticipated lifetime) and the chairman, is published four weeks prior to the TSAG meeting, giving opportunity for the membership to give their position at the meeting. If this is done at least four weeks prior to the TSAG meeting, following the resolution of any comments, the JCA may be established by TSAG by consensus at its meeting. If a TSAG meeting is not pending within the next eight weeks, then an electronic notification as above is sent for the membership to give their position by electronic response. If the notification is sent less than four weeks before the TSAG meeting, no decision is taken at the TSAG meeting; the decision may be taken four weeks after the notification, excluding the meeting time. If necessary, the proposal is adjusted taking into consideration comments received and made available to the membership electronically for decision with a further four-week interval. If there are no substantive comments, the JCA is considered approved. The decision includes the designation of the group responsible (a study group or TSAG), the terms of reference (including scope, objectives and anticipated lifetime) and the chairman.

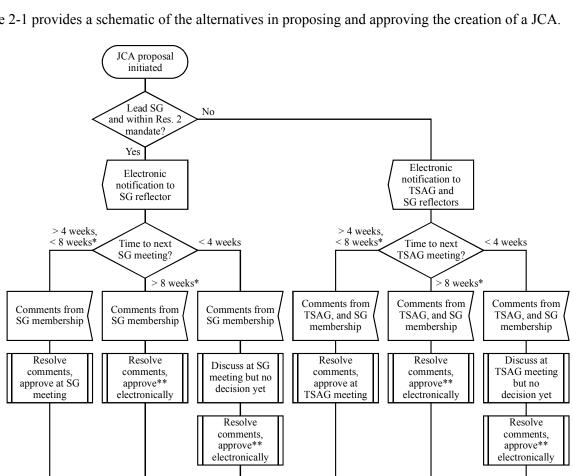


Figure 2-1 provides a schematic of the alternatives in proposing and approving the creation of a JCA.

Nominal time period.

JCA-initiated

Figure 2-1 – Alternatives in proposing and approving the creation of a JCA

A.1(08) F2.1

^{**} If there are no substantive comments, the JCA is considered approved. If the JCA proposal is modified per comments received, it is again circulated for a four-week review. If there are no substantive comments, the JCA is considered approved.

This electronic notification should be sent to the general e-mail reflector for the potentially involved study groups and TSAG and should also be a temporary document to the next meeting of TSAG.

- **2.2.3** JCAs are open, but (to restrict their size) should primarily be limited to official representatives from the relevant study groups that are responsible for work covered by the scope of the JCA. A JCA may also include invited experts and invited representatives of other SDOs and forums, as appropriate. All participants should confine inputs to a JCA to the purpose of the JCA.
- **2.2.4** The establishment of a JCA is to be announced in a TSB circular, which should include the terms of reference of the JCA, the chairman of the JCA, and the study group responsible for the JCA.
- **2.2.5** JCAs should work primarily by correspondence and electronic meetings. Any physical meeting considered necessary should be convened by the chairman of the JCA. Physical meetings should be supported by conferencing capabilities where possible, and both physical and electronic meetings should be scheduled as far as practicable at times that will provide maximum opportunity for broad participation. It is anticipated that physical meetings will be in conjunction with the involved study group meetings (in which case it is reflected in the collective letter for that study group) as far as practicable, but if a separate meeting is to be held, it is to be announced at least four weeks in advance by an (electronic) collective invitation letter.
- **2.2.6** Inputs to the work of a JCA should be sent to the JCA chairman and to the concerned TSB counsellor, and the latter will make these available to the members of the JCA.
- **2.2.7** JCAs may submit proposals to the relevant study groups to achieve alignment in the development of related Recommendations and other deliverables by the respective study groups. A JCA may also issue liaison statements.
- **2.2.8** JCA input and output documents and reports are made available to the ITU-T membership. Reports are issued after each JCA meeting. TSAG may monitor JCA activities through these reports.
- **2.2.9** TSB will provide support for a JCA, within available resource limits.
- **2.2.10** A JCA may be terminated at any time if the involved study groups agree that the JCA is no longer required. A proposal to do so, including justification, may be submitted by any study group involved or by TSAG, and examined for decision by the study group responsible for the JCA, after consulting the involved study groups and TSAG (via electronic means, if a TSAG meeting is not pending in the near future). A JCA may continue across a WTSA but will automatically be reviewed at the first TSAG meeting following the WTSA. A specific decision must be taken on the continuation of the JCA, potentially with adjusted terms of reference.
- 2.2.11 A JCA may propose, in justified cases and on an exceptional basis, the establishment of a global standards initiative (GSI) in the area of work covered by the JCA, where it is considered necessary to provide a visible focus for the work. A GSI is not a working entity but is a name for the package of work being conducted through collocated meetings of the involved study groups and rapporteur groups under the umbrella of a coordinated work plan managed by the JCA. The proposal, which includes the terms of reference, a justification and a scheduled lifetime of the GSI, should be developed by the study group leading the JCA, in consultation with the chairmen of the concerned study groups, and submitted to TSAG for approval. A GSI automatically stops at the end of its scheduled lifetime unless there is a decision by TSAG to prolong it. A GSI may continue across a WTSA but will automatically be reviewed at the first TSAG meeting following the WTSA. A specific decision must be taken on the continuation of the GSI, potentially with adjusted terms of reference.
- **2.2.12** If a GSI is established in the area of work covered by a JCA, a technical and strategic review (TSR) process may be set up by the JCA, if deemed necessary, to operate at every GSI event. The TSR process addresses specific issues within the broader coordination provided by the JCA, and should ensure that the JCA is made aware of any issues requiring guidance or additional attention. If the JCA creates a TSR process, the JCA will choose a TSR coordinator to ensure that the TSR process proactively examines issues, and adequately addresses any concerns of the GSI event participants, for example, regarding work allocation.

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 reside 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 covered by a JCA 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 (e.g., of a rapporteur's meeting or editor's work) to each of the parent group's meetings (see suggested format in Appendix II), in the form of a temporary document to be submitted as soon as possible and not later than the first day of the meeting; when such a temporary document contains draft new or revised Recommendations, then it is encouraged, where possible, that it be submitted at least six weeks prior to the parent group's 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 clause 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 Recommendation ITU-T A.11 on the 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 clause 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 webpage, 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 webpage, 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 temporary document to the next study group or working party meeting. See clause 3.3 for submission and processing of temporary documents.

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.

Rapporteurs will ask, during 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 shall be recorded in the meeting report, along with any affirmative responses.

- **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 should submit their contributions to current studies via electronic means, in accordance with guidance from the Director of TSB (see Recommendation ITU-T A.2, clause 2).
- **3.1.1** *bis* Chairmen and vice-chairmen of study groups and working parties may at any time submit inputs as temporary documents, including, in particular, proposals likely to accelerate the debates; see clause 3.3 for submission and processing of temporary documents.
- **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 Common Patent Policy for ITU-T/ITU-R/ISO/IEC (available at the ITU-T website). Patent declarations are to be made using the "Patent Statement and Licensing Declaration Form for ITU-T/ITU-R Recommendation | ISO/IEC Deliverable" 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 submitter of the licensing declaration declares its 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 but is expected to improve responsiveness and early disclosure of the patent holder's compliance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC.

- **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 that 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** Contributions that are to be considered at a study group or working party meeting shall reach TSB at least ten calendar days before the meeting.

3.2 Processing of contributions

- **3.2.1** Contributions received at least two months before a meeting may be translated (see clause 3.2.2 below) and will be posted in the original and, if applicable, in translated languages, on the web as soon as practicable after they are received. They will be printed and distributed at the beginning of the meeting only to the participants present who request paper copies.
- **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, no translations will be made.
- **3.2.3** Contributions received by the Director less than two months but not less than ten calendar days before the date set for the opening of a meeting cannot be translated. They shall be posted on the web as soon as practicable after receipt. They will be printed and distributed at the beginning of the meeting only to the participants present who request paper copies.
- **3.2.4** 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 ten calendar 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 ITU-T A.2, and the timing given in clause 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 that does not comply with the general directives set out in Recommendation ITU-T A.2, so that it may be brought into line with those directives.

- **3.2.8** Contributions shall not be included in reports as annexes, but should be referenced as needed.
- **3.2.9** Contributions should, as far as possible, be submitted to a single study group. If, however, a participating body submits a contribution that 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 shall be published as temporary documents. They will be printed and distributed during the meeting only to the participants present who request paper copies.
- **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 contributions, as specified in clause 3.2.5.
- **3.3.4** Temporary documents containing extracts from reports of other study group or working party meetings shall not be reissued by TSB as 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 can be produced during the meeting.
- **3.3.6** Temporary documents will be printed and distributed at the beginning of the meeting (and during the meeting) only to the participants present who request paper copies.

3.4 Electronic access

3.4.1 TSB will post electronically all documents (e.g., contributions, temporary documents (including liaison statements)) as soon as electronic versions of these documents are available. Appropriate search facilities for posted documents should be provided.

Appendix I

Rapporteur proposed work programme format

(This appendix does not form an integral part of this Recommendation)

The following format is recommended for a work programme proposed by a rapporteur, in accordance with clause 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 liaison statements and receiving replies;
- f) proposed rapporteur meetings, if any, for each stage of the work to be completed.

Appendix II

Rapporteur progress report format

(This appendix does not form an integral part of this Recommendation)

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 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) response to question on knowledge of patents;
- j) list of attendees at all meetings held since last progress report.

A meeting report shall clearly indicate in its title the Question number, meeting venue and meeting date. In general, the title shall be of the form "Rapporteur Report Q.x/x".

Any draft Recommendations produced shall be presented as separate Temporary Documents (one document per Recommendation). The title of the Temporary Document shall be of the form "Draft new Recommendation X.x: abc", where "abc" stands for the title of the draft Recommendation, or "Draft revised Recommendation X.x: abc", or "Draft Amendment 1 to Recommendation X.x: abc", etc.

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 clause 2.3.3.12) in order to avoid duplication of information.

Recommendation ITU-T A.2

Presentation of contributions to ITU-T

(1984; 1988; 1993; 1996; 2000; 2004; 2008)

- **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 (requiring no more than five printed pages to be distributed), nor should it include more than three pages of figures (making eight pages in all). It should be accompanied by an abstract that 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.
- c) Documents of purely theoretical interest that are not directly related to the Questions under study should not be submitted.
- d) Articles that 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).

2 With regard to the submission of contributions and temporary documents (including liaison statements), all documents to ITU-T 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 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.

Contributions shall be addressed to TSB and copied to the study group chairmen and vice-chairmen, 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.

Appendix I

Detailed guidelines for the preparation of contributions relative to the study of ITU-T Questions

(This appendix does not form an integral part of this Recommendation.)

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 ITU-T 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 with 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 submitted to TSB should provide:
- study group Question number(s) that the contribution is addressing;
- place and date of the meeting to which the contribution is directed;
- study group and working party to which the contribution should be submitted;
- source of the contribution: originating country and/or organization;
- title of the contribution;
- contact information for the contribution originator and/or representative: name, organization, country, telephone, fax and e-mail address.

A template that defines the recommended heading format is available (under "Guides, Tools, and Templates") on the ITU-T study group and TSAG websites.

- **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 that, 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 that 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 ITU-T A.5. Other publications not covered by Recommendation ITU-T 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.

Recommendation ITU-T A.4

Communication process between ITU-T and Forums and Consortia

(1996; 2000; 2002; 2006; 2007)1

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

¹ This publication includes the version of Recommendation ITU-T A.4 approved in 2002 and incorporating its Amendment 1 (2006) and Amendment 2 (2007).

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.

When necessary, between scheduled meetings, the liaison statement may be prepared by an appropriate correspondence process and approved by the study group chairman in consultation with the study group management.

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 that are under evaluation and/or have been approved for the communication process, including identification of the study groups concerned, and make it available online.

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

(This annex forms an integral part of this Recommendation)

NOTE – An administration may require that "communications" to ITU-T or its study groups, from a forum/consortium within that administration's jurisdiction, follow its established national procedures.

Forum/consortium attributes	Desired characteristics			
1) Objectives/relationship of work to ITU-T work	Objectives should refer to use of International Standards/Recommendations, or to the provision of input into international standards organizations, especially ITU-T.			
2) Organization:				
legal status;	 should indicate in which country/countries it has legal status; 			
 geographic scope; 	 should be global (i.e. should involve more than one region of the world); 			
secretariat;	 permanent secretariat should exist; 			
 nominated representative. 	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 telecommunication interests. 			
4) Technical subject areas	Should be relevant to a particular study group(s) or ITU-T as a whole.			
5) IPR Policy and Guidelines on:				
a) patent;	a) should be consistent with "Common Patent Policy for ITU-T/ITU-R/ISO/IEC" and "Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC"*;			
b) software copyright (if applicable);	b) should be consistent with "ITU-T Software Copyright Guidelines"*;			
c) marks (if applicable); and	c) should be consistent with "ITU-T Guidelines related to the inclusion of Marks in ITU-T Recommendations";			
d) copyright.	d) ITU and ITU Member States and Sector Members should have the 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). 			

^{*)} particularly, licences must be offered on a non-discriminatory basis on reasonable terms and conditions (whether free of charge or with monetary compensation) to both members and non-members.

Appendix I

Establishment of a process for cooperation and exchange of information under ITU-T Rec. A.4

(This appendix does not form an integral part of this Recommendation)

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

Recommendation ITU-T 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 website.

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 website.

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 organizations

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

(This appendix does not form an integral part of this Recommendation)

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).

Recommendation ITU-T A.6

Cooperation and exchange of information between ITU-T and national and regional standards development organizations

(1998; 2000; 2002; 2006; 2007)1

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 that 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 Rec. ITU-T A.5.

2.1 Establishment of the process for cooperation and exchange of information

Establishment of a process for cooperation and exchange of information between ITU-T study groups and standards development organizations should be considered on a case-by-case basis, and should be evaluated with due care and diligence using the set of criteria in Annex A. For ITU-T, the process is established at the study group level; for standards development organizations, the process is established at the appropriate level. To avoid multiple requests to a standards development organization for information pertaining to the criteria in Annex A, and to facilitate evaluation by study groups, the Director of TSB makes such requests, and subsequently makes an analysis of the responses to verify that the organizations meet the relevant criteria. A schematic diagram of the process is provided in Appendix I.

2.1.1 Exchange of information initiated by an ITU-T study group

If a study group considers that it is beneficial to establish an exchange of information or documents with a standards development organization, the study group should first consult the A.6-qualified organizations list (see 2.3) and obtain an analysis of that standards development organization from the Director. The study group reviews the analysis and decides whether or not to communicate with the standards development

¹ This publication includes the version of Recommendation ITU-T A.6 approved in 2002 and incorporating its Amendment 1 (2006) and Amendment 2 (2007).

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 TSB on behalf of the study group.

When necessary, between scheduled meetings, the liaison statement may be prepared by an appropriate correspondence process and approved by the study group chairman in consultation with the study group management.

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 that 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 online.

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

(This annex forms an integral part of this Recommendation)

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 and Guidelines on:							
a) patents;	a) should be consistent with "Common Patent Policy for ITU-T/ITU-R/ISO/IEC" and "Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC" *);						
b) software copyright (if applicable);	b) should be consistent with "ITU-T Software Copyright Guidelines"*);						
c) marks (if applicable); and	c) should be consistent with "ITU-T Guidelines related to the inclusion of Marks in ITU-T Recommendations";						
d) copyright;	d) ITU and ITU Member States and Sector Members should have the 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 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). 						

^{*} particularly, licences must be offered on a non-discriminatory basis on reasonable terms and conditions (whether free of charge or with monetary compensation) to both members and non-members.

Appendix I

Establishment of a process for cooperation and exchange of information under Rec. ITU-T A.6

(This appendix does not form an integral part of this Recommendation)

	l Initiation	2 Evaluation	3 Decision	4 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.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

Focus groups: Working methods and procedures

(2000; 2002; 2004; 2006; 2008)

1 Scope

The objective of focus groups is to help advance the work of the ITU Telecommunication Standardization Sector (ITU-T) study groups 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 process of establishment is described in order to help identify, in a timely and collaborative manner, all study groups concerned by the scope of a potential focus group, and to validate a study group or the Telecommunication Standardization Advisory Group (TSAG) as the parent group.

The management of a focus group is placed under the responsibility of a parent group, in association with other involved study groups in the case where the work area of the focus group overlaps with the responsibility and the mandate of those study groups.

2 Establishment, terms of reference and leadership

Within the ITU-T standardization working structure, the initiation of a focus group should be led in a transparent manner.

For each step of the establishment process, the compliance of the focus group proposal with every clause of this Recommendation should be checked, and all decisions are by consensus.

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 should be in the form of a written document to a study group or to TSAG and supported by ITU-T members.

Attention should be paid to distinguishing between the following two situations:

a) Study topic is within the mandate of one study group

When the terms of reference of the focus group fall within the mandate of a single study group, that study group has the necessary authority to approve the formation of a focus group and become its parent study group, provided that the chairman of this study group consults with the chairmen of all possibly impacted study groups. In case of doubt, the decision of such an establishment should be referred to TSAG.

b) Study topic is within the mandate of multiple study groups

In this case, following a consultation process, TSAG has the necessary authority to approve the formation of the focus group and designate its parent group.

The study group or TSAG, when receiving the written document, should check to see which study group could best address the proposed activity for the focus group. The study group dealing with the proposal for a focus group that contains topics felt as potentially falling under the responsibility and mandate of one or more other study groups remains responsible for the consultation with the other relevant study group chairmen and for informing TSAG and the Director of TSB. The whole procedure for consultation should be kept responsive and fast by using, as often as possible, consultation of relevant parties by e-mail and teleconferencing tools, rather than physical meetings.

In all cases, the Director of TSB and the chairman of TSAG are to be kept duly advised during the procedure.

2.1.1 Establishment by a study group

2.1.1.1 Establishment at a study group meeting

For establishment at a study group meeting, the submission of a proposal for a focus group should take the form of a written document submitted at least ten calendar days before that study group meeting.

In the case that all topics fall without doubt within the work area of this study group, the establishment will be discussed during this meeting, and even decided at the same meeting.

If there is any doubt that all the topics fall under the responsibility and mandate of only this study group, establishment of the focus group, including appropriate consultations of other study groups, should be organized by the chairman between scheduled meetings and by correspondence, to enable a transparent, efficient and timely examination of the proposal.

If views are expressed that the proposed topic overlaps with the mandate of one or more other study groups, the chairman of the study group to which the proposal is addressed will transmit the case to the chairman of TSAG. The chairman of TSAG will then proceed as described in clauses 2.1.2.1 or 2.1.2.2 below.

2.1.1.2 Establishment between study group meetings

Exceptionally, in response to urgent marketplace needs, a focus group for the purpose of studying technical issues (i.e. those that have no regulatory or policy implications) may be established between study group meetings.

The 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 transmitted by any member to the chairman of a study group selected by the initiators according to the foreseen work content. The chairman coordinates the first review of the proposal with the vice-chairmen and the chairmen of working parties of the study group. In the case of agreement after this review to establish the focus group, the proposal, completed where required (e.g., actual terms of reference), will be posted on the ITU website and distributed to the study group e-mail distribution list, allowing four weeks for comments.

In the absence of unresolved comments, the study group chairman may decide the immediate establishment of the focus group. As far as possible, the chairman should seek to resolve comments by correspondence; however, if this is not possible, the consideration for approval of the establishment of the focus group is to be deferred to the next meeting of the study group.

If views are expressed that the proposed topic may overlap with the mandate of one or more other study groups, the chairman of the study group to which the proposal is addressed will transmit the case to the chairman of TSAG. The chairman of TSAG will then proceed as described in clauses 2.1.2.1 or 2.1.2.2.

2.1.2 Establishment by TSAG

Initiators of a focus group may choose to submit a proposal to TSAG in the form of a written document, including terms of reference, submitted at least ten calendar days before a scheduled TSAG meeting.

2.1.2.1 Establishment at a TSAG meeting

The TSAG plenary can decide to establish the focus group and designate the parent study group or be its parent group.

This way of proceeding can also be adopted to decide on cases transmitted according to clause 2.1.1.2 above, when the schedule of the TSAG meeting is compatible with a timely response.

2.1.2.2 Establishment between TSAG meetings

Exceptionally, in response to urgent marketplace needs, a focus group for the purpose of studying technical issues (i.e. those that have no regulatory or policy implications) may be proposed between TSAG meetings.

A proposal, including terms of reference, to set up a focus group on a specific technical topic may be submitted by any member to the chairman of TSAG.

The chairman of TSAG will organize a review of the proposal with the vice-chairmen and working party chairmen of TSAG and chairmen of all potentially impacted study groups. Following agreement by this review team to initiate the focus group, the proposal, including its terms of reference and the nomination of the parent group, will be posted on the ITU-T website and distributed to the TSAG e-mail distribution list, allowing four weeks for comments.

In the absence of unresolved comments, the chairman of TSAG may decide the immediate establishment of the focus group. As far as possible, the chairman of TSAG should seek to resolve comments by correspondence; however, if this is not possible, the establishment of the focus group is to be considered for approval by the next meeting of TSAG.

This way of proceeding can also be adopted to decide on cases transmitted according to clause 2.1.1.2 above, when the schedule of the TSAG meetings is not deemed to be compatible with a timely response.

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, the expected deliverables and the time schedules for completion.

The relationship of this work to that of the parent 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. The justification that the intended activity cannot be handled as efficiently by study groups should be given.

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 review and approval by the parent group, the term and scope of a focus group may be extended.

During the activity of the focus group, its terms of reference (including scope) cannot be modified by the focus group itself. Any desired modifications to the terms of reference are to be submitted for consideration and approval by the parent group.

If more than one study group is involved (i.e. the topic falls under the responsibility and mandate of one or more other study groups), a possible modification of the terms of reference (including scope) should be discussed with the other involved study groups before a decision is taken.

Extension of the lifetime requires a decision of the parent group (with no reservations by the other involved study groups in the case where a topic falls under the responsibility and mandate of one or more other study groups). If no decision is reached, the focus group will automatically stop.

2.3 Leadership

A chairman and vice-chairman are initially appointed by the parent group. If needed, after the initial establishment of the focus group, subsequent management appointments will be made by the focus group, and the parent group informed accordingly.

ITU-T members will provide the leadership, but vice-chairmanships can be open to external experts.

3 Participation

Participation is open to any individual from a country that 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.

Participation in focus groups that have impacts on strategic, structural and/or operational aspects of ITU-T is limited to ITU-T members.

4 General financing of focus groups

Each focus group will determine its own method of financing.

Focus groups shall not use 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 and the 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 Intellectual property rights

The Common Patent Policy for ITU-T/ITU-R/ISO/IEC is to be used.

The chairman of a focus group should recall this during every meeting and record all responses in the meeting report.

The copyright provisions in Recommendation ITU-T A.1 are to be followed.

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 group. The focus group will send all of its deliverables to the parent group for further consideration.

For the sake of clarity, all the output/deliverables of a focus group should be posted on the parent group's website, whether or not one or more study groups are involved.

10.1 Approval of deliverables

Focus groups can establish their own rules of approval. However, it is expected generally that approval be obtained by consensus in which each focus group participant can express an opinion.

10.2 Printing and distribution of deliverables

Focus groups may select the method of printing and distribution of deliverables, including the target audience. Deliverables to the parent study group, including progress reports, will be processed as temporary documents by the parent group.

Use of the World Wide Web is encouraged.

All costs must be covered by the focus group. 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 below, and deliverables to study groups.

11 Progress reports

Focus group progress reports are to be provided to the parent group meeting, and transmitted in copy to all involved study groups. They will be posted in the form of temporary documents.

These progress reports to the parent 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 group chairman should keep TSAG advised of the progress of the focus group.

Meeting announcements

The establishment of a focus group will be announced in cooperation with the parent 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 and will be published at least four weeks in advance on the ITU website.

Working guidelines

Focus groups may develop additional, internal working guidelines, as required.

Alternative approval process for new and revised ITU-T Recommendations

(2000; 2004; 2006; 2008)

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 clause 3.3 below.
- 3.3 Such a summary should be prepared in accordance with the Author's Guide for drafting ITU-T Recommendations. This summary is a brief outline of the purpose and content of the new or revised draft Recommendation and, 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** Recommendations are to be elaborated in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC available at http://www.itu.int/ITU-T/ipr/. For example:
- **3.6.1** Any party participating in the work of ITU-T should, from the outset, draw the attention of the Director of TSB to any known patent or to any known pending patent application, either of their own or of other organizations. The "Patent Statement and Licensing Declaration" form from the ITU-T website is to be used.
- **3.6.2** ITU-T non-member organizations that hold patent(s) or pending patent application(s), the use of which may be required in order to implement an ITU-T Recommendation, can submit a "Patent Statement and Licensing Declaration" to TSB using the form available at the ITU-T website.
- 3.7 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 that correct defects may be approved, in accordance with clause 7.1.

4 Last call and additional review

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- **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 (clause 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 the approval of a proposed new or revised Recommendation.
- **4.4** During the last call, should any Member State or Sector Member be of the opinion that the draft new or revised Recommendation should not be approved, they should advise their reasons for disapproving and indicate the possible changes that would facilitate further consideration and approval of the draft new or revised Recommendation. TSB will make the comments available to the membership of ITU-T.
- **4.4.1** If no comments, other than comments indicating typographical error(s) (misspelling, syntactical and punctuation mistakes, etc.), are received by the end of the last call, the draft new or revised Recommendation is considered as approved, and the typographical errors are corrected.
- **4.4.2** If comments, other than those indicating typographical errors, are received by the end of the last call, the study group chairman, in consultation with TSB, makes the judgement whether:
- 1) a planned study group meeting is sufficiently close to consider the draft Recommendation for approval, in which case the procedures in clause 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 clause 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 clause 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 clause 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 clause 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 clause 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 temporary documents including 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.

However, if a Member State present declares that this text has policy or regulatory implications or there is a doubt, the approval procedure shall proceed according to Resolution 1, clause 9.3 or clause 5.8 below.

- **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 clauses 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 clauses 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 clause 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 clause 6.1.
- **5.6.1** A Member State that requested more time to consider its position and that then indicates disapproval within the four-week interval specified in clause 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 clause 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 clause 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 clauses 5.3 to 5.5 above or, exceptionally, two weeks after the period described in clause 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 Recommendation ITU-T A.11, minor amendments may be covered by corrigenda rather than a complete reissue. Also, where appropriate, texts may be grouped to suit market needs.

6.5 Text shall be added to the cover sheets of all new and revised Recommendations urging users to consult the ITU-T patent database 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 Recommendation ITU-T A.11 concerning the publication of new and revised Recommendations.

7 Correction of defects

7.1 When a study group identifies the need for 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. Implementers' guides shall be agreed by the study group, or agreed by one of its working parties with the concurrence of the study group chairman. Implementers' guides shall be made available by posting on the ITU-T website with open access.

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 clause 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.

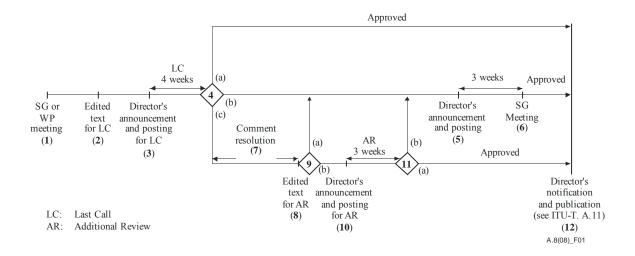


Figure 1 – Sequence of events

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 those 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) proceeds under WTSA Resolution 1 or clause 5.8, as appropriate, if there might be policy or regulatory implications (clause 5.2); or

- b) approves the draft Recommendation (clause 5.3 or 5.4); or
- c) 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).
- 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).

Publication of ITU-T Recommendations and WTSA proceedings

(2000; 2004; 2008)

1 Introduction

Under No. 98 of the ITU Convention, the Secretary-General is charged with the task of publishing Recommendations, and Recommendation ITU-T 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.

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;
- Recommendations on the organization of the work of ITU-T (A-series);

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).

- 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

Guidelines on publication of ITU-T Recommendations

(This annex forms an integral part of this Recommendation)

- **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 the 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 that are updated as soon as possible after approval of the Recommendations and by periodic publication on an appropriate distribution medium;
- b) unambiguous labelling of Recommendations to identify successive versions (see Recommendation ITU-T A.12);
- c) convenient (e.g., online or on a distribution medium) access to appropriate guidance and definitive information on prices, availability and current status of Recommendations;

- d) simple-to-use indexes and search facilities to locate specific subjects without necessarily knowing the titles or understanding the general structure and letter series used to designate ITU-T Recommendations.
- **A.3** Immediately after the conditions for its approval have been met, a new or revised Recommendation should be made available to the public, in accordance with the conditions established by ITU.

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.

Identification and layout of ITU-T Recommendations

(2000; 2004; 2008)

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 that 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" clause).
- **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". 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" should be applied in drafting new Recommendations and, wherever practicable, in revising existing Recommendations.

Supplements to ITU-T Recommendations

 $(2000; 2007)^{1}$

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 that 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 ITU-T A.8 procedures; agreement by the study group or by TSAG (in case of a Supplement developed by TSAG) is sufficient. A working party may agree to a Supplement if the study group that set up the working party has previously identified this Supplement and has authorized the working party to do so at the previous study group meeting, provided that such Supplement is not related or linked to any Recommendation having policy or regulatory implications, in accordance with Nos. 246D to 246 H of the ITU Convention.
- **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. 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.

This publication includes the version of Recommendation ITU-T A.13 that was approved in 2000 and incorporating its Amendment 1 (2007).

- 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.

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) that 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 the 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 field 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.

Guidelines and coordination requirements for the organization of ITU-T workshops and seminars

(2008)

1 Scope

This Recommendation provides guidelines and coordination requirements for the organization of workshops and seminars by ITU-T. These workshops and seminars aim for discussion and dissemination of the development of standards for worldwide implementation in telecommunications carried out by the study groups (SGs) of ITU-T.

2 References

The following ITU-T Recommendations and other references contain provisions that, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a standalone document, the status of a Recommendation.

[ITU-T A.1] Recommendation ITU-T A.1 (2008), Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T).

3 Definitions

3.1 Terms defined elsewhere

None.

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

- **3.2.1 seminar**: The seminar is a primarily one-way format, focused on the dissemination of information, in what amounts to classroom-style format. Depending on the subject and/or audience, there may be a lesser or greater degree of participant interaction with the experts who are presenting.
- **3.2.2 workshop**: The workshop environment is fundamentally a meeting of peers, gathered to discuss technical, implementation, industry, or strategic issues. Workshops can span a spectrum of styles, from highly technical events focusing on a single detailed issue, to broader gatherings intended to expose a wide spectrum of input and opinion.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

SC Steering committee

SDO Standards development organization

SGs Study groups

5 Conventions

Terminologies and definitions throughout this Recommendation must be considered in accordance with the ITU-T "Author's guide for drafting ITU-T Recommendations".

6 Choice of the proper event format

- 6.1 The format, scope and goals of each planned event must be determined at the start of the eventplanning process, as these choices will determine the addressable target audience, and trigger the workshop or seminar notification and promotion process. The awareness of these nuances among different workshop and seminar events is relevant to appropriate event planning and, therefore, to consistent and successful results.
- **6.2** As a way forward to accomplish organization consistency and reach common understanding on the Sector's needs, and to facilitate cooperation and coordination in the organization of cross-Sector events, the above-mentioned standardized terminology (see clause 3) should be observed in order to cope with different characteristics of events within the Sector.

7 Event format specifics

7.1 Seminars

Seminars are most useful in sharing ITU-T vision and technical knowledge with new participants who have not previously been exposed to the scope, workings, or results of the ITU-T standardization process.

7.2 Workshops

Workshops are the preferred vehicle for demonstrations, technical issue resolution, and for the creation of specific deliverables (outputs). A workshop should have clear goals and a limited scope, setting and delivering upon well-defined expectations from the participants and workshop leaders.

8 Event coordination

Aiming at the improvement of the organization of ITU-T workshops and seminars, and coordination with the other two Sectors and the General Secretariat for the preparation, running and evaluation of workshops and seminars, four types of ITU-T workshops and seminars are defined, according to the distinct levels of coordination and the structures, scopes and goals each type requires.¹

Some of the events defined in this Recommendation may have a mixed nature, such as dissemination of information and promotion.

8.1 Study group strategy focused

- **8.1.1** These events are focused on a specific technical topic or standardization area.
- **8.1.2** The main objective is to review points of current development of technology, application and service.
- **8.1.3** In general, they gather information on standardization development in other standardization development organizations (SDOs).
- **8.1.4** They aim at in-depth discussion on the work programme of the SGs, that is, subsequent standardization projects, improvements in coordination or cooperation methods with other SDOs, etc.
- **8.1.5** The proposal for this type of workshop or seminar normally comes from the SG management teams and membership. Speakers are usually proposed and invited by internal experts.
- **8.1.6** Such events are in general collocated with SG meetings and the audience comprises mainly SG delegates and non-ITU-T members.
- **8.1.7** Some of these events are co-organized with the Telecommunication Development Bureau (BDT) to reply to WTSA Resolution 44 concerning the requirements to bridge the standardization gap.
- **8.1.8** These events have the following advantages:
- a) they ensure that the workshop or seminar topic is closely relevant to SG work;
- b) they are cost-effective in terms of organization, and avoid extra time/cost to SG delegates;
- c) they have a guaranteed quantity and quality of participants; thus, a guaranteed quality of discussion.

8.2 Information focused

- **8.2.1** These events are focused on a new technology or emerging study area. By carrying them out, it is possible to review points of current development of technology, applications and services.
- **8.2.2** They are good opportunities for briefing SGs with information regarding standardization development in other SDOs.
- **8.2.3** The proposal for this type of workshop or seminar normally comes from the SG management teams and membership or from the technology watch function of TSB. Speakers are usually proposed and invited by internal experts.
- **8.2.4** Such events are in general collocated with SG meetings and the audience comprises mainly SG delegates.
- **8.2.5** These events have the following advantages:
- a) they ensure that the workshop or seminar topic is closely relevant to SG work;
- b) they are cost-effective in terms of organization, and avoid extra time/cost to SG delegates;
- c) they have a guaranteed quantity and quality of participants; thus, a guaranteed quality of discussion;
- d) they could bring new ideas and work topics to relevant SGs.

8.3 Tutorial focused

200

- **8.3.1** These events are focused on ITU-T SG ongoing work or published Recommendations. Topics are selected according to local interest.
- **8.3.2** The main goal is to disseminate ITU-T technical knowledge and to promote the products of the work on standardization.

- 8.3.3 They are often co-organized with and funded by BDT and targeted at developing countries.
- 8.3.4 ITU-T membership or BDT normally initiates this type of event and proposes topics of interest. The Telecommunication Standardization Bureau (TSB) informs and relies on the related SG management team to look for and identify qualified speakers.

8.4 **Promotion focused**

- 8.4.1 These events are closely linked to promotion activities held outside ITU in order to promote ITU-T work and demonstrate the extent to which ITU contributes in a specific technical area.
- 8.4.2 Though this type of event is mostly suggested by one or more SGs, with specific venue and date, it might not be collocated with the SG meeting but rather associated with a non-ITU industry event related to its study topic.

9 **Event identification**

Once the event format and coordination are properly identified, all related information shall be made available to the Steering Committee (SC), who will be responsible for revising and issuing general advice on the strategic coordination, planning, organization, programme, implementation, drawing and follow-up actions. This SC's task shall be taken according to clause 10 below.

10 Guidelines and coordination requirements for the organization of ITU-T workshops and seminars

An appropriate working party within the Telecommunication Standardization Advisory Group (TSAG) shall undertake the responsibility for all activities and tasks regarding the organization of ITU-T workshops and seminars. The following clauses indicate such duties, followed by those within ITU-T to assist TSAG in this undertaking.

10.1 Guidelines, results and exchange of experience

10.1.1 Study and provide conceptual and strategic guidelines for the preparation, running and evaluation of workshops and seminars.

Support: TSB.

10.1.2 Review the extent to which it is possible to follow the conceptual and strategic guidelines in the preparation, running and evaluation of each workshop or seminar.

Support: TSB.

10.1.3 Review the reports produced by each workshop or seminar that, inter alia, cover lessons learned and recommended follow-up actions. These reports should be produced no later than three months following the events. The reports should highlight the needs of developing countries, if any, and be disseminated as widely as possible.

Support: Study groups and TSB.

10.1.4 Contribute to the exchange of positive experience in the preparation, running and evaluation of the workshops and seminars.

Support: Study groups and TSB.

10.1.5 Encourage and evaluate the evolving implementation of the gender perspective in the programme of ITU-T workshops and seminars.

Support: TSB.

10.2 Coordination within ITU-T, and between ITU-T and the other two Sectors and the General Secretariat of ITU

10.2.1 Coordinate and assess the development of the ITU-T programme of workshops and seminars, taking into consideration budgetary implications and the needs of developing countries.

Support: TSB, in cooperation with BDT (e.g., ITU regional offices and centres of excellence), as applicable.

10.2.2 Coordinate and harmonize the programme of ITU-T workshops and seminars, in close cooperation with the other two Sectors and the General Secretariat of ITU.

Support: TSB, in cooperation with BDT, BR and the General Secretariat, as applicable.

10.2.3 Coordinate and harmonize the programme of ITU-T workshops and seminars, in order to optimize the participation of non-ITU-T members involved with technological innovation and technical change (e.g., academia, research organizations, and small and medium enterprises) in as many events as practicable.

Support: TSB.

10.2.4 Work in close cooperation with the study groups' management teams and TSB.

Support: TSB, in cooperation with BDT, as applicable.

10.2.5 Take into account relevant topics identified by the technology watch function of TSAG, in order to encourage the eventual organization of a workshop or seminar associated with them.

Support: TSB.

10.3 Coordination between ITU-T and relevant SDOs and regional organizations

Coordinate and harmonize the programme of ITU-T workshops and seminars, in close cooperation with relevant regional organizations.

Support: TSB.

10.4 Administrative nature

Provide a report on the activities addressed in clauses 10.1, 10.2 and 10.3, to each meeting of TSAG for consideration and appropriate action.

Support: TSB.

11 Basic requirements for the evaluation and follow-up actions of workshops and seminars

11.1 Depending consistently upon the use of information technology, ITU-T homepages are identified as a crucial item for improving the organization of workshops and seminars and giving valuable feedback to TSB and TSAG on current status. Therefore, the website is to be maintained by TSB, so that accurate information provided by workshop and seminar organizers and the SC is made public on the Internet to all interested parties.

- 11.2 The website shall provide a range of functionalities, including immediate access to past, current and forthcoming events. Data on events is to be shown in a standardized format and is to include the following basic requirements for the evaluation and follow-up actions of ITU-T workshops and seminars, as exemplified in Table 1:
- Title
- Place
- Start date
- End date
- Basic information
 - Contact
 - Invitation
 - Programme
 - Steering committee
 - Sponsorship
 - Introduction
 - Objective
- Type
 - Event format
 - Event coordination
- Content
 - Abstract
 - Presentations
 - Biography
- Report
- List of participants

Table 1 – Format of information for the evaluation and follow-up actions of workshops and seminars

					Basic information				Content			ent						
Ite	m	Title	Place	Start date	End date	Contact	Invitation*	Programme	Steering **	Sponsorship	Introduction	Objective	Туре	Abstract	Presentations	Biography	Report ****	List of participants
#	<u>£</u>	<name event="" of=""></name>	<city>, <country></country></city>	dd/mm/yy	dd/mm/yy	√	V	V	V	V	V	√	***	V	√	V	V	V

^{*} The invitation letter contains also information notes so that the wording should be: "Invitation letter and information notes", if not explicitly mentioned in a separated link, "Information notes or practical information".

^{**} This column indicates if the steering committee information was available on the webpage of the event.

^{***} The indication of the "Type" of event implies that both the "event format" (workshop or seminar) and the "event coordination" (study group strategy, information, tutorial or promotion focused) shall be clearly identified (refer to clauses 7 and 8).

^{****} Three months is the expected period for the final report submission.

Supplement 2 to ITU-T A-series Recommendations

Guidelines on interoperability experiments

(2000)

1 Background

- 1.1 Study groups of the ITU Telecommunication Standardization Sector (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 the early 1980s (SG 11).
- b) ISDN field trials in various places in the late 1980s (SG 11 and then SG 18).
- c) Digital circuit multiplexing equipment (DCME) in the early 1990s (SG 15).
- 1.2 However, when interoperability experiments/testing have 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 ITU-T and to facilitate information exchange between parties participating in such experiments and ITU-T study groups.

3 Guidelines

- 3.1 The interoperability experiments are to be performed outside 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 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 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 the ITU Telecommunication Standardization Sector (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 Internet protocol-based (IP-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 the Telecommunication Standardization Advisory Group (TSAG) in September 1998 and by 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 the 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 webpage.

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-webpage at

<u>www.ietf.org/IESG/liaison.html</u>. An individual at IETF is assigned responsibility for dealing with each communication that is received. The name and contact information of the person responsible is listed with the links to the communications on this webpage.

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 that 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

Recommendation ITU-T 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 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
 www.ietf.org/rfc/rfc2223.txt
- IETF RFC 2026 The Internet Standards Process Revision 3, October 1996
 www.ietf.org/rfc/rfc2026.txt
- IETF RFC 2418 IETF working group Guidelines and Procedures, September 1998
 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/lid-abstracts.txt

 Current list of IETF working groups and their charters (includes area directors and chair contacts, mailing list information, etc.):

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

RFC Editor pages about publishing RFCs:

www.rfc-editor.org/howtopub.html

Current list of liaisons:

www.ietf.org/IESG/liaison.html

Intellectual property rights notices:

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:

www.itu.int/ITU-T

List of all ITU-T Recommendations:

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

- ITU-T study group main page for study group NN (where NN is the 2-digit SG number):

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

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

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

Intellectual property policies, forms and databases:

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

- ITU-T operational matters including:
 - Recommendation ITU-T A.1 (2008), Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T).
 - Recommendation ITU-T A.2 (2008), Presentation of contributions relative to the study of Questions assigned to ITU-T.
 - Recommendation ITU-T A.4 (2007), Communication process between ITU-T and forums and consortia.
 - Recommendation ITU-T A.5 (2001), Generic procedures for including references to documents of other organizations in ITU-T Recommendations.
 - Recommendation ITU-T A.8 (2008), Alternative/approval process for new and revised Recommendations.

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

www.itu.int/publ/T-RES/e

- Author's Guide for drafting ITU-T Recommendations:
 www.itu.int/ITU-T/studygroups/templates/index.html
- Templates for contributions:
 www.itu.int/ITU-T/studygroups/templates/index.html

PART 3

ITU Telecommunication Standardization Sector study groups, TSAG and other groups established by WTSA-08 and chairmen and vice-chairmen appointed by WTSA-08

Study Group 2 - Operational aspects of service provision and telecommunication management

Chairman:	Ms Marie-Thérèse Alajouanine	$(F)^{1}$
Vice-Chairmen:	Mr James M. Kilaba	(TZA)
	Mr Marcos Pérez García	(CUB)
	Mr Sherif Guinena	(EGY)
	Mr In-Seop Lee	(KOR)
	Mr Steven Lind	(USA)
	Mr Bruno Ramos	(B)
	Mr Phil Rushton	(UK)
	Ms Jie Zhang	(CHN)

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

Chairman:	Mr Ki-Shik Park	(KOR)
Vice-Chairmen:	Mr Leslie Martinkovics	(USA)
	Mr Matano Ndaro	(KEN)
	Mr Cleveland Thomas	(TRD)
	Mr Seiichi Tsugawa	(J)
	Mr Alexander V. Yakovenko	(RUS)

Study Group 5 – Protection against electromagnetic environment effects

Chairman:	Mr Ahmed Zeddam	(F)
Vice-Chairmen:	Mr Tariq H. Al-Amri	(ARS)
	Mr Darren Carpenter	(UK)
	Mr Héctor Carril	(ARG)
	Mr Philip Day	(AUS)
	Mr Sung-Chul Kang	(KOR)
	Mr Guy-Michel Kouakou	(CTI)
	Mr Alexander Tsym	(RUS)
	Mr Li Xiao	(CHN)

Study Group 9 - Television and sound transmission and integrated broadband cable networks

Chairman:	Mr Charles Sandbank	(UK)
Vice-Chairmen:	Mr O.V. Gofaizen Mr Satoshi Miyaji Mr Dong Wang Mr Arthur Webster	(UKR) (J) (CHN) (USA)

¹ The names of the Member States that correspond to the abbreviations in this document may be found in the ITU Global Directory.

Study Group 11 – Signalling requirements, protocols and test specifications

Chairman:	Mr Wei Feng	(CHN)
Vice-Chairmen:	Ms Jane Humphrey Mr Kaoru Kenyoshi	(S) (J)
	Mr Andrei Koucheryavi	(RUS)
	Mr Hyeong-Ho Lee	(KOR)

Study Group 12 - Performance, QoS and QoE

Chairman:	Mr Charles A. Dvorak	(USA)
Vice-Chairmen:	Mr Paul Barrett Mr Vladimir Efimushkin Mr Gamal Amin Elsayed Mr Hyung-Soo Kim Ms Catherine Quinquis Mr Akira Takahashi Mr Hassan Talib Mr Feng Qi	(UK) (RUS) (SDN) (KOR) (F) (J) (MRC) (CHN)

Study Group 13 - Future networks including mobile and NGN

Chairman:	Mr Chae-Sub Lee	(KOR)
Vice-Chairmen:	Mr Mohammed Al Ramsi	(UAE)
	Mr Simon Bugaba	(UGA)
	Mr Marco Carugi	(UK)
	Mr Haitham Chedyak	(SYR)
	Mr Maurice Habib Ghazal	(LBN)
	Mr Davoud D. Gordeh	(IRN)
	Mr Olivier Le Grand	(F)
	Mr Leo Lehmann	(SUI)
	Ms Duo Liu	(CHN)
	Ms Hui Lan Lu	(USA)
	Mr Naotaka Morita	(J)
	Mr Konstantin Trofimov	(RUS)

Study Group 15 – Optical transport networks and access network infrastructures

Chairman:	Mr Yoichi Maeda	(J)
Vice-Chairmen:	Mr Baker Baker Mr Júlio Cesar Fonseca	(SYR) (B)
	Mr V.B. Katok	(UKR)
	Mr Francesco Montalti	(I)
	Mr Andrew Nunn	(UK)
	Mr Helmut Schink	(D)
	Mr Sadegh A. Shahkooh	(IRN)
	Mr Shaohua Yu	(CHN)

Study Group 16 – Multimedia coding, systems and applications

Chairman:	Mr Yushi Naito	(J)
Vice-Chairmen:	Mr Fode Soumah Mr Seong-Ho Jeong Ms Claude Lamblin Mr Zhong Luo Mr Mark Neibert Mr Ibaa Oueichek	(GUI) (KOR) (F) (CHN) (USA) (SYR)

Study Group 17 – Security

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Chairman:	Mr Arkadiy Kremer	(RUS)
Vice-Chairmen:	Mr Jianyong Chen Mr Mohammed K. Elhaj	(CHN) (SDN)
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	Mr Antonio Guimarães	(B)
	Mr Koji Nakao	(J)
	Mr Patrick Mwesigwa	(UGA)
	Mr Heung-Youl Youm	(KOR)

TSAG – Telecommunication Standardization Advisory Group

Chairman:	Mr John Visser	(CAN)
Vice-Chairmen:	Mr Fabio Bigi	(I)
	Mr Dmitry Cherkesov	(RUS)
	Mr Mohammed Gheyath	(UAE)
	Mr Jean-Jacques Massima-Landji	(GAB)
	Mr Haruo Okamura	(J)
	Mr Stephen Trowbridge	(USA)

Other groups established by WTSA-08:

Study Group 3 - Regional Group for Africa

Chairmen:	Mr Abossé Akue-Kpakpo	(TGO)
	Mr Modibo Traore	(MLI)

Vice-Chairmen: Ms Joséphine Adou Biendjui (CTI)

Ms Pauline Tsafak Djoumessi (CME)

Study Group 3 - Regional Group for Latin America

Chairman:	Mr Facundo Fernández Begni	(ARG)
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Vice-Chairmen: Mr Pedro Oliva Brunet (CUB)

Mr Vanderlei Campos (B)
Mr Luis E. Monsanto (VEN)

Study Group 3 - Regional Group for Asia and Oceania

Chairman: Mr Byoung Nam Lee (KOR)

Vice-Chairman: Mr Gunawan Hutagalung (INS)

Standardization Committee for Vocabulary

Chairman: Mr Nabil Kisrawi (SYR)

Vice-Chairmen: Ms Marie-Thérèse Alajouanine (F)

Ms Marta Serrano (E)
Mr Ahmad M. Khawaldeh (JOR)
Mr Oleg Viktorovich Mironnikov (RUS)
Mr James Ennis (USA)

Ms Weiling Xu (CHN)

PART 4

Questions approved for study by the ITU Telecommunication Standardization Sector

Study Group 2 – Operational aspects of service provision and telecommunication management

Question	Title
1/2	Application of numbering, naming, addressing and identification plans for fixed and mobile telecommunications services
2/2	Routing and interworking plan for fixed and mobile networks
3/2	Service and operational aspects of telecommunications, including service definition
4/2	Human factors related issues for improvement of the quality of life through international telecommunications
5-1/2	Network and service operations
5-2/2	Network and service operations and maintenance procedures
6/2	Terms and definitions
7/2	Requirements for Business-to-Business and Customer-to-Business management interfaces
8/2	Management framework and architecture
9/2	Methodology and generic requirements, analysis and design for management interfaces
10/2	Specialized requirements, analysis and design for management interfaces
11/2	Protocols and security for management
12/2	Telecommunications management and OAM project
13/2	Service provider/network operator requirements and priorities for telecommunication management
14/2	Common measurement techniques and results collections for use on NGN telecommunications systems and their constituent parts

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 using the next generation networks (NGNs) and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs
2/3	Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question A/3, including adaptation of existing D-series Recommendations to the evolving user needs
3/3	Study of economic and policy factors relevant to the efficient provision of international telecommunication services
4/3	Regional studies for the development of cost models together with related economic and policy issues
5/3	Terms and definitions for Recommendations dealing with tariff and accounting principles

Study Group 5 – Protection against electromagnetic environment effects

Question	Title
1/5	EMC issues arising from the liberalization of telecommunications networks
2/5	EMC related to broadband access networks
3/5	Human exposure to electromagnetic fields (EMFs) due to radio systems and mobile equipment
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*	Technical aspects of unbundling and sharing of outside plant elements in networks
8/5	Home networks
9/5	Interference to telecommunication networks due to power systems and electrified railway systems
10/5*	Copper cables, networks and fibre-optic connection hardware for broadband access
11/5	Safety in the telecommunications networks
12/5	EMC telecommunication recommendations
13/5	Protective components and assemblies
14/5	Guides and terminology
15/5	Security of telecommunication and information systems regarding the electromagnetic environment
16/5	EMC requirements for the Information Society

^{*} WTSA authorized SG 5 to have these Questions fine-tuned at the first meeting of the study group.

Study Group 9 – Television and sound transmission and integrated broadband cable networks

Question	Title
1/9	Transmission of television and sound programme signal 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 content distribution services within the scope of Study Group 9
5/9	Functional requirements for a universal integrated receiver or set-top box for the reception of advanced content distribution services
6/9	Digital programme delivery controls for multiplexing, switching and insertion in compressed bit streams, possibly encapsulated in TS or IP packets
7/9	Cable television delivery of digital services and applications that use Internet Protocols (IP) and/or packet-based data
8/9	Voice and video IP applications over cable television networks
9/9	The extension of network-based content-distribution services over broadband in home networks
10/9	Requirements and methods to deliver sound and television programmes and other multimedia services over IP networks for advanced service platforms
11/9	Transmission of multichannel analogue and/or digital television signals over optical access networks
12/9	Objective and subjective methods for evaluating perceptual audiovisual quality in multimedia services within the terms of Study Group 9
13/9	Transmission of large screen digital imagery programmes for contribution and distribution purposes

Study Group 11 – Signalling requirements, protocols and test specifications

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	Coordination of signalling requirements and protocol development
7/11	Signalling and control requirements and protocols supporting network attachment and identification in NGN environment
8/11	Protocol test specifications for NGN
9/11	Monitoring parameters for NGN protocols
10/11	Service test specification for NGN
11/11	QoS tests specification for NGN
12/11	USN and RFID test specification
13/11	Coordination of work on emergency communications within an NGN environment
14/11	Security coordination for NGN protocols
15/11	End-to-end multicast

Study Group 12 – Performance, QoS and QoE

Question	Title
1/12	Work programme, QoS/QoE coordination and bridging the standardization gap
2/12	Multimedia performance considerations for IP gateways
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, audio and audiovisual quality interactions
8/12	E-model extension towards wideband transmission and future telecommunication and application scenarios
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	Performance interworking and traffic management for next generation networks
12/12	Operational aspects of telecommunication network service quality
13/12	QoE, QoS and performance requirements and assessment methods for multimedia including IPTV
14/12	Development of parametric models and tools for audiovisual and multimedia quality measurement purposes
15/12	Objective assessment of speech and sound transmission performance quality in networks
16/12	Framework for diagnostic functions and their interaction with external objective models predicting media quality
17/12	Performance of packet-based networks and other networking technologies

Study Group 13 – Future networks including mobile and NGN $\,$

Question	Title
1/13	Coordination and planning
2/13	Network terminology
3/13	Requirements and implementation scenarios for emerging services and capabilities in an evolving NGN
4/13	Requirements and frameworks for QoS enablement in the NGN
5/13	Principles and functional architecture for NGN (including ubiquitous networking)
6/13	Mobile telecom network architecture for NGN
7/13	Impact of IPv6 to an NGN
8/13	Mobility management
9/13	MM mechanisms supporting multi-connections for multiple access technologies
10/13	Identification of evolving IMT-2000 systems and beyond
11/13	Convergence of existing and evolving IMT and fixed networks
12/13	Evolution towards integrated multi-service networks and interworking
13/13	Step-by-step migration to NGN networks
14/13	Service scenarios and deployment models of NGN
15/13	Applying IMS and IMT in developing country mobile telecom networks
16/13	Security and identity management
17/13	Packet forwarding and deep packet inspection for multiple services in packet-based networks and NGN environment
18/13	Requirements and framework for enabling COTS components in an open environment
19/13	Distributed services networking (DSN)
20/13	Public data networks
21/13	Future networks

Study Group 15 – Optical transport networks and access network infrastructures

Question	Title
1/15	Coordination of access network transport standards
2/15	Optical systems for fibre access networks
3/15	General characteristics of transport networks
4/15	Transceivers for customer access and in-premises networking systems on metallic conductors
5/15	Characteristics and test methods of optical fibres and cables
6/15	Characteristics of optical systems for terrestrial transport networks
7-1/15*	Characteristics of optical components and subsystems
7-2/15*	Optical components and subsystems
7-3/15*	Joint closures, termination and distribution frames, enclosures and terminals for application in central office, outside plant and customer premise locations
8/15	Characteristics of optical fibre submarine cable systems
9/15	Transport equipment and network protection/restoration
10/15	OAM and network management for OTN
11/15	Signal structures, interfaces and interworking for transport networks
12/15	Transport network architectures
13/15	Network synchronization and time distribution performance
14/15	Management and control of transport systems and equipment
15-1/15	Test and measurement techniques and instrumentation for use on telecommunications systems and their constituent parts
15-2/15	Jitter and wander test and measurement techniques and instrumentation for use on transmission systems and their constituent parts
16-1/15*	Infrastructure and installation techniques for cables and equipment, including faster techniques in urban areas
16-2/15*	Optical fibre cable construction types
17-1/15*	Support system for infrastructure and network elements management
17-2/15*	Optical fibre cable network maintenance
18/15	Development of optical networks in the access area
19/15*	Environmental sustainability and safety procedures for outside plant

^{*} WTSA authorized SG 15 to have these Questions fine-tuned at the first meeting of the study group.

Study Group 16 – Multimedia coding, systems and applications $\,$

Question	Title
1/16	Multimedia systems, terminals and data conferencing
2/16	H.323 real-time multimedia system
3/16	Multimedia gateway control architectures and protocols
4/16	Advanced functions for H.300-series systems and beyond
6/16	Visual coding
7/16	System and coordination aspects of media coding
8/16	Generic sound activity detection
9/16	Embedded variable bit rate coding of speech signals
10/16	Speech and audio coding and related software tools
12/16	Advanced multimedia system for NGN and other packet-based networks
13/16	Multimedia application platforms and end systems for IPTV
14/16	Voiceband modems and facsimile terminals protocols: specification, performance evaluation and interworking with NGN
15/16	Voice gateway signal processing functions and circuit multiplication equipment / systems
16/16	Speech enhancement functions in signal processing network equipment
18/16	Interaction aspects of signal processing network equipment
20/16	Multimedia coordination
21/16	Multimedia architecture
22/16	Multimedia applications and services
24/16	Multimedia functions in NGN and other networks
25/16	USN applications and services
26/16	Accessibility to multimedia systems and services
27/16	Vehicle gateway platform for telecommunication/ITS services/applications
28/16	Multimedia framework for e-health applications

Study Group 17 – Security

Question	Title		
1/17	Telecommunications systems security project		
2/17	Security architecture and framework		
3/17	Telecommunications information security management		
4/17	Cybersecurity		
5/17	Countering spam by technical means		
6/17	Security aspects of ubiquitous telecommunication services		
7/17	Secure application services		
8/17	Service oriented architecture security		
9/17	Telebiometrics		
10/17	Identity management architecture and mechanisms		
11/17	Directory services, Directory systems, and public-key/attribute certificates		
12/17	Abstract Syntax Notation One (ASN.1), Object Identifiers (OIDs) and associated registration		
13/17	Formal languages and telecommunication software		
14/17	Testing languages, methodologies and framework		
15/17	Open Systems Interconnection (OSI)		

PART 5

Reports and documents of the Assembly

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Section 1 – Plenary reports

1.1 – Report of inaugural ceremony and first to third Plenary meetings

Chairman: H.E. Dr Ivy Matsepe-Casaburri (Republic of South Africa; Dean of the Assembly) **Later:** Ms Lyndall Shope-Mafole (Republic of South Africa)

Inaugural Ceremony (Tuesday, 21st October 2008, 1100 – 1130 hours)

H.E. Dr Ivy Matsepe-Casaburri, Minister of Communications of the Republic of South Africa, welcomed the delegates to the World Telecommunication Standardization Assembly in Johannesburg, Republic of South Africa. Her welcome address can be found in Annex 1.

Ms Zia Maharaj, a 16-year-old high school student of St Peters College, addressed the Assembly. She was the overall winner in a science essay competition, hosted by the Japanese Government in partnership with South Africa and Zambia, on the benefits of technology. Ms Maharaj chose the topic of using an ICT solution to connect students from different schools. Her speech is reproduced in Annex 2.

ITU Secretary-General, Dr Hamadoun I. Touré, welcomed the delegates to the rainbow nation. His opening address is given in Annex 3.

First and second Plenary meetings (Tuesday, 21st October 2008, 1145 – 1300 hours and 1430 – 1600 hours)

1 Opening of the 1st Plenary

ITU Secretary-General, Dr Hamadoun I. Touré, announced that, in accordance with the Rules of Procedure of Conferences, Assemblies and Meetings of the Union, South Africa had appointed H.E. Dr Ivy Matsepe-Casaburri as Dean of the Assembly. The Secretary-General invited Ms Ivy Matsepe-Casaburri to chair the Assembly. Dr Ivy Matsepe-Casaburri declared WTSA-08 to be open.

2 Approval of the agenda

The agenda (OJ/01) was adopted.

3 Election of the Chairman of the Assembly

The Dean of the Assembly announced that South Africa had proposed Ms Lyndall Shope-Mafole, Director General of the Department of Communications of the Republic of South Africa, as Chairman of the Assembly. Ms Shope-Mafole was elected Chairman of the Assembly by acclamation.

4 Address by the Chairman of the Assembly

The Chairman delivered her address (Annex 4).

5 Address by the Director of the Telecommunication Standardization Bureau (TSB)

The Director of TSB delivered his address (Annex 5).

6 Election of the Vice-Chairmen of the Assembly

Plenary appointed the following Vice-Chairmen by acclamation:

- Mr Vince Affleck (United Kingdom)
- H.E. Mr David Gross (United States)
- Mr Yukio Hiramatsu (Japan)
- Mr Nabil Kisrawi (Syrian Arab Republic)
- H.E. Mr Naum Marder (Russian Federation)
- Mr John Nkoma (Tanzania)

7 Establishment of Committees (Structure of the Assembly)

The Assembly approved the structure of the Assembly and the mandates of Committees (Document 122).

8 Election of Committee Chairmen and Vice-Chairmen

The Assembly elected the following Committee Chairmen and Vice-Chairmen by acclamation for Committee 2 through 5 (Document 123):

Committee 2 Chairman: Mr Bruce Gracie (Canada)

(Budget Control) Vice-Chairmen: Mr Sultan Al-Malik (Saudi Arabia)

Mr Joshua Peprah (Ghana)

Committee 3 Chairman: Mr Brian Moore (United Kingdom)

(Working Methods of ITU-T) Vice-Chairmen: Mr Nasser Bin Hammad (United Arab Emirates)

Mr Viktor Katok (Ukraine) Mr Matano Ndaro (Kenya) Mr Kishik Park (Rep. of Korea)

Committee 4 Chairman: Mr Bob Horton (Australia)

(Work Programme and Vice-Chairmen: Mr Makhsum MaKhmudov (Uzbekistan)

Mr Jean-Jacques Massima Landji (Gabon)

Mr Hans Meierhofer (Germany) Mr Sadegh Abbasi Shahkooh (Iran) Mr Luis Ramírez Barreto (Paraguay)

Committee 5 Chairman: Ms Marie-Thérèse Alajouanine (France)

(Editorial Committee) Vice-Chairmen: Ms Marta Serrano (Spain)

Mr Victor Stroyakovskiy (Russian Federation)

Mr Ben Wallis (United Kingdom)

Ms Weiling Xu (China)

Mr Ahmad F. Khawaldeh (Jordan)

The Secretary-General pointed out that discussions regarding the chairman- and vice-chairmanships for Working Groups 1 and 2 of Plenary were still ongoing and that he would report back to Plenary as soon as he had reached agreement.

Organization of ITU-T)

9 Secretariat for Plenary and Committees of WTSA-08

The Secretary-General informed the meeting of the composition of the secretariat of the Plenary and the Committees (Document 125).

10 Draft work plan (Document DT/2)

The draft work plan contained in Document DT/2 was approved. Steering Committee 1 will make amendments as needed.

11 Tribute to deceased delegates

The Assembly observed a minute of silence in tribute to the delegates deceased since WTSA-04 (Document 118).

12 Expression of appreciation to retired delegates

The Chairman thanked the retired delegates (Document 119).

13 General information on the secretariat and organization of the Assembly

The secretariat informed the delegates about practical aspects of the Assembly.

14 Allocation of documents to Committees

The allocation of documents (DT/9) was presented. Corrections made in Plenary are reflected in DT/9 corr1. The allocation of documents was approved.

15 Report of the Director of TSB

The Director of TSB presented Document 33, Addendum 2, "ITU-T 2005 - 2008", comprising the highlights of Documents 33 - 36. Plenary approved the TSB Director's report.

16 Report of the Telecommunication Standardization Advisory Group to WTSA-08

The Chairman of TSAG, Mr Gary Fishman, presented Document 28. Plenary took note of the document. It will be considered by the respective Committees/Working Groups.

17 Report on the outcome of the Global Standards Symposium (GSS)

H.E. Mr Nguyen Thanh Hung, Vice-Minister, Ministry of Information and Communications, Viet Nam, presented Document 121, the report of the conclusions of the GSS. The document was duly noted.

The Chairman of WTSA-08 confirmed that the report of the GSS will be used by the Committees/Working Groups as appropriate.

The United States pointed out a misplacement of text in clause 2.1 of Document 121 and stated that "interoperability measurements of products" are not part of the "ladder of development".

18 Expressions of appreciation to the Study Group Chairmen

The TSB Director handed out certificates of appreciation to the chairmen of the ITU-T study groups and the chairman of TSAG of the 2005-2008 study period:

•	Ms Marie-Thérèse Alajouanine	ITU-T Study Group 2
•	Mr Kishih Park	ITU-T Study Group 3
•	Mr David Sidor	ITU-T Study Group 4
•	Mr Roberto Pomponi	ITU-T Study Group 5
•	Mr Francesco Montalti	ITU-T Study Group 6
•	Mr Richard Green	ITU-T Study Group 9
•	Mr Yukio Hiramatsu	ITU-T Study Group 11
•	Mr Jean-Yves Monfort	ITU-T Study Group 12
•	Mr Brian Moore	ITU-T Study Group 13
•	Mr Yoichi Maeda	ITU-T Study Group 15
•	Mr Pierre-André Probst	ITU-T Study Group 16
•	Mr Herbert Bertine	ITU-T Study Group 17
•	Mr John Visser	ITU-T Study Group 19
•	Mr Gary Fishman	ITU-T TSAG

19 Any other business

As negotiations regarding the chairmanship of Working Groups 1 and 2 of Plenary were still ongoing, Plenary discussed how to proceed with respect to the scheduled meeting at 1600 hours of Working Group 2 of Plenary. After discussion, Plenary decided to appoint Mr Ghazal as acting chairman until Plenary had appointed a chairman. Plenary also decided to hold a short Plenary meeting on the morning of Wednesday 22nd October to agree on the chairmen and vice-chairmen of Working Groups 1 and 2.

Third Plenary meeting (Wednesday, 22nd October 2008, 0930 – 1000 hours)

1 Approval of the agenda

Plenary adopted the agenda (OJ/7).

2 Election of Chairmanships for Working Groups 1 and 2 of Plenary

The ITU Secretary-General reported that he had reached agreement regarding the chairman and vice-chairmanships for Working Groups 1 and 2 of Plenary. Plenary approved the proposal presented by the Secretary-General (Document 123):

Working Group 1 of Plenary Chairman: Mr Patrick F. Masambu (Uganda)

(Issues relevant to the WSIS Vice-Chairmen: Mr Cleveland Thomas (Trinidad and Tobago)

Mr Jianyong Chen (China)

work of study groups)

Working Group 2 of Plenary Chairman: Mr Maurice Ghazal (Lebanon)
(Bridging the standardization gap) Vice-Chairmen: Ms Tran Thanh Ha (Viet Nam)

Mr Aboubakar Haman (Cameroon)

3 Any other business

outcome related to ITU-T and the

The Chairman of Committee 2 presented DT/12 "Financial Responsibilities of the Assembly" and requested that other Committees/Working Groups liaise with Committee 2 in case proposals had financial implications. This was noted.

Syria supported a prior request from the United States that no parallel sessions of ad hoc groups take place during the weekend. The Chairman said that the Assembly would try to adhere to that. However, sessions of the Editorial Committee could take place in parallel with sessions of ad hoc groups.

The TSB Director mentioned the three side events – "ICTs and accessibility", "Cybersecurity", and "ICTs and Climate Change" – to take place at WTSA-08. In particular, the event on "ICTs and accessibility" would show an impressive demonstration of assistive technologies.

Annex 1

Opening address at WTSA-08 H.E. Dr Ivy Matsepe-Casaburri, Minister of Communications Emperors Palace Convention Centre (21 October 2008) Republic of South Africa World Telecommunication Standardization Assembly

Secretary-General of ITU, Dr Hamadoun Touré,

Honourable Ministers,

Heads of Delegation,

Distinguished Guests,

Ladies and Gentlemen,

We take this opportunity to thank the International Telecommunication Union (ITU) family for honouring us with the hosting of this important event, when for the first time a World Telecommunication Standardization Assembly takes place on African soil.

Since the admission of democratic South Africa to ITU in 1994, we have been beneficiaries as well as active participants in the work of the Union in all the three core sectors: Radiocommunication Sector (ITU-R), Standardization Sector (ITU-T) and Development Sector (ITU-D), and have hosted the ITU TELECOM Exhibition and Forum twice in succession in 1998 and 2001. It is thanks to work of ITU that South Africa, although a developing country, has been able to join pioneering countries in the development and deployment of ICTs and gained confidence and experience in navigating its way in a rapidly changing technology sector. Consequently, Telkom SA, an ITU-T Sector Member, is leading the roll-out of Next Generation Network infrastructure in the country and, together with Sentech, our signal distributor, they are guarantors for the provision of state-of-the-art infrastructure, thus contributing to making the 2010 FIFA World Cup – another first on African soil – the best ever such event to date. In line with the ITU decision to migrate to digital television, our Government has decided that South Africa will start its digital migration process which will commence as WTSA-08 closes. On the first of November 2008, we will switch on the digital terrestrial television (DTT) signal, thus ushering in a new broadcasting era in our country. We have decided to migrate over three years, thus completing the migration in three years in 2011. As a developing country that is confronted with a multiplicity of challenges, we are happy that WTSA-08 will give focused attention to, amongst others, several issues that we are grappling with such as:

- **Accessibility** to achieve equitable communication for everyone
- **Cybersecurity** to combat spam and cybercrime and build confidence and a sense of security in the use of ICTs
- Connecting the unconnected by 2015 thus bridging the digital divide
- **Climate change** thus promoting the use of ICTs to combat climate change
- **Saving lives** by greater use of ICTs for disaster management
- **Networks of the future** deploying Next Generation Networks, especially in developing countries

WTSA approves standards, based on work performed in the ITU-T study groups over the previous four years. This year for the first time the standards will also be shaped by the GSS recommendations. These recommended standards will be used by manufacturers, regulators and users of ICT equipment globally. We accordingly take this opportunity to thank the Chairperson, Vice-Chairpersons and participants of all the ITU-T study groups that spearheaded that ITU standardization work since Florianópolis, Brazil, for providing the basis for the WTSA-08 deliberations. We thank Mr Malcolm Johnson who, under the

stewardship of the Secretary-General, ably steers this work. The Assembly will also approve Questions for study by the ITU-T study groups over the next four years that will result in new ICT standards for the future.

The 21st Century business models and systems based on the knowledge economy and information society require that we function in an increasingly globalized digitally networked economy from which none are excluded. As we now live in a world in which at the touch of a key we are able to traverse vast distances between us, crossing borders and closing time zones through the transmission of information, data and images in a matter of seconds, we need interoperability and trust as never before from the standards set in order to have confidence in the use of ICT infrastructure. ITU-T and its study groups provide standardization work that seeks to allay our concerns, hence the importance for all of us to make an effort to participate in ITU standardization work to bridge the digital divide. We are extremely happy that over 800 delegates from the 119 ITU Member States and the ITU-T Sector Members have registered to attend this WTSA-08. We hope you will find the Emperors Palace to be a good home to the Assembly. We trust that you will all have fruitful discussions, whose fruit the world will enjoy in the near future. Have a memorable stay in South Africa and enjoy our warm African hospitality. We look forward to seeing you in 2010, when some of the fruits of WTSA work will be clearly visible.

OBRIGADO, MERCI, GRACIAS, KE A LEBOGA, DANKIE I THANK YOU.

Annex 2

Address to WTSA-08 Ms Zia Maharaj (21 October 2008) Johannesburg, South Africa Opening Ceremony of the World Telecommunication Standardization Assembly

Secretary-General of ITU, Dr Hamadoun Touré,

Director ITU-T, Mr Malcolm Johnson,

Honorouble Ministers,

Heads of Delegation,

Distinguished Guests,

Ladies and Gentlemen,

Thank you for inviting me to deliver the opening speech for such an important gathering of telecommunication, technology and policy experts. I am very honoured to represent my beautiful country today. What can a 16 year old like me tell you that you do not already know? Well, for one, I am happy to be here because I have a valid reason not to be at school. More importantly though, I realize that perhaps I can communicate a message from my generation to you where my message can make a difference to the outcome of your important work here today. The future that you are creating through telecommunication standards affects the way in which my generation throughout the world will communicate and link our countries together in various economic and society-based partnerships.

When preparing for this speech, I was amazed to find the huge amounts of factors involved in the definition of telecommunication standards and how developed and developing countries can use these standards. I started to think of some of the systems and solutions which are inside these networks and I can only imagine that there must be an enormous number of choices ranging from programming languages to operating systems to hardware standards even before dealing with the standards to send and receive information.

Imagine if I chose to deliver my speech in a language in which I successfully communicate with my fellow learners, where we would all be standing or sitting together in this same room but sending each other SMS and MMS messages using cryptic text, visual and audio images and various symbols. I would be able to hold multiple communication streams, but to you it will be difficult to translate our messages using a standard way of communication and some members of the audience may miss out on important parts of my message. So instead I am following the protocol of the English language where interpreters can follow the rules of grammar to translate my message into different languages so that it is received by members of the audience in an equal fashion.

Even though this may sound like a simple example, we all know that in a different setting where the literacy levels of audiences are not the same, be it language literacy or even technology literacy, much can be lost in the translation, and this can impact on the message being entirely lost or garbled if even only part of the message is lost. Either way, this affects proper communication for all parties.

As a member of the youth, I am very fortunate to have access to modern technologies and am even learning how to programme in different computer languages. More importantly, I am also very aware of how learners in poorer communities do not have the same access to my learning environment. In my old school, we set up a Saturday school for three schools from Alexander where the learners were taught different subjects including English and science. I volunteered to work with the teachers and was assigned to different classes. I can tell you that in my Group, although the teaching was of the same standard as in the other classes, there was a different element of improved communication because of us being of a similar age, and we had more

fun and laughter yet learned the same amount. So I realized that, in addition to standards, the quality of the communication is just as important to send and receive messages successfully.

I also want to share with you my experience of how we the youth use technology in our daily lives. This is an example which can be used in different societies so long as there is a telecommunication network in place. I connect to a GSM cell network and when I use voice, it is simple, but when I use data, I can use many different technology protocols within this same network. Then when I run out of airtime, which in my world equates to the main currency of communication, I quickly send my mother a message to top me up. A few years back, my mother would buy me airtime by going into a shop and buying an airtime voucher, but now she can top up my airtime through a transaction on the Internet or directly from her own cell phone, and she can do this even if we are in two different countries.

With technology solutions that are already available, I can soon use my cell phone as my electronic wallet and make purchases (of course I will have to work hard to get a good paying job first), whether this be a ticket to use public transport or pay for my groceries at a supermarket or even for health services. Most people of my generation are extremely comfortable in using this cell phone device for multiple purposes. Therefore, what started off as a need to use a device to communicate has now grown and changed to using the same device for different transactions – even linking the device to banking, where I would have otherwise used a separate card and a different system of rules.

I am using these examples to explain my simple understanding of how the important work you are doing affects the future of my generation in a positive way to make things easier. I also understand how a lack of the important work on standards can affect my generation in a negative way, which can disconnect us from being part of the global world. Communicating at a social level is one thing, but the world is connected through economies and trade. To take part in this world, my generation will have to learn from a common set of computer languages and technology design principles to hopefully develop systems which link our countries to exchange information, solutions and money.

I understand that there are different standards to broadcast radio and television, different satellite transmission standards, different cell phone standards and even when technology is modernized to digital solutions, the use of different standards can determine whether the message is being sent and received correctly within the right time. I also read how the world is becoming more and more connected through undersea cable solutions. Within our countries, there are new fibre optic cables, but all of this without agreeing to standards is like building the most modern roads and still allowing people to travel on horseback when the other traffic may be super-performance vehicles. Both will reach the end destination but the advantages of using the new modern infrastructure will not be of benefit to us all.

So before I leave you to go back to school and my books, I must please ask you to see this world you are defining through the eyes of my generation. We are not afraid of technology, so the easier it becomes for us to access these technologies in rich and poor communities, the better it will become for us to work and learn together to make a difference to our future. Please help us get there through overcoming the barriers of standards.

Annex 3

Opening address to WTSA-08 Dr Hamadoun I. Touré, Secretary-General, ITU (21 October 2008) Johannesburg, South Africa

Honorable Minister Your Excellency Ivy Matsepe-Casaburri,

Excellencies, Ministers, Ambassadors,

Directors BR, TSB, and BDT,

Professor Marwala,

Chairman of ICASA, Mr Paris Mashile,

Ms Zia Maharaj,

Distinguished delegates,

Ladies and gentlemen,

Welcome to Johannesburg for the World Telecommunication Standardization Assembly (WTSA-08). This "rainbow" nation has inspired the continent and the world, not least because of its booming information and communication technology (ICT) sector. I would like to thank H.E. Minister Ivy Matsepe-Casaburri for the warm welcome and kind hospitality so legendary for this great African Nation. Hearing Zia Maharaj speaking gives me also assurance that, indeed, the future is bright. A future full of hope. We have just learned from her how the youth would like us to lay the ground for them to be able to evolve in the challenging environment they are in.

Johannesburg was also the venue of ITU TELECOM AFRICA 2001, hosted under President Thabo Mbeki. Three years earlier, at the invitation of President Nelson Mandela, ITU TELECOM AFRICA 1998 took place in the same city. President Mandela urged the world community to bridge the gap between the "information-rich" and the "information-poor".

A decade later, we have made the most extraordinary progress. Back at the beginning of 1998, there were one billion fixed and mobile subscribers worldwide, and just 182 million Internet users. By the beginning of this year, however, those numbers had mushroomed beyond all expectations – to reach 4.5 billion total telephone subscribers, and 1.34 billion Internet users. Within the next few weeks there will be over four billion mobile subscribers on the planet, and over 1.5 billion people will have access to the Internet.

Standardization has played a vital role in achieving this progress.

The information and communication technology (ICT) sector is characterized by its fast paced nature, innovation, competition, collaboration and change. And at the heart of all ICTs are standards.

World Telecommunication Standardization Assemblies enable ITU – as the pre-eminent global ICT standards body – to take stock of the global situation and adapt our work accordingly. Being here in Africa is also significant for me as an African. I welcome very much the opportunity to bring this key event to this great continent and address – head-on – one of the key goals of ITU, bridging the digital divide – in this case by bridging the standardization gap and bringing more participants from Africa and the rest of the developing world to our standards meetings.

Standardization is a complex business, and it is getting more complex by the day. But standards are essential for international communications and global trade. Globalization requires global standards, and a global standards body like ITU clearly has an increasing role to play. Global standards avoid costly market battles

over preferred technologies, and for companies from emerging markets, they create a level playing field that provides access to new markets. They are an essential aid to developing countries in building their infrastructure and encouraging economic development. They can reduce costs for all: manufacturers, operators and consumers, through economies of scale.

So, it is vital given the vast breadth of membership of ITU to regularly examine the ICT environment and understand best how to meet the challenges of the coming years and take into account the needs of all our members, whether Member State, Sector Member, developed or developing country.

In the past, ITU members have made admirable decisions ensuring that ITU's working processes are the most efficient available and that its work areas are the most important in order to meet the Union's mission – to connect the world.

I am proud of the strong resolve that ITU-T has shown in supporting this number one goal of ITU. Decisions made at the last WTSA have taken into account the commercial realities for our members, whether they hail from rich or poor countries, and have heralded a new era of communications – the so-called next-generation networks (NGN).

ITU-T has remained the preeminent global standards body for telecommunications (and now ICTs) throughout its history. The challenge is to make sure that it remains that way. I trust the WTSA decisions will be directed by the needs of the global community (such as addressing climate change) and this vision to connect the world.

To have maintained the level of credibility and importance that ITU has achieved over so many years is an incredible feat. In today's rich ICT environment it is even more remarkable. One of the recognized reasons for this is our ability to absorb and embrace the need for change. And this WTSA-08 presents us with more opportunities for change than we have seen in previous years.

ITU is the oldest organization of the United Nations system with its 143 years of cooperation. I am happy to report to you that the new management team have worked with me to make this organization more efficient and relevant by working on the "One ITU" concept around one theme "Connect the World".

I wish you a very successful Assembly. You have an important role to play in the preparations for an important new era.

Good luck, let's make this the start of a successful new period for ITU-T.

Annex 4

Address by Ms Lyndall Shope-Mafole Director General of the Department of Communications Republic of South Africa Chairman of WTSA-08 (21 October 2008) Johannesburg, South Africa

Mr Secretary-General of ITU, Dr Hamadoun Touré,

Director of TSB, Mr Malcolm Johnson,

Directors of the Development and Radiocommunication Sectors,

Honourable Ministers, Deputy Ministers and Heads of Delegation,

Distinguished delegates,

Thank you for this honour bestowed upon me. Thank you for the confidence. Its significance to me, my country, our continent, developing countries, women, and refugee children can, from my own experience, be life changing. It was such honours, bestowed upon people whose life experience I could relate to, that influenced my own life.

I also would like to thank my country for the trust in me to represent our people in ITU over the years. This is what allowed me to grow and be entrusted with such history-making responsibilities in the Union.

I would have failed in my status as a product of international solidarity if I did not use this opportunity to thank once again, and from South African soil, all the peoples of the world whom you represent here today. Your contribution to the struggle against apartheid for a democratic, non-racial and non-sexist South Africa has borne fruit. I hope that you can see the slow but firm strides we are making in that regard and that you can recognize your own contribution to making us who we are today with pride.

This being the first WTSA on African soil, we have shared thoughts with African colleagues on what legacy we would like this Assembly to leave in ITU. I will share these with you in the hope that, if not all, at least some of these can be realized.

Building new generations of the ITU family

The first is the need to strengthen the ITU family that we love so much. As in any family, this means that we, as ITU, need to pay even more attention to building new generations of the ITU family by involving even more young people in the activities of the Union. The ITU Youth Forum, whose establishment I am privileged to have co-initiated with Ms Walda Roseman, has grown into a well recognized activity. We now need to target and bring young students, who are today in our institutions of higher learning, into the core of ITU work, the Study Groups. This will not only bring new blood to this work, it will also make the research for thesis work done by these students more relevant to the real life challenges that we face as countries. We believe that this would, for example, link students in African institutions of learning with each other and with their peers elsewhere in the world, thus building networks and giving them important exposure.

We have invited students to WTSA-08 with a view to starting a students@theitu Forum, and trust that we can all think of creative ways to make this a reality. These students can then follow the work of Study Groups electronically. Our collective challenge is to equip them for this.

Passing on the ITU family tradition

The next is passing on the ITU family tradition. All families have traditions and cultures that they pass on from generation to generation. In Africa, this is a particularly important responsibility of all adults. The ITU family is a very close-knit and distinguishable family. Having been associated with this family personally since December 1992 at the Additional Plenipotentiary Conference in Geneva, I have come to know many people and have watched all of us mature gracefully over time.

In order to ensure that as younger generations come into this family, the best family traditions are not lost, and to ensure that the older generation shares its experience, we need to look at how we can informally institutionalize the preservation and sharing of this talent for the benefit of all Member States and Sector Members, especially those in developing countries. In this regard, we may look at a special voluntary fund to make such sharing of experience and expertise possible.

Supporting the involvement of more women persons with disability in ITU work

The number of female delegates and the responsibilities given to women has grown over the years in ITU. Today is a far cry from the early nineties when the number of women delegates was too few to count. Today, having a woman chair this august Assembly marks yet another milestone in our history for which we must congratulate ourselves. We should, however, continue to pay special attention to this important matter. In this regard, I would like to officially recognize the sponsors of what used to be the ITU Women's Breakfast and later became the Lunch. This has become an ITU tradition that I think is unique in the UN family. It is a very important networking and experience-sharing activity. On behalf of all women delegates who have benefitted from this, thank you.

Similarly, some progress has been made with regard to the involvement of persons with disability in ITU work and the attention paid by ITU to matters of ICTs and disability. The issue of universal design technologies, however, needs much more of our attention, and it is our hope that this Assembly will advance the work of ITU-T in this area.

Making ITU-T work visible

This Assembly will be discussing the visibility of ITU work. As we were preparing to host this Assembly, we tried to inform the South African general public about the work of ITU. We could explain the development work fairly easily. We could also explain the radiocommunication work with a bit more creativity, such as showing the resemblance of the radio-frequency spectrum to land as both are precious natural resources. The standardization work was not so easy to explain. This, we felt, was a pity because of the importance of this work to everything that is ICT. It is a pity that in almost all the gadgets that the public uses there is ITU-T sweat but this is not evident. It is for this reason that we think that the easy identification of the contribution of ITU to the industry though its standards-making work needs to be visible and recognizable. This is also important because it enables the contribution of the public, whose funds also contribute to the work of ITU, to be recognized.

An ITU family for all

When I attended my first ITU meeting in 1992 we were observers. Then, I never thought that a democratic South Africa would today, as a full and proper member of ITU, be hosting a WTSA, never mind chairing it.

It is therefore our sincere belief that today can bring hope. That today brings the day closer when all of us in this room will have that prestigious status of being a full and equal member of this ITU family. That it brings closer the day when, like in South Africa, all children of Israel and Palestine will benefit and contribute together to the work of ITU. We hope our unique story in this country will inspire all of us in that regard.

Thank you to all

With respect to passing the family tradition on to younger generations, I would like to take this opportunity to thank the many people who have been a source of inspiration and counsel. In particular, I would like, standing on South Africa soil, to pay special tribute to Mr Berada from Morrocco and Mr Nabil Kisrawi from Syria for their support and encouragement as I learnt the ropes of this very complex family. I am sorry that Mr Berada is not here with us but am very happy that Mr Kisrawi is. I know that we are not the only ones who have benefitted from their wisdom. I must confess though that the wisdom is not always so obvious or clear to see.

Finally, standards-making requires thoroughness, precision, accuracy, collaboration and it is very time sensitive. All this without compromising the beauty of the product. I hope that this is what will characterize our deliberations at WTSA-08 and their product.

Confident that you will, as always, give me your support in this important work, I thank you.

Annex 5

Address to the first Plenary of WTSA-08 Malcolm Johnson, Director of TSB, ITU (21 October 2008) Johannesburg, South Africa

Excellencies,

Madam Chairman,

Distinguished delegates,

Ladies and gentlemen,

I would like to add my welcome to this World Telecommunication Standardization Assembly 2008 (WTSA-08) and express my sincere thanks to the South African Government for having invited us to Johannesburg and providing us with such excellent facilities and hospitality.

We are very proud to be in Johannesburg for the first WTSA in Africa. It is indeed a wonderful opportunity to underline ITU's commitment to the region, and developing countries throughout the world, to push for equal opportunity for all in the development of information and communication technologies (ICT) standards.

I am also very happy to welcome and express my sincere thanks to Ms Lyndall Shope-Mafole, Director General of the South African Department of Communications, for agreeing to chair this Assembly. Lyndall is no stranger to ITU, having chaired ITU Council, the ITU Reform Group, and many other responsibilities at an international level... we are certainly in good hands.

Yesterday at the Global Standards Symposium (GSS) we saw yet again the importance of international standards underlined by global ICT leaders.

Standards for ICT underpin the Internet and the global telecommunication network. No call is made or message exchanged without the use of ITU standards. And visibility plays no small part in this achievement. We have spearheaded many initiatives to raise the profile of ITU in the public consciousness and I thank you all for your support in spreading the word of ITU and its core message to connect the world.

WTSA is our opportunity to ensure that ITU remains the world's pre-eminent standards body. It is our chance to streamline the structure of our standards work and make sure that it meets the demands of today's fast paced information society. ITU, as the only truly global standards organization, is in a strong and unique position and takes its responsibility in shaping this new period of ICT development very seriously.

The last WTSA saw an emphasis on next-generation networks (NGN), which remains high on our agenda today. Since 2004, many standards have been published enabling telecommunication companies around the world to transition smoothly to packet-based networks. The pioneering work of the Focus Group on IPTV has, in parallel, given these companies the attractive promise of IPTV to generate multiple revenue streams over the same core network. Indeed, IPTV is one of the most highly visible applications to emerge as part of work on NGN. It can be seen as both the business case and principal driver for accelerating deployment of NGN.

I hope you have had a chance to visit the exhibition area where you can see IPTV and other wonderful new technologies.

Also since 2004, we have seen increased focus on topics such as home networking, accessibility, ICTs and climate change, cybersecurity and emergency telecoms. But, as well as our work in these high profile areas, ITU's work in tariffs, numbering, copper and optical access, optical transport, audio and video coding is the bedrock on which all of our communications are built. It is impossible to pinpoint one single achievement or

even handful of achievements – roughly one standard is published every day, but ITU winning an Emmy award for its video coding standard Recommendation ITU-T H.264 was definitely a highpoint of the last study period, and I am pleased to have it on display here at the entrance to the conference centre.

With more and more initiatives to bring developing countries into the standardization process, we can say with a high degree of confidence that standards produced by ITU members truly connect the world.

WTSA-08 will define the next period of study for the standardization sector. Over the next ten days, we will determine the work programme for the next four years, establish the study groups to take the work forward, and appoint their leaders. I am very pleased to see so many proposals for ITU-T to start new and exciting work, and so many well qualified people willing to serve as chairmen or vice-chairmen.

As Director of ITU's Telecommunication Standardization Bureau, I can assure you that I and my staff are ready and keenly awaiting the challenge that a new study period will bring us and we will spare no effort in helping make this WTSA-08 a successful and enjoyable event.

I wish you all the best of luck.

1.2 – Report of fourth Plenary meeting

Chairman: Ms Lyndall Shope-Mafole (Republic of South Africa) (Friday, 24th October 2008, 1430 – 1530 hours)

1 Approval of the agenda

Plenary adopted the agenda (OJ/16).

2 Approval of the report of the inaugural ceremony and Plenary meetings 1 to 3

Plenary approved the report of the inaugural ceremony and Plenary meetings 1 to 3 (Document 128).

3 Oral progress reports by Committee / Working Group Chairmen

3.1 Committee 2 (Budget Control)

The Chairman of Committee 2, Mr Bruce Gracie, gave the oral report.

- 3.1.1 A report on ITU-T expenditure during 2005 to 2008 was presented in Committee 2, which also estimated the financial needs up to WTSA-12. Detailed comments were put forward on the report, in particular by the Russian Federation. The responses by the secretariat to those questions were included in a working document of Committee 2.
- 3.1.2 Two contributions were submitted by the Arab States and Brazil to Committee 2 regarding Resolution 34, "Voluntary Contributions". The modifications to Resolution 34 will be sent in a liaison statement to Working Group 2 of Plenary.
- 3.1.3 Committee 2 recommended to Plenary that Resolution 42 "Results-based Budgeting" be abrogated, as progress on this topic was well advanced in ITU and ITU-T.
- 3.1.4 Plenary duly noted the oral report.

3.2 Committee 3 (Working Methods of ITU-T)

The Chairman of Committee 3, Mr Brian Moore, gave the oral report.

- 3.2.1 Committee 3 set up various drafting groups as well as an ad hoc group on Resolution 1. The ad hoc group will progress work over the weekend. There is also editing work ongoing on Recommendation ITU-T A.1. Further drafting work over the weekend was likely to be set up in the afternoon session of Committee 3, following this Plenary.
- 3.2.2 The Chairman expected that Committee 3 would agree this afternoon on a number of Resolutions that could be forwarded to the Editorial Committee.
- 3.2.3 Plenary duly noted the oral report.

3.3 Committee 4 (Work Programme and Organization of ITU-T)

The Chairman of Committee 4, Mr Bob Horton, gave the oral report.

3.3.1 There is a proposal for a new Resolution "ICTs and Climate Change"; an ad hoc group will edit text for this Resolution over the weekend.

- 3.3.2 There is a proposal for a new Resolution on the study of the effects of human exposure to radio-frequencies; an ad hoc group will edit text for this Resolution over the weekend.
- 3.3.3 There is a proposal for a new Resolution on studies regarding nomadic telecommunication services and applications. Saudi Arabia is leading discussions. A revised text will be submitted on Monday.
- 3.3.4 Committee 4 also achieved significant progress regarding study group restructuring and agreed the following:
- Study Groups 2, 3, 5, 12, 13, 15, 16, 17 are maintained.
- The work of Study Groups 4 and 19 are exported to other study groups; Study Groups 4 and 19 would therefore be terminated.
- 3.3.5 An ad hoc group will meet over the weekend and discuss the future of Study Groups 6, 9 and 11. The options for these study groups are as follows:
- Study Group 6: (a) keep as a stand-alone study group and collocate with Study Group 15; (b) terminate and export the work to Study Groups 15 and 5.
- Study Group 9: (a) keep as a stand-alone study group with significant collocation; (b) merge with Study Group 16; (c) there are also proposals from Japan that could help to advance the negotiations.
- Study Group 11: (a) keep as a stand-alone study group with potential collocation; (b) merge with already merged Study Groups 13 and 19; (c) a proposal from Canada considers moving some of the language work into Study Group 11.
- 3.3.6 Plenary duly noted the oral report.

3.4 Working Group 1 of Plenary (Issues relevant to WSIS outcome related to ITU-T and the work of Study Groups)

The Chairman of Working Group 1 of Plenary, Mr Patrick Masambu, gave the oral report.

- 3.4.1 All documents were presented. Three formal ad hoc groups were established (Network Externality, Internet/WSIS, Numbering) and would work over the weekend. Another two informal groups will meet Friday night and on the weekend.
- 3.4.2 Plenary duly noted the oral report.

3.5 Working Group 2 of Plenary (Bridging the Standardization Gap)

The Chairman of Working Group 2 of Plenary, Mr Maurice Ghazal, gave the oral report.

- 3.5.1 Working Group 2 of Plenary created a drafting group on Resolution 17.
- 3.5.2 An entire session was dedicated to the ITU Mark. The TSB Director presented his Document 104, and three proposals for a draft Resolution were put forward. However, the issue was difficult, and a lot of work was left on this topic. The Chairman therefore requested further meetings for Working Group 2 to progress work on this and remaining topics.
- 3.5.3 Plenary duly noted the oral report.

3.6 Committee 5 (Editorial Committee)

The Chairman of Committee 5, Ms Marie-Thérèse Alajouanine, gave the oral report.

3.6.1 The Chairman pointed out several novelties for the Editorial Committee of this WTSA: (a) for the first time, the Editorial Committee will be working in the six official languages of the Union; previously, it

worked only in English, French and Spanish; (b) the vice-chairmen are all new to the Editorial Committee; (c) the estimated number of pages to be reviewed is significantly higher than at WTSA-04.

- 3.6.2 The Chairman pleaded that the Committees/Working Groups provide their text as soon as possible to the Editorial Committee.
- 3.6.3 Plenary noted the oral report.

4 Summary of meeting schedule

- 4.1 The secretariat reported on the decisions of the Steering Committee regarding the schedule of ad hoc group meetings over the weekend and the schedule of the following week.
- 4.2 The meeting schedule for the second week will stay as is, with one more meeting of Working Group 2 of Plenary added on Tuesday afternoon, 28 October. The exact time is yet to be determined in order to ensure that interpretation is available. The revised schedule will be published in DT2/rev3.
- 4.3 The meeting schedule of the ad hoc groups for the weekend was displayed. An information note in paper form with the schedule of these meetings was requested; it will be provided.
- 4.4 Canada proposed that an ad hoc group on the ITU Mark be established to progress work over the weekend. Plenary approved the creation of the ad hoc group under the chairmanship of Ghana, to meet on Sunday afternoon.

5 Any other business

- 5.1 The TSB Director, Mr Malcolm Johnson, thanked his fellow Directors from BR and BDT, Mr Valery Timofeev and Mr Sami Al Basheer Al Morshid, for attending the first week of WTSA-08 and for all the support they have given him throughout the week. Their attendance shows the very good spirit and collaboration among the three Bureaux and the effort everyone is putting into giving the image of *One ITU*.
- 5.2 The BR Director said that he was very much satisfied that references were made at WTSA-08 to the activities of the Radiocommunication Sector. Whereas, in previous times, effort was spent to define the borders between the R- and the T-Sector, today discussions centre on how to formulate joint activities, a step forward which was very much appreciated.
- 5.3 The BDT Director thanked South Africa for its hospitality and the spirit of cooperation. He said that he had felt very welcome. He reaffirmed that all work as a single team, as *One ITU*. He was pleased to see a continuing increase in the attendance of the developing world in the T-Sector, and he thanked the TSB Director for having achieved this.

1.3 – Report of fifth to eighth Plenary meetings and closing ceremony

Chairman: Ms Lyndall Shope-Mafole (Republic of South Africa) (Wednesday 29th October 2008, 0930 – 1230 hours and 1430 – 2030 hours; Thursday 30th October 2008, 0930 – 1230 hours and 1430 – 2125 hours)

1 Approval of the agenda

Plenary adopted the agendas (OJ/27, OJ28, OJ/29 and OJ/30).

2 Approval of report of Plenary meeting 4

Plenary **approved** the report of Plenary meeting 4 (Doc 145).

3 Consideration and approval of the report of Committee 5 (Editorial Committee)

Note 1 – The Editorial Committee may have fine-tuned some of the text which was agreed in Plenary and recorded in this report (see clause 3.25).

Note 2 – Annex D and Annex E contain a complete list of Resolutions and Recommendations approved by Plenary.

The Chairman of Committee 5, Ms Marie-Thérèse Alajouanine, presented the reports of Committee 5 (Doc. 138, 144, 149 and 163). The Chairman of Committee 5 pointed out that only very few texts were submitted to Committee 5. Furthermore, for some texts, versions differed for different languages, making it difficult to decide which version was the authoritative one. The more texts can be submitted here at WTSA the better. Still, the Editorial Committee will have a lot of work to do immediately after WTSA-08.

The Secretary-General also pleaded that maximum work be done at the Assembly instead of in Geneva; the ITU secretariat is ready and cannot be blamed for any delays if texts don't arrive.

The Chairman of the Assembly said that for South Africa, as a host country on the African continent, it was very important that the Assembly concluded properly, with the documents well done.

- 3.1 Plenary approved revised Resolution 32, "Strengthening electronic working methods for the work of ITU-T" (Doc. 149).
- 3.2 Plenary approved revised Resolution 33, "Guidelines for ITU-T strategic activities" (Doc. 149).
- 3.3 Plenary approved revised Resolution 47 "Country code top-level domain names" (Doc. 149).
- 3.4 Plenary approved new Resolution [S], "Misappropriation of international telecommunication numbering resources" (Doc. 149) with the following modifications:
- 3.4.1 The word "hijacking" is replaced everywhere by "misappropriation".
- 3.4.2 The two paragraphs "i" and "ii" under "recalling a)" are moved to "resolves to invite Member States".
- 3.4.3 In (formerly "ii", now part of "resolves"), insert the word "fraudulent" before "number" to read "to mitigate the adverse effects of fraudulent number misappropriation".
- 3.4.4 Delete "reaffirming that it is the sovereign right of each country to regulate its telecommunications" and add instead a "recognizing c) relevant provisions of ITU constitution and convention".
- 3.4.5 Replace "recognized operation agencies (ROA)" by "operating agencies authorized by Member States".
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- 3.5 Plenary approved revised Resolution 7, "Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC)" (Doc. 144).
- 3.6 Plenary approved revised Resolution 11, "Collaboration with the Postal Operations Council (POC) of the Universal Postal Union (UPU) in the study of services concerning both the postal and the telecommunication sectors" (Doc. 144) with the editorial change replacing "recognized operation agencies (ROA)" by "operating agencies authorized by Member States".
- 3.7 Plenary **approved revised Resolution 17, "Telecommunication standardization in relation to the interests of developing countries"** (Doc. 144) with the insertion of the word "flagship" before "groups" in the fourth bullet point under "instructs the Director of TSB": "encouraging and supporting the establishment and operation of flagship groups addressing the above questions;".
- 3.8 Plenary approved new Resolution [Nomadic], "Studies regarding nomadic telecommunication services and applications" (Doc. 144).
- 3.9 Plenary approved revised Recommendation ITU-T A.11, "Publication of ITU-T Recommendations and WTSA proceedings" (Doc. 144).
- 3.10 Plenary approved revised Recommendation ITU-T A.12, "Identification and layout of ITU-T Recommendations" (Doc. 144).
- 3.11 Plenary approved revised Recommendation ITU-T A.8, "Alternative approval process for new and revised Recommendations" (Doc. 138), with the following changes:
- 3.11.1 Clauses 3.6 and 3.7 in Doc. 138 are changed to the following:
 - "3.6 Recommendations are to be elaborated in accordance with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC available at http://www.itu.int/ITU-T/ipr/. For example:
 - 3.6.1 Any party participating in the work of ITU-T should, from the outset, draw the attention of the Director of TSB to any known patent or to any known pending patent application, either of their own or of other organizations. The "Patent Statement and Licensing Declaration" form from the ITU-T website is to be used.
 - 3.6.2 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 available at the ITU-T website."

The text in clause 3.6 is also to be used in Resolution 1.

- 3.11.2 In clause 7, Implementers' guides are "agreed" instead of "approved" (2x).
- 3.12 Plenary approved revised Recommendation ITU-T A.2, "Presentation of contributions relative to the study of Questions assigned to ITU-T" (Doc. 163). Syria requested that the following statement be included in this report: "Paper submission of proposals could be accepted by TSB if it comes from some developing countries unable to provide such contributions electronically." Plenary agreed with the statement.
- 3.13 Plenary approved revised Recommendation ITU-T A.7, "Focus Groups: Working methods and procedures" (Doc. 163). Syria requested that the following statement be included in this report: "Our approval of this Recommendation ITU-T A.7 is conditioned by the possibility by the Director in accordance with 5.11 of Resolution 1 to propose the creation of a focus group." Plenary agreed with the statement.
- 3.14 Plenary approved revised Resolution 22, "Authorization for TSAG to act between WTSAs" (Doc. 163) with the amendment under "resolves 4)" at the end: "... and nominate their chairman and vice-chairmen".
- 3.15 Plenary **approved revised Resolution 26, "Assistance to the regional tariff groups"** (Doc. 163). Syria, on behalf of the Arab Group, asked that the following statement be included in this report: "Traditionally the Assembly authorizes ITU-T Study Group 3 to establish the groups of the two regions

which do not yet have a tariff group and nominate their chairman and vice-chairmen." Plenary agreed with this statement.

- 3.16 Plenary approved revised Resolution 38 "Coordination among ITU-T, ITU-R and ITU-D for activities relating to IMT" (Doc. 163). The Editorial Committee will update the reference to Resolution 18 in "noting".
- 3.17 Plenary approved Resolution [EMF], "On the study of the effects of human exposure to radiofrequencies" (Doc. 163) with the modification that under "invites Member States and Sector Members", the sentence is terminated after "electromagnetic fields", i.e., the text "in frequency bands relevant to ICT deployment" is deleted.
- 3.18 Plenary **approved Resolution [ICTs&CC], "ICTs and climate change"** (Doc. 163) with the following modifications:
- 3.18.1 "Instructs TSAG 1" reads: "to review the results of the Focus Group on ICTs and Climate Change and take appropriate actions in accordance with Resolution 22, including, for example, the identification of possible structural mechanisms and a lead study group, and to progress the work on this topic by encouraging the involvement of all ITU-T study groups".
- 3.18.2 "Instructs TSAG 2" reads: "to ensure by requesting study groups to carry out a review of both the appropriate existing ITU-T Recommendations and all future Recommendations to assess their implications and the application of best practices in the light of climate change".
- 3.18.3 Instructs TSAG 3" reads: "to consider possible changes to working procedures in order to meet the objective of this resolution, including extending the use of electronic working methods to reduce the climate change impact, such as paperless meetings, virtual conferencing, teleworking, etc.".
- 3.18.4 The former "instructs the Director of TSB 2 to liaise with the ITU-R and ITU-D ..." is moved to "invites all ITU-T study groups" and becomes "4 to liaise with the relevant ITU-R and ITU-D study groups and promote liaison with other standards development organizations to avoid duplication of work and to optimize the use of resources".
- 3.18.5 "Instructs the Director of TSB ... to establish a calendar of events relevant to ICTs and climate change" is amended by the text "based on proposals by TSAG and in close collaboration with the other two sectors".
- 3.18.6 Under "Instructs the Director of TSB", swap the order of "seminars" and "workshops" to read: "to organize, in close collaboration with the Directors of BDT and BR, workshops and seminars for developing countries ...".
- 3.18.7 Delete under "instructs the Director of TSB" the entire paragraph "to inform TSAG about the implementation ..." and add instead a new item at the end: "to report to TSAG on the progress regarding *invites the Secretary-General* below".
- 3.18.9 Include "*invites the Secretary-General* 1" as follows: "to bring the content of this Resolution to the attention of the Council and invite them to study the issue of climate neutrality for all ITU activities and take appropriate actions, taking into consideration the United Nations commitment to lead by example achieving climate-neutral status within 3 years."
- 3.18.9 Syria asked that the following statement be included in the report: "The Arab States proposed to this assembly that Study Group 5 should be the lead study group on climate change and proposed also to transfer Question 6A from Study Group 6 to Study Group 5."

The texts in Doc. 173 and Doc. 174 were sent to the Editorial Committee but could not be reviewed by it:

3.19 Plenary **approved revised Resolution 54, "Creation of regional groups"** (Doc. 173) with the following modifications:

- 3.19.1 "resolves" reads as follows: "resolves to support within available or otherwise contributed resources on a case-by-case basis the creation of regional groups", i.e., the text starting with "bearing in mind ..." including all three bullet points is suppressed.
- 3.19.2 The text in square brackets under "invites the regions 1", namely "[and be consistent with a balanced budget and instructions from the Plenipotentiary Conference.]", is suppressed.
- 3.19.3 "instructs the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau" is amended by "within available resources", and in the second bullet point the word "necessary" is kept and "possible" deleted.
- 3.20 Plenary approved new Resolution [C], "Role of vice-chairmen of developing countries elected for TSAG and ITU-T study groups" (Doc. 173), with the following modifications:
- 3.20.1 The title is changed to the above title.
- 3.20.2 As only TSAG vice-chairmen but not the vice-chairmen of study groups are elected based on a regional representation, the text in "noting b)" was modified to read "that TSAG Vice-chairmen who are elected on a regional representation as well as other study group vice-chairmen from developing countries can be charged ..."
- 3.20.3 Resolves 1) reads "that all vice-chairmen from developing countries are charged with ..."
- 3.20.4 Under resolves 1), the bullet point "ii) Make activity reports to the regional countries on especially standardisation activities" is deleted.
- 3.20.5 The point under "invites the Director ...", i.e., "to assist in institutionalizing ...", becomes the 3^{rd} item under "instructs the Director ..."
- 3.21 Plenary approved revised Resolution 45, "Effective coordination of standardization work across study groups in ITU-T and the role of TSAG" (Doc. 174).
- 3.22 Plenary approved revised Resolution 55, "Mainstreaming gender in ITU-T activities" (Doc. 174).
- 3.23 Plenary approved new Resolution [GG], "The Creation of Technology Watch Function (T.W.F.) in TSB" (Doc. 174).
- 3.24 Plenary approved new Resolution [JJ], "The implementation of Resolution 122 (Rev. Antalya, 2006) 'The evolving role of the World Telecommunication Standardization Assembly' " (Doc. 174).
- 3.25 The Chairman of Committee 5 requested that an additional meeting of the Editorial Committee take place in Geneva in the week following WTSA-08 to complete the work. Plenary **approved** the request.
- 3.26 The following points noted by Plenary will be taken into account by the Editorial Committee:
- 3.26.1 The term "developing countries" is used in a generic sense and includes the least developed countries, small island developing states and countries with economies in transition.
- 3.26.2 "recognized operating agencies (ROA)" needs to be replaced by "operating agencies authorized by Member States".

4 Consideration and approval of the report of Committee 2 (Budget Control)

The Chairman of Committee 2, Mr Bruce Gracie, presented the report (Doc. 169).

4.1 Syria requested that the report of Plenary include that the savings from reducing the number of study groups from 13 to 10 have not yet been taken into account.

- 4.2 Syria requested that the report of plenary include that the TSB Director update Doc. 169 for Council 2008, in particular the table on page 5, "Potential Financial Implications Preliminary Expenditure Estimates".
- 4.3 Plenary approved to delete Resolution 42 "Implementation of results-based budgeting Impact on planning in ITU-T".
- 4.4 Plenary **approved** the report of Committee 2.
- 5 Consideration and approval of the report of Committee 3 (Working Methods of ITU-T)

The Chairman of Committee 3, Mr Brian Moore, presented the report (Doc. 155 and Doc. 155 Corrigendum 1).

Plenary approved revised Resolution 35, "Appointment and maximum term of office for chairmen and vice-chairmen of ITU-T Study Groups and of the Telecommunication Standardization Advisory Group (TSAG)" (Doc. 157). The Arab States, the Islamic Republic of Iran, Nigeria and South Africa requested that the following statement be included in the report of Plenary, taken from Doc. 155 and Doc. 155 Corrigendum 1, clause 3.1.13:

"In discussing the revision of this Resolution in relation to the Arab proposal contained in Add.9 to document 47, after heavy discussion, it was agreed that the thrust of the proposal be included in the minutes of the Assembly along the lines of the following:

In preparing the above-mentioned draft list, the number of proposed chairmen should be normally limited to one per Member State, except in certain circumstances in which that number may be increased, as appropriate."

- 5.2 Plenary approved revised Resolution 40, "Regulatory aspects of ITU-T work" (Doc. 157).
- 5.3 Plenary approved new Resolution [E], "Strengthening coordination and cooperation among ITU-R, ITU-T and ITU-D on matters of mutual interest" as given in Doc. 160 (superseding the text in Doc. 157).
- 5.4 Plenary approved to maintain unchanged Resolution 18, "Principles and procedures for the allocation of work to, and coordination between, the Radiocommunication and Telecommunication Standardization Sectors".
- Plenary approved new Resolution [NN], "Admission of Academia, Universities and associated research establishments to participate in the work of ITU-T" as given in Doc. 161 (superseding the text in Doc. 157), with the additional change under "resolves to instruct the Director of the Telecommunication Standardization Bureau 2" to change "to request Council" into "to invite Council", and to be all-inclusive at the end of the paragraph (developing countries, particularly of least developed countries, countries with economies in transition and small island developing states).
- Plenary approved revised Resolution 31, "Admission of entities or organizations to participate as Associates in the work of ITU-T" (Doc. 138), with the suppression of "recognizing a) and b)" and the editorial change in "(new) recognizing a)" (= old "recognizing c)) regarding the phrase on developing countries.
- 5.7 Plenary approved new Resolution [Y+F], "Admission of Sector Members from developing countries in the work of the ITU-T" (Doc. 170).
- 5.8 Plenary approved new Resolution [II], "Creation of a Standardization Committee for Vocabulary (SCV)" (Doc. 47, Add. 39).

- 5.9 Plenary approved to maintain unchanged Recommendation ITU-T A.4 "Communication process between ITU-T and Forums and Consortia".
- 5.10 Plenary approved to maintain unchanged Recommendation ITU-T A.5 "Generic procedures for including references to documents of other organizations in ITU-T Recommendations".
- 5.11 Plenary approved to maintain unchanged Recommendation ITU-T A.6 "Cooperation and exchange of information between ITU-T and national and regional standards development organizations".
- 5.12 Plenary approved to maintain unchanged Recommendation ITU-T A.13 "Supplements to ITU-T Recommendations".
- 5.13 Plenary approved to maintain unchanged Recommendation ITU-T A.23 "Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology".
- 5.14 Plenary approved new Recommendation ITU-T A.31, "Guidelines and coordination requirements for the organization of ITU-T seminars and workshops" (Doc. 30, Annex G).
- 5.15 Plenary **approved revised Resolution 53, "Establishment of a workshop and seminar coordination group"** as given in Doc. 181 (superseding the text given in Doc. 157).
- 5.16 Plenary approved new Resolution [MM], "Telecommunication/ICT accessibility for persons with disabilities" (Doc. 170 and Doc. 170, Corrigendum 1) with the following modifications:
- 5.16.1 "resolves 3" is deleted (Doc. 170, Doc. 170 Corr. 1).
- 5.16.2 In "invites the TSB Director 3", ITU-R is replaced by BR and ITU-D by BDT.
- 5.16.3 A new "instructs TSAG" is added: "to revise *The Guide for ITU Study Groups Considering enduser needs in developing Recommendations* and relevant guidelines for end-user needs in order to specifically include the needs of persons with disabilities and to update this guide on a regular basis, based on the contributions from Member States and Sector Members as well as the ITU-T study groups, as appropriate."
- 5.17 Plenary approved revised Resolution 1, "Rules of procedure of the ITU Telecommunication Standardization Sector (ITU-T)" (Doc. 156) with the following modifications:
- 5.17.1 Under "considering a)", reference to Article 20 of the ITU Convention is added: "... and Articles 13, 14, 14A, 15 and 20 of the ITU Convention."
- 5.17.2 The square brackets under "resolves" on page 2 are removed and the text "and in the resolutions to which they refer" stays.
- 5.17.3 The text on top of page 5, "The Plenary meeting of WTSA may set up committees to consider matters referred to the Assembly", is removed
- 5.17.4 In clause 4.4, instead of "specified/specific period" the text "specified period" is used.
- 5.17.5 In clause 5.4, the Editorial Committee may substitute "Standards Developing Organizations" instead of "standards bodies."
- 5.17.6 Clause "7.1 Development of Questions" reads as follows: "The methods for developing a draft Question for approval and inclusion in the work programmes of ITU-T are preferably:
- a) processing through a study group and TSAG;
- b) processing through a study group and further 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 where urgent treatment is justified;

- or submission through WTSA (see 7.1.10)."
- 5.17.7 Clause 7.1.10 reads: "If, despite the above provisions, a Member State or Sector Member proposes a Question directly to a WTSA, the latter either approves the Question or invites the Member State or Sector Member to submit the proposed Question to the next meeting of the appropriate study group(s)."
- 5.17.8 In clause 7.1.11, the Editorial Committee needs to use the agreed language for "developing countries".
- 5.17.9 The square brackets in 7.3.3 are removed and the text reads as follows: "The proposed Questions may be approved by WTSA in accordance with the General Rules."
- 5.17.10 In clause 7.4.2, "Deletion of a Question by WTSA", the last sentence "WTSA may approve the request" is replaced by "WTSA will decide as appropriate."
- 5.17.11 Syria, on behalf of the Arab States, withdrew the square-bracketed text of clause 7.5 in Doc. 156 which suggested that study groups shall commence studies without a specific Question, but requested that the following statement be included in the report: "As regards the work of study groups implementing Resolutions adopted by WTSA, we expect that the work will start immediately after the Assembly; the formulation of Questions should not delay the start of this work. The Arab States will raise this issue, if possible, at the next Plenipotentiary Conference requesting to treat the Standardization Sector equally to the Radiocommunication Sector and the Development Sector regarding their ouputs and instructions to the study groups."
- 5.17.12 In 9.1.2, the following text is deleted: "[The study group may also decide to initiate the accelerated procedure for simultaneous adoption and approval of Recommendations by correspondence (see 9.4bis)]".
- 5.17.13 In 9.1.3, the following text is deleted: "[by correspondence]".
- 5.17.14 In clause 9.3.8 and 9.3.9, the same text on Common Patent Policy as was inserted in 3.6 (including 3.6.1 and 3.6.2) in Recommendation ITU-T A.8 needs to be inserted.
- 5.17.15 Regarding the proposed text in square brackets "9.4bis Procedure for simultaneous adoption and approval by correspondence", a fast-track approval process for TAP suggested by the Russian Federation, the following compromise was accepted: the text in square brackets of 9.4bis is deleted, including the corresponding figure, and the following text inserted in this report: "This procedure (= 9.4bis, i.e., an accelerated TAP process) is annexed to the report of this session of plenary, inviting TSAG to further explore the matter with a view to its potential use for approval of ITU-T Recommendations. In this connection, following examination by TSAG, the procedure may be used by relevant study groups on a trial basis to examine its efficiencies and effectiveness in further accelerating the approval process. TSAG is further instructed to report on the matter to the next WTSA in 2012 (see Annex A)".
- 5.17.16 The formulation "Implementers' guides are agreed" instead of "approved" is to be used. Therefore, clause 9.7 reads "Implementers' guides shall be agreed by the study group ...". Also, the word "existing" is inserted: "... or agreed by one of its existing working parties ...".
- 5.18 Plenary approved revised Recommendation ITU-T A.1, "Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)" (Doc. 158), with the following modifications:
- 5.18.1 As the agreed nomenclature is that Implementers' guides are agreed instead of approved, in clause 1.7.8 the word "approval" needs to be replaced by "agreement".
- 5.18.2 The square brackets in Section 2.2 on "Joint coordination activities (JCAs)" are removed and the text is kept. TSAG is empowered to change Section 2.2 at its next meeting.
- 5.19 Plenary **approved** the report of Committee 3.

6 Consideration and approval of the report of Committee 4 (Work Programme and Organization of ITU-T)

The Chairman of Committee 4, Mr Bob Horton, presented the report (Doc. 172, Doc. 172 Corrigendum 1).

- Plenary approved the study group structure together with the inter-study group coordination measures (Doc. 172, §2.3.2). The Chairman of Committee 4 corrected the following:
- 6.1.1 The "** Note" needs to read: "** Note: Blocks 6A, 6B and 6C merged into Study Group 15 will be fine-tuned at the first meeting of the study group.
- 6.1.2 The last bullet point in §2.3.2, "The chairmen of Study Groups 9 and 12", needs to read: "Concerning Questions B/9 and M/9, the chairmen of Study Groups 9 and 12 are to ensure that work of these Questions is well coordinated with work of Study Group 12 and that experts do not have an excessive number of meetings to attend."
- Plenary **approved** the text of the Questions proposed by the Study Groups found in Docs 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, and 26 together with revised Question P/13 proposed by TSAG in Annex D.10 of Doc. 31 (Doc. 172, §2.3.1).
- Plenary **approved** to forward the six proposals of draft new Questions or amendments to Questions listed in Doc. 172 §2.3.4 and Doc. 172 Corrigendum 1 to the respective study groups for their further consideration on the inclusion of these work items in their study programme.
- Plenary **approved** to request Study Groups 11 and 13 at their next collocated meeting to jointly review the proposal to move Question K/13 (Q14/13) to Study Group 11 found in document 91.
- 6.5 Plenary **approved** that the decision of which group be designated as Lead Study Group for ICT and climate change issues be deferred to TSAG at its first meeting, whence the Focus Group on ICTs and Climate Change has concluded its studies (§2.3.7).
- 6.6 Plenary **approved** to defer to TSAG the decision on whether Question A/6 should be moved to SG 5 (§2.3.8).
- 6.7 Plenary **approved** to terminate the Intersector Coordination Group on Satellite Matters (§2.3.9).
- 6.8 Plenary **approved revised Resolution 2, "Study group responsibility and mandates"** (Doc. 159), with the following amendment(s):
- 6.8.1 A "recognizing the Resolutions adopted by this Assembly which implies many instructions and implications of the work of the relevant study groups" is added.
- 6.8.2 In Annex A, Part 1, Study Group 2, the second bullet point is amended as follows: "numbering, naming, addressing and identification requirements and resource assignment including criteria and procedures for reservation and assignment and reclamation".
- 6.8.3 In Annex A, Part 1, Study Group 3, the first sentence "Responsible for studies relating to tariff and accounting ..." is amended as follows: Responsible, among others, for studies relating to tariff and accounting ..."
- 6.8.4 In Annex A, Part 2, the following amendments were made:
 - SG 5: Lead study group on EMC (Electromagnetic Compatibility) / EME (Electromagnetic Effects)
 - SG 11: Lead study group on test specifications
 - SG 15: Lead study group on optical transport
- 6.8.5 In Annex B, Study Group 16, add a new bullet point at the end: "studies on appropriate character sets, especially for non-Latin scripts and languages." This activity is related to Resolution 48, "Internationalized (multilingual) domain names."

- 6.9 Plenary **approved** that TSB audit Annex C of Resolution 2 and make factually correct changes, if any (§3.1).
- 6.10 Syria requested that the following statement be included in this report: "The Arab States proposed that SG 11 be the lead study group on performance testing."
- 6.11 Egypt requested that the following statement be included in this report: "In approving Questions of Study Groups by WTSA-08, and in line with Resolution 1 as revised by this Assembly, relevant study groups will also work on those areas and topics referred to them by relevant resolutions of this assembly, on the same level of priority of these Questions outlined in Annex A of Resolution 2 of this Assembly."
- 6.12 Plenary **approved** the report of Committee 4.

7 Consideration and approval of the report of Working Group 2 of Plenary (Bridging the Standardization Gap)

The Chairman of Working Group 2 of Plenary, Mr Maurice Ghazal, presented the report (Doc. 147).

- 7.1 Plenary approved new Resolution [I&I Testing] "Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme" (Doc. 162) with the following modifications:
- 7.1.1 The square brackets are removed from the title, and the title stays as is.
- 7.1.2 "recognizing b)" reads as follows: "that conformity assessment is the accepted way of demonstrating that a product adheres to an international standard ..."
- 7.1.3 The square brackets under "recognizing j)" are removed, i.e., the text stays.
- 7.1.4 The square brackets of "resolves 1" are removed but with "/ICT" removed (subsequent statements under "resolves" are therefore renumbered).
- 7.1.5 The square brackets in "instructs the Director ... 3" and "instructs the Director ... 4" are removed; the text "for possible future ITU-T Mark program" is kept.
- 7.1.6 The square brackets including the text "[without necessarily the need to develop relevant Questions to do so]" are removed under "instructs the study groups"
- 7.2 Plenary approved new Resolution [L], "Creation of regional Computer Incident Response Teams (CIRTs) for Developing countries" (Doc. 166) with the following modifications:
- 7.2.1 Note by the Chairman of Working Group 2: The term "CERT" (Computer Emergency Response Team), originally used in the Resolution, is a trademark. The title of the Resolution was therefore changed to the above title.
- 7.2.2 A new "recognizing d) the work carried out by ITU-D Question 21 of Study Group 1" is added.
- 7.3 Plenary approved new Resolution [N], "Enhancing participation of telecommunication operators from developing countries" (Doc. 167) with the following changes:
- 7.3.1 The title has been grammatically corrected.
- 7.3.2 "Noting a)" is deleted.
- 7.3.3 "Noting b)" becomes "recognizing a)", with "these countries" replaced by "developing countries"
- 7.3.4 "resolves to instruct the TSB Director" instead of "instructs the TSB Director".
- 7.4 Plenary **approved revised Resolution 34, "Voluntary Contributions"** (Doc. 178).
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- 7.5 Plenary **approved revised Resolution 43, "Regional preparations for WTSAs"** (Doc. 165), with the modification "invites the Secretary-General ..." instead of "requests the Secretary General ..."
- 7.6 Plenary approved revised Resolution 44, "Bridging the standardization gap between developing and developed countries" (Doc. 168) with the following changes:
- 7.6.1 In recognizing b), instead of "that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) cover standards and technical recommendations, technical regulations, conformity assessment technical matters and matters having policy or regulatory implications", the following text is to be used: "that the tasks undertaken in the ITU Telecommunication Standardization Sector (ITU-T) cover recommendations, conformity assessment and matters having policy or regulatory implications".
- 7.6.2 The last bullet point under "Programme 3" (starting with "promoting assistance ...") in the Annex is deleted as it is referenced in Resolution [I&I Testing].
- 7.6.3 "outcome of the relevant Global Standardization Symposium" is replaced by "conclusions of the relevant Global Standardization Symposium".
- 7.7 Plenary **approved** the report of Working Group 2 of the Plenary.

8 Consideration and approval of the report of Working Group 1 of Plenary (Issues relevant to WSIS outcome related to ITU-T and the work of Study Groups)

The Chairman of Working Group 1 of Plenary, Mr Patrick Masambu, presented the report (Doc. 175).

- 8.1 Plenary approved revised Resolution 20, "Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources" (Doc. 154) with the following modifications:
- 8.1.1 "resolves to instruct" instead of "instructs".
- 8.1.2 The last paragraph under "resolves to instruct 1)" reads as follows: "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, and those to be adopted with respect to identification".
- 8.2 Plenary approved revised Resolution 29, "Alternative calling procedures on international telecommunication networks" (Doc. 154), with the editorial change referring to ROA.
- 8.3 Plenary **approved revised Resolution 49, "ENUM"** (Doc. 154) with the editorial change "resolves to instruct Study Group 2 ..." instead of "instructs Study Group 2 ...".
- 8.4 Plenary **approved revised Resolution 50, "Cybersecurity"** (Doc. 154).
- 8.5 Plenary **approved revised Resolution 52 "Countering and combating spam"** (Doc. 154), with the following modifications:
- 8.5.1 The title was changed to the above title.
- 8.5.2 "resolves to instruct ..." instead of "instructs" (combination of 51 and 52).
- 8.5.3 Include "Associates" to read "invites Member States, Sector Members and Associates to contribute to this work, ..."
- 8.6 Plenary approved new Resolution [R], "Responding to the challenges of the evolution of the numbering system and its convergence with IP based systems" (Doc. 164), with the editorial change "resolves to instruct Study Group 2 ..." instead of "instructs Study Group 2 ..."

- 8.7 Plenary approved revised Resolution 48, "Internationalized (multilingual) domain names" (Doc. 164).
- 8.8 Plenary approved new Resolution [DD], "Calling party number delivery" (Doc. 164).
- 8.9 Plenary approved new Resolution [WSIS], "ITU-T's contribution in implementing the outcomes of the World Summit on the Information Society, and the establishment of a dedicated group on Internet-related public policy issues as an integral part of the Council Working Group on World Summit on the Information Society" (Doc. 164), with the following editorials:
- 8.9.1 Insert "the" in the title before "Information Society" and in the first line of "considering b)" before "implementation".
- 8.9.2 In "considering further b)", move the word "by" after (i).
- 8.10 Plenary **approved new Resolution [U], "Dispute Settlement"** (Doc. 164, Add. 1) with the following modifications:
- 8.10.1 "resolves to instruct ITU-T Study Group 3" instead of "instructs ITU.
- 8.10.2 Under "invites Member States", delete item 3: "to take any other steps which would further expansion of the Internet in developing countries".
- 8.11 Plenary approved new Resolution [CC], "IP address allocation and encouraging the deployment of IPv6" (Doc. 164, Add. 1), with the following modifications:
- 8.11.1 In "instructs the Director ... 3)", delete the words "involved in the assignment, allocation, and management of IPv6 addresses".
- 8.11.2 In "instructs the Director of the Telecommunication Standardization Bureau in close collaboration with the Director of BDT", delete 4) and insert a new "further instructs the Director of the Telecommunication Standardization Bureau to study the question of IPv6 address allocation and registration for interested members and, especially, developing countries and report to the 2009 session of the ITU Council."
- 8.11.3 Plenary approved new Resolution [KK], "Non-discriminatory access and use of Internet resources" (Doc. 164, Add. 2).
- 8.12 Plenary approved to delete Resolution 46 "ITU-T activities in support of the World Summit on the Information Society"; it was replaced by the new Resolution [WSIS].
- 8.13 Plenary **approved to delete Resolution 51 "Combating spam"**; it was merged into Resolution 52.
- 8.14 Plenary **approved revised Recommendations ITU-T D.50 "International Internet Connectivity"** (Doc. 164, Add. 1) with the following modifications:
- 8.14.1 Square brackets under "recognizing c)" are removed; text stays.
- 8.14.2 Delete "noting c) that the concept of network externalities may apply to international Internet interconnections between developed and developing countries; and"
- 8.14.3 The square brackets under "recommends 2)" are removed, and the text "that the General Considerations in Annex 1 should be used to accelerate the objectives of the Tunis Agenda number 50" stays.
- 8.14.4 Greece removes its name from the footnote. *Subsequent note:* the United States also removed its name from the footnote; the footnote is therefore removed.
- 8.14.5 China keeps its reservation on Appendix I of D.50.

- 8.15 Draft Recommendation ITU-T D.156, "Network externalities" and draft Resolution [O], "Apportionment of revenues in providing international telecommunication services" (Doc. 164, Add. 3) were the subject of intense debate. Doc. 164, Add. 3 was not an agreed output of the working group but a document produced by the Chairman of Working Group 1 with the intent of facilitating the work of the Assembly. The Chairman of Working Group 1 proposed three options:
 - 1. Approve D.156, and, possibly, new Resolution [O];
 - 2. Approve only new Resolution [O], but not D.156;
 - 3. Approve new Resolution [O], which specifies a fixed timeline resulting in approval of D.156.

All three options were presented in the single document Doc. 164, Add. 3.

After intensive discussion during which the United Kingdom, on behalf of CEPT, called for a vote but then, following offline discussions with delegates and the TSB Director, and following a proposal by the Secretary-General, withdrew its call for a vote, Plenary approved Recommendation ITU-T D.156 as given in Doc. 164, Add. 3, Annex II and as worked on during this Assembly. In addition, the items for study which appear in Annex I of draft Resolution [O] were approved to be made into an Appendix of ITU-T D.156. The draft Resolution [O] is suppressed.

The following countries expressed a reservation with respect to the thus approved ITU-T D.156, either during Plenary or afterwards: Argentina, Australia, Austria, Canada, Czech Republic, Finland, France, Germany, Greece, Italy, Japan, Liechtenstein, Lithuania, Netherlands, Mexico, Norway, Paraguay, Poland, Portugal, Russian Federation, Serbia, Spain, Switzerland, Thailand, Turkey, United Kingdom, Uruguay, United States.

8.16 Plenary **approved** the report of Committee Working Group 1 of Plenary.

9 Appointment of Chairmen and Vice-Chairmen of study groups, TSAG, regional tariff groups, and other groups

Plenary appointed the Chairmen and Vice-Chairmen for the Study Period starting 31 October 2008-2012 as proposed by the Heads of Delegations in Doc. 176.

For the TAF group, two chairmen are listed. The understanding is that Mr Modibo Traore (Mali) chairs the TAF group the first two years and Mr Abossé Akue-Kpakpo (Togo) the next two years.

Subsequent to the Heads of Delegation meeting, the candidature of Mr Fodé Soumah as Vice-chairman of Study Group 16 was received. Plenary approved Mr Soumah as Vice-chairman.

In addition, Plenary approved for the Standardization Committee for Vocabulary (SCV) Mr Nabil Kisrawi (Syria) as chairman and the following vice-chairmen: Ms Marie-Thérèse Alajouanine (France), Ms Marta Serrano (Spain), Mr Ahmad M. Khawaldeh (Jordan), Mr Oleg Viktorovich Mironnikov (Russian Federation), Mr James Ennis (United States), Ms Weiling Xu (China).

The Heads of Delegation committed that their candidate chairmen and vice-chairmen would be provided with the necessary resources to fulfil the duties of their office for the full four-year term. It was recognized that the chairmen and vice-chairmen will not receive financial assistance from ITU

The TSB Director announced a two-day gathering with chairmen and vice-chairmen in Geneva on 15-16 December 2008 to prepare for the new study period.

10 Launch of digital TV in South Africa

In a ceremony during lunch on Thursday 30 October 2008 in the presence of the Minister of Communications, Dr Ivy Matsepe-Casaburri, South Africa entered a new era in terrestrial broadcasting as its

digital signal was switched on for the first time, marking the start of a total migration from analogue to digital.

11 Closing

The Director of the Telecommunication Standardization Bureau delivered the address reproduced in Annex B.

The Secretary-General delivered the address reproduced in Annex C and presented the Chairman of the Assembly, Ms Lyndall Shope-Mafole, with the silver medal of the Union, to be turned into a gold medal as soon as ITU has received it.

The Chairman of the Assembly, Ms Lyndall Shope-Mafole, expressed thanks for the very kind words and the confidence that the Assembly had put in her. Ms Shope-Mafole expressed her gratitude to the Minister of Communications of South Africa, all the delegates, the support staff from both South Africa and ITU, and all the families of those present at the Assembly.

The Chairman declared the World Telecommunication Standardization Assembly in Johannesburg, 2008, closed at 2125 hours.

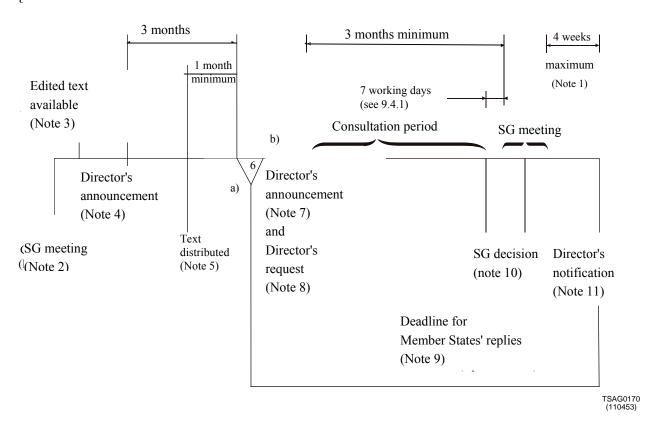
Annex A

[9.4bis Procedure for simultaneous adoption and approval by correspondence

- **9.4bis.1** After a study group meeting decides to carry out consultations with Member States according to the procedure under 9.3.1 above, it may also decide as a first step to submit the draft new or revised Recommendation for simultaneous adoption and approval by correspondence, if there is no objection by any Member State attending the meeting. See Figure 9.2 for the sequence of events.
- **9.4bis.2** In this case, the Director shall circulate the draft new or revised Recommendation, together with the summary, to all Member States and Sector Members.
- **9.4bis.3** 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).
- **9.4bis.4** The period for consideration shall be three months beginning with the date of the Director's announcement of the intention to apply the procedure for simultaneous adoption and approval by correspondence.
- **9.4bis.5** The text of the draft new or revised Recommendation must have been distributed in the official languages at least one month prior to the end of the period for consideration.
- **9.4bis.6** If, within this period for consideration, no objection is received from a Member State, the draft new or revised Recommendation shall be considered to be adopted by the study group. Since the procedure has been followed, such adoption is considered to constitute approval and the procedure for approval in 9.4, 9.5 and 9.6.1 is unnecessary.
- **9.4bis.7** The Director shall notify by circular that the text is approved, and shall arrange that this information is also included in the next available ITU Notification. The Director shall also ensure that this approved Recommendation is available online, with an indication that the Recommendation may not be in its final publication form.

9.4bis.8 If, within this period for consideration, an objection to the draft text or a request to follow the procedure in 9.4 above is received from any Member State, the draft new or revised Recommendation shall be considered as not adopted and the Director shall promptly notify, by circular letter, this result. The procedure laid down in 9.4 and 9.5 shall be followed.]

[...



- 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 The study group meeting takes the decision from the outset to send the draft new or revised Recommendation for simultaneous adoption and approval by correspondence (9.4bis.1).
- NOTE 3 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 language (9.3.3). Any associated electronic material included in the Recommendation must also be made available to TSB at the same time.
- NOTE 4 DIRECTOR'S ANNOUNCEMENT: The Director announces the intention to seek approval of the draft Recommendation under the procedure for simultaneous adoption and approval by correspondence (9.4bis.2)
- NOTE 5 TEXT DISTRIBUTED: Text of the draft Recommendation must have been distributed in the official languages at least one month prior to the end of the period for consideration. (9.4bis.5)
- NOTE 6 Result of the consideration by correspondence:
- a) If, within this period for consideration, no objection is received from a Member State, the draft new or revised Recommendation shall be considered to be adopted by the study group. Since the procedure has been followed, such adoption is considered to constitute approval and the procedure for approval in 9.4, 9.5 and 9.6.1 is unnecessary. (9.4bis.6)
- b) If, within this period for consideration, an objection to the draft text or a request to follow the procedure in 9.4 above is received from any Member State, the draft new or revised Recommendation shall be considered as not adopted and the Director shall promptly notify, by circular letter, this result. The procedure laid down in 9.4 and 9.5 shall be followed. (9.4bis.7)
- NOTE 7 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 8 – 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 9 – 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 10 – 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 11 – DIRECTOR'S NOTIFICATION: The Director notifies whether the draft Recommendation is approved or not.]

Figure 9.2 – Approval of new and revised Recommendations using PSAA – Sequence of events]

Annex B

Address by the Director of the Telecommunication Standardization Bureau WTSA-08 Closing Ceremony (30 October 2008) Malcolm Johnson

Madam Chairman,

Mr Secretary-General,

Mr Deputy Secretary-General,

Distinguished Delegates,

Ladies and Gentlemen,

After ten days of hard work and intense deliberation, WTSA-08 is finally at an end.

I wish to express not just my own personal appreciation but also the appreciation of the entire ITU management for the huge amount of effort that all of you have put into setting into stone the Resolutions and study group structure that will guide us through the next four years and beyond.

The restructure that we have achieved here will serve to streamline our work and give more efficient focus to key areas. I believe we have been given a very solid foundation to take us into the future.

This was my first WTSA as Director. It was a first for Africa, the first preceded by a global standards symposium, the first chaired by a woman and the first in which special accommodation was made for academia.

WTSA-08 saw the highest level of participation ever, with 768 participants from 99 countries in attendance. That compares to 484 participants from 72 countries at the last Assembly. We have been honoured by the presence of 13 ministers or deputy ministers compared to just one in 2004... and VIPs spanning the world and the entire telecommunication and ICT industry. This is a sure sign of the growing interest in the work of the ITU-T Sector.

We were reminded of the importance and impact of our work on the new generation with the charming speech of Zia Maharaj, and Tabiso showed us how ICTs can completely change a person's life during the wonderful gala dinner. I am sure we will enjoy looking back at the photos of that event, which we have uploaded onto our website.

During WTSA-08, eighty groups were established – committees, working groups, ad hoc groups, etc. They have worked through over 350 documents, often into the night and over the weekend – many more documents than were expected.

Madam Chairman, I would like to take this opportunity to express my sincere thanks to you. With so many people from so many countries and with so many different opinions, yours was a truly formidable task. We were confident we were in good hands, and I know that all of us appreciate very much your excellent guidance, ensuring with your calm and your wonderful charm and good humour the smooth running and success of this Assembly.

I would also like to take this opportunity to express my thanks to the Vice-Chairmen of the Assembly, the Chairmen and the Vice-Chairmen of the Committees and Working Groups, and to the Chairmen of the ad hoc groups and the informal groups that helped develop draft texts for adoption by this Assembly.

Please let me also take this opportunity to express my appreciation and thanks to my colleagues, especially the Secretary-General for solving some key issues, the other elected officials, and the staff in TSB, BR, BDT and the regional offices, as well as in the General Secretariat, who have worked very hard for this Assembly.

I would also like to thank the interpreters and translators, both here in Johannesburg and in Geneva, and all those local staff who have worked so hard towards the smooth running of this Assembly. We have had a wonderful welcome, and always smiling faces when we arrive here in the mornings, which has helped to put us in the right frame of mind.

Last but not least, it gives me great pleasure to express my thanks to our South African hosts for the magnificent job they have done for us.

You may not know, but it was only in September last year that I asked my friend Ingrid Poni during last year's Council if there was any chance of South Africa hosting this Assembly. This was at the time that our prospective host had informed us that it was unfortunately not able to accommodate WTSA-08.

We know just how complicated organizing an event of this size can be. It is incredible that such an excellent facility, perfect organization and attention to detail can have been achieved in such a short time.

We have enjoyed a wonderful level of hospitality and support and I know that everyone here will join me in expressing great gratitude for this. It is obvious that the organizers of the World Cup in 2010 have nothing to worry about. I am sure many of us look forward to returning for that spectacle as fans, assuming our teams qualify.

Maybe it was with the World Cup in mind that we decided to establish a team of eleven: 10 study groups and TSAG. I am sure it will be a good team, and I look forward to acting as the coach.

Ladies and Gentlemen, this fifth Assembly or Conference of the ITU-T Sector, has, I believe, achieved a remarkable set of results that will guide us well into the future. Some have already described it as historic.

We have received a strong message from our members that ITU is, and will remain, the world's pre-eminent global telecommunication and ICT standards body. And we hear also, and very clearly, that ITU should continue on its mission to connect the world, and that bridging the standardization gap, by increasing developing country participation in our work, is an essential prerequisite to achieve this goal.

The reorganization of the study groups was not a simple task. It has been attempted before but this time we have established a streamlined and efficient structure, avoiding duplication and focusing on our key objectives.

We have excellent new chairmen and vice-chairmen, with 33 new countries represented, compared to 24 in the last study period. I congratulate all of them on taking on their respective responsibilities, and my staff and I look forward to working with them and providing them with all the support they need.

We have adopted the first ever ITU Resolutions on ICTs and climate change, accessibility to ICTs for persons with disabilities, conformance and interoperability testing, and encouraging academic participation and Sector Members from developing countries – amongst many other significant resolutions. We have plenty of new and exciting work, and I am sure we are all eagerly looking forward to the new study period.

Ladies and gentlemen, thank you all for your participation and contribution to WTSA-08. I wish you all a good trip home.

Annex C

Address by the ITU Secretary-General WTSA-08 Closing Ceremony (30 October 2008) Dr Hamadoun I. Touré

Madam Chairman,

Mr Deputy Secretary-General,

Mr Johnson, Director of TSB,

Distinguished Delegates,

Ladies and Gentlemen,

Today, I am happy to close this Assembly safe in the knowledge that we have made significant strides towards the further development of the information society... towards the knowledge society.

ITU and standards bodies in general have faced criticism in the past for being slow and bureaucratic.

I think that anyone bearing witness to the events of the past ten days will have been amazed at how far we have come. The procedures that are now in place combined with the excellent stewardship of one of the most capable chairmen I have had the pleasure of working with bring us to this excellent conclusion.

It was not for nothing that ITU was awarded the accolade of being one of the world's most enduring organizations, able to reinvent itself time and again. This was very evident here at this Assembly. I am confident that the Director of TSB, Mr Malcolm Johnson, will now move this Sector to a level never achieved before, of course, with your help.

Ladies and Gentlemen,

ITU is an organization that embraces change.

At the start of the Assembly it was clear that we had a complicated task before us. We have always to expect that there will be some difference of opinion... this is natural when you bring together close to 800 people from nearly 100 countries. The fact that we have resolved these issues is testament to the value and power of ITU as an able architect of the standards that underpin the world's communications networks.

I would like to congratulate all the new members of the study group management teams and the new chairman and vice-chairs of TSAG, and wish them every success in their new roles. And, of course, I cannot forget the outgoing chairmen and vice-chairmen for their great commitment and invaluable contribution for so many years, particularly Gary Fishman of Lucent and then Alcatel-Lucent, who has completed 12 years as Chairman of TSAG. I would like to extend my appreciation to Alcatel-Lucent and to the United States for having put the right support behind Gary to enable him to carry out his task with such high professionalism. I hope that you will all continue to work for ITU.

I congratulate their countries as well as the numerous countries that have put forward candidates all with a very good intention to give the Union and its cause all their expertise. My plea at the beginning of the Assembly for a spirit of cooperation has been heard and I thank you all.

My thanks go to you all for your hard work in the various committees and ad hoc groups.

Our South African hosts did their utmost to help us all make the best of our time in Johannesburg, and I am extremely grateful to them for their help.

My thanks, too, go to all of the ITU staff, who once again proved that they are our greatest asset.

However, I would like to reserve my warmest gratitude to you, Madam Chairman.

Thanks to your able guidance and your confident leadership, patience and humour, we have been able to steer a clear course through some turbulent waters.

It is with great pleasure that I present you with the ITU silver medal in recognition of your work here and your constant support of ITU over the years.

We have had an eventful ten days serving as a prelude to a new and exciting period for ITU, and its standards work.

Ladies and Gentlemen, I would like to list for you some of the Assembly's notable achievements:

- It is the first time we have had a WTSA in Africa.
- It is the first time we have had an exhibition.
- We have been honoured by the presence of the highest number of Ministers and Vice Ministers of any WTSA.
- We have seen the highest number of documents.
- And, the highest number of new Resolutions adopted.
- It is the first time that we have had a woman chairman.
- And the first time that we have invited students.
- We have achieved a restructuring of the Sector that takes into account market realities and allows for greater efficiency in our work and keeps ITU-T as the leading standardization body in the world.
- We have achieved a strengthening of the resolve of ITU to bridge the standardization gap. What a new opportunity we have created!
- And a fine-tuning of working methods.
- We have adopted key resolutions on:
 - ICTs and climate change
 - Accessibility to ICTs for persons with disabilities
 - Conformance and interoperability testing and a possible future ITU Mark
 - Encouraging academic participation
 - Encouraging Sector Members from developing countries
 - Studies regarding nomadic telecommunication services and applications
 - The creation of national Computer Incident Response Teams (CIRTs), particularly for developing countries

I expect you are all looking forward to getting home to your families. So I won't take up any more of your time other than to say thank you all again.

I feel a great sense of pride and achievement at the close of this Assembly. Pride that this event is in Africa, pride that it is the first to be chaired by a woman and a real sense that what has been achieved gives us real strength to connect the world, which as you know is our number one goal.

Have a safe trip home.

Annex D

WTSA-08 decisions relative to resolutions

Table 1: Revised resolutions

#	Title
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
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 regional groups of Study Group 3
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
40	Regulatory aspects of ITU-T work
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
47	Country code top-level domain names
48	Internationalized (multilingual) domain names
49	ENUM
50	Cybersecurity
52	Countering and combating spam
53	Establishment of a workshop and seminar coordination group
54	Creation of regional groups
55	Mainstreaming gender in ITU-T activities

Table 2: New resolutions

Note: The final Resolution numbers were added subsequently.

#	Title		
56 [C]	Roles of TSAG and ITU-T study group vice-chairmen from developing countries		
57 [E]	Strengthening coordination and cooperation among ITU-R, ITU-T and ITU-D on matters of mutual interest		
58 [L]	Encourage the creation of national computer incident response teams, particularly for developing countries		
59 [N]	Enhancing participation of telecommunication operators from developing countries		
60 [R]	Responding to the challenges of the evolution of the numbering system and its convergence with IP-based systems/networks		
61 [S]	Misappropriation of international telecommunication numbering resources		
62 [U]	Dispute settlement		
63 [BB]	Studies regarding nomadic telecommunication services and applications		
64 [CC]	IP address allocation and encouraging the deployment of IPv6		
65 [DD]	Calling party number delivery		
66 [GG]	Creation of a technology watch function in the Telecommunication Standardization Bureau		
67 [II]	Creation of a Standardization Committee for Vocabulary (SCV)		
68 [JJ]	Implementation of Resolution 122 (Rev. Antalya, 2006) on the evolving role of the World Telecommunication Standardization Assembly		
69 [KK]	Non-discriminatory access and use of Internet resources		
70 [MM]	Telecommunication/Information and communication technology accessibility for persons with disabilities		
71 [NN]	Admission of academia, universities and their associated research establishments to participate in the work of ITU-T		
72 [EMF]	Measurement concerns related to human exposure to electromagnetic fields		
73 [ICT&CC]	Information and communication technologies and climate change		
74 [F&Y]	Admission of Sector Members from developing countries in the work of ITU-T		
75 [WSIS]	ITU-T's contribution in implementing the outcomes of the World Summit on the Information Society, and the establishment of a Dedicated Group on Internet-related Public Policy Issues as an integral part of the Council Working Group on the World Summit on the Information Society		
76 [I&I Testing]	Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark programme		

Table 3: Resolution unchanged

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

Table 4: Resolutions deleted

#	Title
42	Implementation of results-based budgeting – Impact on planning in ITU-T
46	ITU-T contribution to Council Working Group on the World Summit on the Information Society
51	Combating spam

Annex E

WTSA-08 decisions relative to Recommendations

Table 1: Revised Recommendations

A.1	Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)
A.2	Presentation of contributions to ITU-T
A.7	Focus Groups: Working methods and procedures
A.8	Alternative approval process for new and revised ITU-T Recommendations
A.11	Publication of ITU-T Recommendations and WTSA proceedings
A.12	Identification and layout of ITU-T Recommendations
D.50	International Internet connection

Table 2: New Recommendations

A.31	Guidelines and coordination requirements for the organization of ITU-T seminars and workshops
D.156	Network Externalities

Table 3: Unchanged A-series Recommendations

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.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	

Section 2 – Committee reports to the Plenary

2.1 – Committee 2: Budget Control

Chairman: Mr Bruce Gracie (Canada)

1 Budget Control Committee

The Budget Control Committee held three meetings during the World Telecommunication Standardization Assembly (WTSA-08) under the Chairmanship of Mr Bruce Gracie (Canada), assisted by Vice-Chairmen Mr Sultan AL-MALIK (Saudi Arabia) and Mr Joshua PEPRAH (Ghana), and considered the issues arising from its terms of reference.

2 Terms of reference

The terms of reference were presented and approved (Document DT/1).

3 Agreement between the Government of the Republic of South Africa and ITU

In accordance with Resolution 77 of the Plenipotentiary Conference (Rev. Antalya, 2006), Resolution 5 of the Plenipotentiary Conference (Rev. Antalya, 2006) and Resolution No 83 (amended) of the ITU Council concerning the organization, financing and liquidation of the accounts of ITU conferences and meetings, the Government of the Republic of South Africa and ITU concluded an agreement concerning the holding, organization and financing of the World Telecommunication Standardization Assembly (WTSA-08) and the holding, organization and financing of the Global Standardization Symposium of the International Telecommunication Union (GSS).

The Budget Control Committee took note of the agreement (Document 109) and warmly thanked the Government of the Republic of South Africa for the excellent organization and facilities provided for the Assembly.

4 Financial contribution of organizations of an international character and Sector Members to the expenses of the Assembly

The Committee took note of the amount that non-exempted international organizations and Sector Members (other than ITU-T members) would have to pay to defraying the expenses of the Conference (Document 38).

As at 28 October 2008, no non-exempted international organization and Sector Member has been registered.

5 Budget of the World Telecommunication Standardization Assembly (WTSA-08)

At its 2007 session, the Council approved by Resolution 1280 the budget of the World Telecommunication Standardization Assembly (WTSA-08) for the biennium 2008-2009, amounting to CHF 1 960 000, of which CHF 1 188 000 are foreseen for documentation (Document 37).

Estimate of the expenditure of the World Telecommunication Standardization Assembly (WTSA-08) as at 27 October 2008

The estimated expenditure of the WTSA-08 as at 27 October 2008 indicates an amount of CHF 108 000 of unused appropriations excluding documentation costs. An excess of expenditure of CHF 62 000 is projected for the cost of documentation due to higher volumes than planned. Total costs including documentation are expected to be CHF 46 000 below budget. (Document 148 and the Annex to this report.)

The Annex reflects the actual amounts expended under each budget category and, where budgeted funds are being diverted for other purposes, the amounts and purposes for which the funds are being used are included in the report to the Plenary as a footnote.

Report on ITU-T expenditure during the Study Period 2005-2008 and estimated financial needs up to WTSA-12

The report on ITU-T expenditure during the Study period 2005-2008 and estimated needs up to WTSA-12 (Document 36) and Working Document 1 of Committee 2 with additional information were presented and examined in detail. The framework provided by Council Resolution 1280 (biennial budget of the Union for 2008-2009) and Decision 5 (Rev, Antalya, 2006) was recalled.

TSB was invited to hold ITU-T meetings at the ITU premises as far as possible instead of renting meeting rooms at the CICG in Geneva, in order to reduce expenses.

8 Resolution 34 – Voluntary Contributions

Document 44 and Document 47 Addendum 8 relating to proposed modifications to Resolution 34 (Voluntary contributions) were presented and discussed. The United States delegation expressed some general concerns about an apparent lack of transparency regarding the acceptance and use of the voluntary contributions, as well as the possible duplication and overlap of activities financed through voluntary contributions in the Union as a whole. A concern was also expressed about the accuracy of cost-based budgeting including time accounting for ITU staff supporting programmes funded through voluntary contributions. Finally, it was suggested that, with the implementation of the new International Public Sector Accounting Standards (IPSAS), all capital assets must be included on the balance sheet and need to be fully depreciated. The Chairman noted that voluntary contributions are governed in accordance with Article 33 Nos. 486 and 487 of the Convention and with the Financial Regulations (Annex 2).

Committee 2 transmitted Document 44 and Document 47 Addendum 8 to Working Group 2 of the Plenary for its consideration. It was noted that, besides some editorial modifications, the proposals refer to Resolution 44 (Bridging the standardization gap between developing and developed countries).

9 Resolution 42 – Implementation of results-based budgeting – Impact on planning in ITU-T

Committee 2 recommends to the Plenary the abrogation of Resolution 42 regarding the implementation of results-based budgeting – impact on planning in ITU-T (Document 46) as progress on this topic is well advanced in ITU and ITU-T.

10 Financial responsibilities of conferences

The attention of Committee 2 was drawn to Article 34 of the Convention of the International Telecommunication Union, Nos. 488 and 489 concerning the financial responsibilities of conferences (Document 39). It was pointed out that similar provision is provided in Article 18 of the Constitution.

11 Financial implications of Decisions and Resolutions of the Assembly (WTSA-08)

As of 28 October 2008, the Budget Control Committee has identified several areas that might have some financial impact.

The potential financial consequences relating to exploratory regional meetings for equipment testing, ICTs and climate change, regional groups of study groups, ITU Mark, have been estimated to about CHF 2114000 per biennium (see table below). Concerning some further items, such as support for the Standardization Committee for Vocabulary, and for the Seminar and Workshop Group, potential financial implications are still to be determined.

The estimated financial impact is indicative and will be further discussed in Council when adopting the 2010-2011 budget. For 2009, TSB will strive to accommodate the new requirements within the approved 2008-2009 budget.

Other items such as the level of the amount of the contributory unit for ITU-T Sector Members from developing countries, the admission of academia and relevant universities in the work of ITU-T, and accessibility of ITU and ITU-T services and facilities for persons with disabilities, will have financial implications on the income and expenditure of the Union as a whole that will have to be considered by the governing bodies of the Union as appropriate.

- A. Draft new Resolution [I&I Testing] (DT/33): "Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark program" instructs the Director of the Telecommunication Standardization Bureau in cooperation with the Radiocommunication Bureau and the Telecommunication Development Bureau, to conduct exploratory activities in each region to identify and prioritize the problems faced by developing countries related to achieving interoperability of ICT equipment.
- B. Draft new Resolution [ICT&CC] on ICTs and Climate Change (DT/20) resolves to create, within ITU-T, a repository and knowledge base on the relationships between ICTs and climate change.
- C. Draft new Resolution [ICT&CC] on ICTs and Climate Change (DT/20) instructs the Director of TSB to organize in close collaboration with the BDT and BR Directors, seminars and workshops for developing countries, to raise awareness and identify their needs in this domain, as they are the most vulnerable countries affected by climate change.
- D. Draft revised Resolution 54 (DT/38) on the Creation of Regional Groups instructs the Director of TSB to provide all necessary support for creating and ensuring the smooth functioning of the regional groups, and to take all [necessary/possible] measures to facilitate the organization of the meetings and workshops of those groups.
- E. Draft new Resolution [OO] (Document 136) on the Creation of a Group to address enhanced cooperation on international Internet public policy issues, resolves that a Group, International Internet Public Policy Group (IIPPG), shall be created within the structure of ITU-T, and instructs the Director of TSB to provide to the IIPPG all administrative and other necessary support for its effective functioning within the budgetary allocation of ITU-T.
- F. Draft new Resolution [I&I Testing] (DT/33): instructs the Director of TSB to carry out the necessary studies with the view to introduce the use of ITU Mark as a voluntary programme permitting manufacturers and service providers to make a visible declaration that their equipment

conforms to ITU-T Recommendations, and to increase the probability of interoperability; and to consider its possible application as an indication of a degree of interoperability capability in the future; and further instructs the Director of TSB to study the financial and legal implications, and all other concerns raised with regard to this proposal regarding the possible introduction of the ITU-T Mark.

- G. Draft new Resolution [GG] (DT/37) on The Creation of Technology Watch Function (T.W.F.) in TSB resolves to instruct the Director of TSB to formalize such function by the Bureau.
- H. Draft revised Resolution 17 on Telecommunication standardization in relation to the interests of developing countries (DT/23) resolves to request the Director of TSB to cooperate with the ITU regional offices, including the possibility of holding ITU-T meetings in the regions, and to instruct the Director to provide BDT with all the necessary support with a view to assisting and advising in the organization and holding of information meetings concerning the work of the ITU-T study groups.
- I. Draft new Resolution [L] (DT/49) on the creation of national Computer Emergency Response Teams (CERTs), particularly for Developing countries, instructs the Director of TSB, in collaboration with the Director of BDT to collaborate with international experts and bodies to realise the establishment of national CERTs, to provide support as appropriate and within existing budgetary resources, and to facilitate collaboration between national CERTs such as capacity building and exchange of information, within an appropriate framework.
- J. Draft new Resolution [II] (Document 47, Add. 39) on the Creation of a Standardization Committee for Vocabulary (SCV), instructs the Director of TSB to nominate an editor for the English language who will act as the secretary for the SCV, and to facilitate the work of the SCV by providing its chairman with the necessary support for organizing the electronic meeting of the SCV and the yearly face-to-face meeting.
- K. Draft revised Resolution 53 (DT/47) on the establishment of a seminar and workshop group, instructs the Director of TSB to work closely with the ITU Secretariat and with the Directors of the other Bureaux to provide all necessary support and advice to the group 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, and to provide a secretariat for this group.

Potential financial implications Preliminary expenditure estimates

in CHF 000

	2009	2010-2011	2012
A Draft new Resolution [I&I Testing] (DT/33)	647	1 294	647
B Draft new Resolution [ICT&CC] (DT/20)	50	100	50
C Draft new Resolution [ICT&CC] (DT/20)	tbd	tbd	tdb
D Draft revised Resolution 54 (DT/38)	20	40	20
E Draft new Resolution [OO] (Document 136)	20	40	20
Reinforcement of the Bureau for:	320	640	320
F Draft new Resolution [I&I Testing] (DT/33)			
G Draft new Resolution [GG] (DT/37)			
H Draft revised Resolution 17 (DT/23)			
I Draft new Resolution [L] (DT/49)			
J Draft new Resolution [II] (Document 47, Add.39)	tbd	tbd	tbd
K Draft revised Resolution 53 (DT/47)	tbd	tbd	tbd
Total estimates	1 057	2114	1 057

The Plenary meeting is requested to consider and approve this Report, which will then be forwarded by the Secretary-General, together with the Comments of the Plenary meeting for submission to the 2008 session of the Council.

Annex

Estimate of expenditure of the World Telecommunication Standardization Assembly 2008 (as at 27 October 2008)

in CHF 000

	Budget 2008-2009	Actual expenditure	Estimated commitments	Projected balance
Staff costs	464	62	383	19
Other staff costs	31		30	1
Travel on duty*	30	32	88	-90
Contractual services	100	25	5	70
Contractual services	100	25	5	70
Rental and maintenance of premises and equipment	95			95
Materials and supplies	5		4	1
Acquisition of premises, furniture and equipment	17		5	12
Public and internal service utilities	15		15	0
Miscellaneous	15		15	0
Total	772	119	545	108
Documentation costs				
Translation (3 080 pages)	598	623	57	-82
Composition (4200 pages)	436	440	50	-54
Reprography (1 400 000 pages)	154	58	22	74
Documentation	1 188	1 121	129	-62
TOTAL	1 960	1 240	674	46

^{*} Actual expenditure of CHF 32 000 and estimated commitments of CHF 88 000, totalling CHF 120 000, correspond to the granting of 52 partial fellowships to participants from the least developed or low income developing countries.

2.2 - Committee 3: Working methods of ITU-T

Chairman: Mr Brian Moore (UK)

1 Introduction

Committee 3 was set up to consider working methods of ITU-T and held nine sessions during WTSA (Johannesburg, 2008).

The chairmanship of Committee 3 was established and approved by the first Plenary meeting of WTSA-08 and is as follows:

Chairman: Mr Brian Moore (United Kingdom)

Vice-Chairmen: Mr Nasser Bin Hammad (United Arab Emirates)

Mr Viktor Katok (Ukraine) Mr Matano Ndaro (Kenya) Mr Kishik Park (Rep. of Korea)

At its first meeting, the Committee agreed to structure its discussion per topics under the headings of: Participation in the work of ITU-T, Study group management, Standardization management, Strategic activities, EDH and publication issues, coordination and cooperation, Seminars and workshops, Gender issues and WTSA issues.

The meeting endorsed the TSAG report (Document 28) submitted by the Director of TSB. Documents 29, 30 and 32, containing the proposals related to draft revised resolutions and A-series Recommendations were studied in detail in the related sessions.

The general agenda for Committee 3 was approved as in DT/3Rev.1.

2 Discussions

2.1 Participation in the work of ITU-T

Under this topic, a number of new and revised Resolutions were considered, including issues such as admission of entities and organizations to participate as Associates of ITU-T, admission of Sector Members from developing countries in the work of ITU-T, admission of academia, universities and associated research establishments to participate in the work of ITU-T and telecommunication/ICT accessibility for persons with disabilities.

2.2 Study group management

A number of the A-series Recommendations as well as resolutions covering the management of the ITU-T study groups were revised, including working methods of study groups and focus groups, the approval processes and term of office for chairmen and vice-chairmen of study groups and TSAG.

2.3 Standardization management

Under this topic, the resolutions concerning the authorization of TSAG to act between WTSAs and regulatory aspects of ITU-T work were considered.

2.4 Strategic activities

The resolution concerning guidelines for ITU-T strategic activities was updated and a new resolution on creation of a technology watch function in TSB was developed.

2.5 EDH and publication issues

A number of A-series Recommendations concerning publication issues were revised and a revision of Resolution 32 on strengthening electronic working methods was developed.

2.6 Coordination and cooperation

Under this topic, a number of resolutions concerning collaboration and cooperation with other organizations and within ITU were revised. Also, Resolution 45 on the coordination of the work across study groups and the role of TSAG was revised and a new Resolution on strengthening the cooperation between ITU Sectors was developed.

The European Patent Office (EPO) proposed in its contribution to strengthen the current collaboration between the two organizations. It was noted that EPO has already promoted the importance of cooperating with patent offices in GSC-13, where it was endorsed in Resolution GSC-13/23. EPO is also discussing the same issues with ETSI. It was also noted that TSB has already done the necessary to change the document template so that it contains the publication date of all TSB documents. Collaboration will continue through the existing mechanisms, e.g. TSB Director's IPR ad hoc Group.

2.7 Seminars and workshops

Discussions centred on proposals to establish a seminar and workshop group.

2.8 Gender issues

Resolution 55 on mainstreaming gender in ITU-T activities was revised.

2.9 Role of WTSA

A new resolution on the evolving role of the WTSA was developed.

2.10 Miscellanea

At the closing session, the Chairman, Mr Brian Moore, thanked the Vice-Chairmen of the Committee, the Chairman of the ad hoc group on Resolution 1 and the coordinators of the various drafting activities for their very hard work, and thanked the TSB secretariat – Ms Judit Katona Kiss, Mr Georges Sebek and Ms Maite Comas Barnes – for their support, and all the delegates for their fruitful cooperation.

3 Results of the Work of Committee 3

3.1 Revised Resolutions

3.1.1 Resolution 1

The outcome of an ad hoc group established by COM 3 to prepare a revised Resolution 1 is contained in Doc. 156. Substantial progress was made on the revision but COM 3, due to lack of time, was not able to resolve all the outstanding issues and the text is presented to the Plenary meeting for further consideration.

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The revision includes in section 7.1 text proposed by the RCC concerning development of Questions by WTSA. This was not agreed by COM 3 and is in square brackets pending a decision of the Plenary meeting.

It should be noted that editorial adjustments need to be made to Resolution 26 to maintain consistency with the revisions made to 2.3.2 of Resolution 1. The required editorial changes to Resolution 26 are in the Addendum 1 to Doc. 3.

3.1.2 Resolution 7

The meeting agreed to request the Plenary meeting to approve the revised Resolution 7 as contained in Doc. 144.

3.1.3 Resolution 11

The meeting agreed to request the Plenary meeting to approve Resolution 11 as contained in Doc. 144.

3.1.4 Resolution 18

The meeting agreed to maintain Resolution 18 in its current state.

3.1.5 Resolution 22

The Committee agreed to request the Plenary meeting to approve Resolution 22 as contained in Doc.163.

3.1.6 Resolution **31**

The meeting agreed to request the Plenary meeting to approve Resolution 31 as contained in Doc. 138.

3.1.7 Resolution **32**

The meeting agreed to request the Plenary meeting to approve Resolution 32 as contained in Doc. 149.

3.1.8 Resolution **33**

The meeting agreed to request the Plenary meeting to approve Resolution 33 as contained in Doc. 149.

3.1.9 Resolution **35**

The outcome of an ad hoc group established by COM 3 to prepare a revised Resolution 35 is contained in Doc. 157. COM 3 was not able to resolve all the outstanding issues and the text is presented to the Plenary meeting for further consideration.

The convenor of the ad hoc group made the following note:

"In discussing the revision of this Resolution in relation to the Arab proposal contained in Add.9 to document 47, after heavy discussion, it was agreed that the thrust of the proposal be included in the minutes of the Assembly along the lines of the following:

In preparing the above-mentioned draft List, the number of proposed chairmen should be normally limited to one per Member State, except in certain circumstances in which that number may be increased, as appropriate."

3.1.10 Resolution 38

The meeting agreed to request the Plenary meeting to approve the Resolution 38 as contained in Doc. 163.

3.1.11 Resolution 40

The outcome of an ad hoc group established by COM 3 to prepare a revised Resolution 40 is contained in Doc. 157. Due to lack of time COM 3 was not able to review the proposal and the text is presented to Plenary meeting for further consideration.

3.1.12 Resolution 45

The Committee agreed to request the Plenary meeting to approve Resolution 45 as contained in Doc. 163.

3.1.13 Resolution 53

The outcome of an ad hoc group established by COM 3 to prepare a revised Resolution 53 is contained in Doc. 157. COM 3 was not able to resolve all the outstanding issues and the text is presented to the Plenary meeting for further consideration.

3.1.14 Resolution 55

The Committee agreed to request the Plenary meeting to approve Resolution 55 as contained in Doc. 163.

3.2 **New Resolutions**

3.2.1 **Resolution** [E]

The outcome of an ad hoc group established by COM 3 to prepare a revised draft of new Resolution [E] is contained in Doc. 157. Due to lack of time, COM 3 was not able to review the proposal and the text is presented to the Plenary meeting for further consideration.

Subsequent to the meeting, Canada, as requested, submitted Doc. 160 containing a proposal for the finalization of new Resolution E.

3.2.2 Resolution [FY]

The Committee agreed to request the Plenary meeting to approve Resolution [FY] as contained in Doc. 170.

3.2.3 **Resolution [MM]**

The Committee agreed to request the Plenary meeting to approve Resolution [MM] as contained in Doc. 170.

3.2.4 Resolution [NN]

The outcome of an ad hoc group established by COM 3 to prepare a revised draft of new Resolution [NN] is contained in Doc. 157. Due to lack of time, COM 3 was not able to review the proposal and the text is presented to the Plenary meeting for further consideration.

Subsequent to the meeting, Canada, as requested, submitted Document 161 containing a proposal for the finalization of new Resolution E.

3.2.5 **Resolution [JJ]**

The Committee agreed to request the Plenary meeting to approve Resolution [JJ] as contained in Doc. 163.

3.2.6 **Resolution** [GG]

The Committee agreed to request the Plenary meeting to approve Resolution [GG] as contained in Doc. 163.

3.2.7 Resolution [II]

New Resolution [II] on the creation of a Standardization Committee for Vocabulary was presented in document 47 Add.39. COM 3 was not able to resolve all the outstanding issues and this document is presented to the Plenary meeting for further consideration.

3.3 A-series Recommendations

Recommendations A.4, A.5, A.6, A.9, and A.23 were not proposed by TSAG for revisions and members considered that they do not need any revision. Recommendation A.13 was not proposed by TSAG for revision; the proposal from Korea contained in Doc. 78 Add.22 was withdrawn, so Recommendation A.13 does not need revision.

Committee 3 requests the Plenary meeting to endorse the proposal to maintain Recommendations A.4, A.5, A.6, A.9, A.13 and A.23 unchanged.

3.3.1 Recommendation A.1

The results of the drafting activity in COM 3 on Recommendation A.1 as shown in Doc. 158. It is based on the TSAG-determined text, which included an update of clause 2.2 to describe JCAs, which are now used widely in the work of ITU-T. The text is in square brackets pending a decision of the Plenary meeting as COM 3 was not able to reach consensus on its inclusion. The text is presented to the Plenary meeting for further consideration.

3.3.2 Recommendation A.2

The Committee agreed to request the Plenary meeting to approve Recommendation A.2 as shown in Doc. 163.

3.3.3 Recommendation A.7

The Committee agreed to request the Plenary meeting to approve Recommendation A.7 as shown in Doc. 163.

3.3.4 Recommendation A.8

The Committee agreed to request the Plenary meeting to approve Recommendation A.8 as shown in Doc. 138.

3.3.5 Recommendation A.11

The Committee agreed to request the Plenary meeting to approve Recommendation A.11 as shown in Doc. 144.

3.3.6 Recommendation A.12

The Committee agreed to request the Plenary meeting to approve Recommendation A.12 as shown in Doc. 144.

3.3.7 New Recommendation A.31

During the last TSAG meeting, draft new Recommendation A.31 was determined and proposed for approval by WTSA-08 in Document 30 Annex G. Committee 3 examined the draft, but was not able to reach consensus and the text is presented to the Plenary meeting for further consideration.

Annex 1

Status of resolutions and A-series Recommendations assigned to Committee 3

Revised resolutions agreed by Committee 3

Res#	Title	Document #
7	Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC)	144
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	144
22	Authorization for TSAG to act between WTSAs	163
31	Admission of entities or organizations to participate as Associates in the work of ITU-T	138
32	Strengthening electronic working methods for the work of ITU-T	149
33	Guidelines for ITU-T strategic activities	149
38	Coordination among ITU-T, ITU-R and ITU-D for activities relating to IMT	163
45	Effective coordination of standardization work across study groups in ITU-T and the role of TSAG	163
55	Mainstreaming gender in ITU-T activities	163

Revised resolutions forwarded by Committee 3 to the Plenary meeting for further consideration

Res#	Title	Document #
1	Rules of procedure of the ITU Telecommunication Standardization Sector (ITU-T)	156
35	Appointment and maximum term of office for chairmen and vice-chairmen of ITU-T study groups and of TSAG	157
40	Regulatory aspects of ITU-T work	157
53	Establishment of a seminar and workshop group	157

New resolutions agreed by Committee 3

Res#	Title	Document #
[MM]	Telecommunication/ICT accessibility for persons with disabilities	170
[GG]	Creation of Technology watch function (T.W.F) in TSB	163
[11]	The implementation of Resolution 122 (Rev. Antalya, 2006) "The evolving role of the World Telecommunication Standardization Assembly"	163
[F, Y]	Admission of Sector Members from developing countries in the work of ITU-T	170

New resolutions forwarded by Committee 3 to the Plenary meeting for further consideration

Res#	Title	Document #
[E]	Strengthening coordination and cooperation between ITU-R and ITU-T on matters of mutual interest	157
[NN]	Admission of Academia, Universities and Associated research Establishments to Participate in the Work of ITU-T 157	
[II]	Creation of a Standardization Committee for Vocabulary (SCV)	47Add.39

Revised Recommendations determined by TSAG and agreed by Committee 3

	Title	Document #
A.2	Presentation of to ITU-T	163
A.7	Focus groups: Working methods and procedures	163
A.8	Alternative approval process for new and revised ITU-T Recommendations	138
A.11	Publication of ITU-T Recommendations and WTSA proceedings	144
A.12	Identification and layout of ITU-T Recommendations	144

Revised Recommendations determined by TSAG and forwarded by Committee 3 to the Plenary meeting for further consideration

	Title	Document #
A.1	Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)	158
New A.31	Guidelines and coordination requirements for the organization of ITU-T seminars and workshops 30 Annex	

2.3 - Committee 4: Work programme and organization of ITU-T

Chairman: Mr Bob Horton (Australia)

1 Introduction

- 1.1 The terms of reference for Committee 4 are contained in Document 122.
- 1.2 Committee 4 (Work programme and organization of ITU-T) was chaired by Mr R. Horton (Australia) with the support of the vice-chairmen of the Committee, Messrs Makhsum Makhmudov (Uzbekistan), Jean-Jacques Massima (Gabon), Hans Meierhofer (Germany), Sadegh Abbasi Shahkooh (Iran) and Luis Ramírez Barreto (Paraguay). The secretary of Committee 4 was Mr S. De Campos Neto from TSB.
- 1.3 The committee held five sessions, and the respective reports can be found in Documents 126, 133, 137 and 171.
- 1.4 The meetings took into account the documents allocation to Committee 4 given in DT/9 (and revisions) and the topics listed in DT/4 and its Revision 1.

2 Study group structure

2.1 General

- 2.1.1 The discussions on the study group structure and mandates and allocation of Questions were based on the TSAG proposal in Document 31 and in the numerous member proposals received and allocated to Committee 4.
- 2.1.2 The agreements regarding the study group structure, titles, numbering, mandate and allocation of Questions are listed in 2.3 below. Three of the study groups in the 2005-2008 study period were disbanded and their work was reallocated to other study groups. A total of 13 study groups remain.

2.3 Individual study group's titles, mandates, Questions, etc.

- 2.3.1 The text of the Questions proposed by the study groups found in Documents 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24 and 26, together with revised Question P/13 proposed by TSAG in Annex D.10 of Document 31 were agreed by Committee 4. *Committee 4 requests the Plenary to approve this action.*
- 2.3.2 The following agreements were reached by Committee 4 concerning the study group structure and Question allocation:

Study Group	Title	Blocks and Questions
2	Operational aspects of service provision and telecommunication management	Block 2A (Questions A/2, B/2, C/2), Block 4X (Questions F/2, A/4 to J/4), Block 2D (Question D/2)
3	Tariff and accounting principles including related telecommunication economic and policy issues	Block 3A (Questions A/3 to E/3)
5	Protection against electromagnetic environment effects	Block 5A (Questions A/5 to N/5), Block 6D (Questions C/6 and E/6)*
9	Television and sound transmission and integrated broadband cable networks	Blocks 9A and 9B (A/9, B/9, E/9, G/9, K/9, L/9, M/9, N/9, C/9, D/9, F/9, H/9, I/9, J/9)
11	Signalling requirements, protocols and test specifications	Block 11A (Questions A/11 to N/11) and Block 17D (Question F/17)

Study Group	Title	Blocks and Questions		
12	Performance, QoS and QoE	Block 12A (Questions A/12 to P/12) and Question E/2 (including QSDG)		
13	Future networks including mobile and NGN	Block 13A (Questions A/13, I/13), Block 13B (Questions B/13, Q/13), Block 13C (Questions C/13, M/13), Block 13D (Questions D/13, L/13), Block 13E (Questions G/13, H/13, K/13), Block 13F (Questions J/13, O/13, P/13), Block 13G (Questions F/13, N/13), Block 19A (Questions A/19 to G/19)		
15	Optical transport networks and access network infrastructures	Block 13H (Question E/13), Block 15A (Questions 15A-A, 15A-B, 15A-C), Block 15B1 (Questions 15B1-A, 15B1-B, 15B1-C), Block 15B2 (Questions 15B2-A, 15B2-B, 15B2-C, 15B2-D), Block 15C (Questions 15C-A, 15C-B, 15C-C, 15C-D, 15C-E, 15C-F, 15C-G, 15C-H, K/4, L/4); also Blocks 6A, 6B and 6C (these blocks are also included in Block 15B2)**		
16	Multimedia coding, systems and applications	Block 16A (Questions A1/16, A2/16, A3/16, A4/16), Block 16B (Questions B1/16, B2/16, B3/16, B4/16, B5/16, B6/16, B7/16, B8/16, B9/16, B10/16), Block 16C (Questions C1/16, C2/16, C3/16, C4/16, C5/16), Block 16D (Questions D1/16, D2/16, D3/16, D4/16)		
17	Security	Block 17A (A/17, D/17, E/17, I/17, J/17, K/17 to Q/17, T/17), Block 17C (B/17, C/17)		

^{*} Note: Block 6D merged into Study Group 5 will be fine-tuned at the first meeting of the study group.

The following inter-study group coordination aspects were also agreed as part of the restructuring discussions:

- ITU-T Study Group 9 and Study Group 16 will hold collocated meetings
- ITU-T Study Group 11 and Study Group 13 will hold collocated meetings
- Concerning Questions B/9 and M/9, the chairmen of Study Groups 9 and 12 are to ensure that work of these Questions is well coordinated with work of Study Group 12 and that experts do not have an excessive number of meetings to attend.

It was agreed to reflect these agreements in relevant parts of Resolution 2.

2.3.3 The Plenary is requested to approve the study group structure together with the inter-study group coordination measures that are detailed in §2.3.2.

- 2.3.4 Several proposals were submitted to the Committee 4 proposing new Questions and amendments to Questions drafted by the study groups. Committee 4 endorsed the proposals below and agreed that they be forwarded to the concerned study groups for study, as follows:
- Draft new Question on secure solutions for mobile payments found in Document 111, to Study Group 13
- Draft amendment to the text of Question A/2 (part of ex Q1/2) as found in Document 74, to Study Group 2.
- Draft amendment to the text of Question B/3 (ex Q1/3B) as found in Document 97, to Study Group 3.
- Draft amendment to the text of Question C/13 (ex Q3/13) as found in Document 110, to Study Group 13.

^{**} Note: Blocks 6A, 6B and 6C merged into Study Group 15 will be fine-tuned at the first meeting of the study group.

- Draft amendment to the text of Question Q/13 (ex Q8/13) as found in Document 95, to Study Group 13.
- Draft amendment to the text of Question D3/16 (ex Q28/16) as found in Document 98, to Study Group 16.
- 2.3.5 The Plenary is requested to forward the five proposals listed in §2.3.4 to the respective study groups for their further consideration on the inclusion of these work items in their study programme.
- 2.3.6 Concerning the proposal to move Question K/13 (Q14/13) to Study Group 11 found in Document 91, Committee 4 agreed that the best way forward is to request that Study Groups 11 and 13 jointly review the proposal at their next collocated meeting. *Committee 4 requests the Plenary to approve this action.*
- 2.3.7 On the issue of which group should be designated as Lead Study Group for ICT and climate change issues, Committee 4 agreed that this decision be deferred to TSAG at its first meeting, whence the Focus Group on ICTs and Climate Change concludes its studies. *Committee 4 requests the Plenary to approve this action.*
- 2.3.8 Consistent with the decision in 2.3.7 above, the option of moving Question A/6 to Study Group 5 proposed in Document 47A38 was also deferred to TSAG for further consideration. *Committee 4 requests the Plenary to approve this action.*
- 2.3.9 Committee 4 agreed with the recommendation of SG 13 in Document 17 §10.2 to terminate the Intersector Coordination Group on Satellite Matters, noting that it had served its purpose and that further cooperation on satellite matters will continue in the normal way between ITU-T and ITU-R. *Committee 4 requests the Plenary to approve this action.*

3 Resolutions

3.1 Existing Resolution

Committee 4 agreed to forward to the Plenary the text of draft revised Resolution 2 with the titles of study groups with their responsibilities and mandates. The text, after editing with the agreed changes, is found in document 159.

It was further agreed to recommend to the Plenary that TSB be requested to audit Annex C of Resolution 2 and make factually correct changes (similarly to what was done in WTSA-04), since it contains the significantly detailed allocation of Recommendations to study groups, and there was not enough time to consider the issue as carefully as possible during WTSA-08.

- The final text of draft new Resolution 2 is found in Document 159, which is submitted to the approval of the Plenary.
- The Plenary is also requested to request TSB to audit Annex C of Resolution 2 and make factually correct changes, if any.

3.2 New Resolutions

Three new resolutions were agreed by Committee 4 after discussions. They are draft new Resolution [Nomadic] on studies regarding nomadic telecommunication services and applications, draft new Resolution [EMF] on addressing measurement concerns related to human exposure to electromagnetic fields (EMF), and draft new Resolution [ICTs&CC] on ICTs and climate change.

The following draft new Resolutions are submitted for adoption by WTSA-08:

- Draft new Resolution [Nomadic] as found in document 144
- Draft new Resolution [EMF] as found in document 163
- Draft new Resolution [ICTs&CC] as found in document 163

Acknowledgments

COM 4 Chairman wishes to express his heartfelt thanks to all the contributors of documents allocated to COM 4 and its participants, in particular, the support and leadership of vice-chairmen and distinguished delegates Mr K. Dickerson (UK) for leading the ad hoc group on ICTs and climate change, Mr J-J. Massima (Gabon and vice-chairman of Committee 4) for chairing the ad hoc group on Resolution [EMF], Mr A.A. Al-Mubadal (Saudi Arabia) for coordinating the informal discussion group on draft new Resolution [Nomadic] (ex Res. [BB]), Mr J. Visser (Canada) for chairing the ad hoc group on restructuring and Mr S. Trowbridge (USA) for chairing the ad hoc group on Resolution 2. He also thanks the TSB staff, Mr S. De Campos Neto, Mr G. Jones, Mr E. Sutherland and Ms I. Frost, for their support.

2.4 – Working Group 1 of the Plenary: Issues relevant to the WSIS outcome related to ITU-T and to the work of study groups

Chairman: Mr Patrick F. Masambu (Uganda)

Working Group 1 of the Plenary met five times as a group and it held a number of ad hoc group meetings and informal consultations. The general agenda as agreed by the Working Group can be found in DT 5 Rev.1. The reports of the Working Group sessions are found as follows:

- 1) 22 October 2008, AM in Doc. 124
- 2) 23 October 2008, PM in Doc. 132
- 3) 24 October 2008, PM in Doc. 135
- 4) 27 October 2008, PM in Doc. 150
- 5) 28 October 2008, PM in Doc. 153

I Resolutions

The Resolutions agreed by the Working Group are:

1) Revised

- a) Resolution 20 Procedures for allocation and management of international telecommunication numbering, naming, addressing and identification resources Doc. 154
- b) Resolution 29 Alternative calling procedures on international telecommunication networks Doc. 154
- c) Resolution 47 Country code top-level domain names Doc. 149
- d) Resolution 48 Internationalized (multilingual) domain names Doc. 164
- e) Resolution 49 ENUM Doc. 154
- f) Resolution 50 Cybersecurity Doc. 154
- g) Resolution 52 Countering (combating) spam, including by technical means Doc. 154

 This revised Resolution represents the combination of the WTSA-04 Resolutions 51 and 52.

2) New

a) Resolution CC – IP address allocation [and encouraging the deployment of IPv6] Doc. 164 Add. 1

This document contains some square brackets for discussion by plenary.

- b) Resolution DD Calling party number delivery Doc. 164
- c) Resolution O Network Externalities Doc. 164 Add. 3

This document contains some square brackets for discussion by plenary.

See also Recommendation D.156 in II.2.a below.

- d) Resolution U Dispute Settlement Doc. 164 Add. 1
- e) Resolution R Responding to the Challenges of the Evolution of the Numbering System and its Convergence with IP based Systems/Networks Doc. 164
- f) Resolution S "Hijacking" of international telecommunication numbering resources Doc. 149

- g) Resolution WSIS ITU-T's contribution in implementing the outcomes of the World Summit on the Information Society, and the establishment of a Dedicated Group on Internet-related Public Policy Issues as an integral part of the Council Working Group on World Summit on Information Society Doc. 164
- h) Resolution [KK] Non discriminatory access and use of Internet resources Doc. 164 Add. 2 This document contains square brackets for discussion by plenary.

3) Suppressed

a) Resolution 46 – ITU-T contribution to Council Working Group on the World Summit on the Information Society

This Resolution is replaced by new Resolution WSIS of 2.g above.

b) Resolution 51 – Combating spam

This Resolution is merged into Resolution 52 of 1.g above.

II Recommendations

1) Approved

The Recommendations approved by the Working Group are:

a) Recommendation D.50 Doc. 164 Add. 1

This document contains square brackets for discussion by plenary.

2) Considered

The Recommendations considered by the Working Group are:

a) Recommendation D.156 – Doc. 164 Add. 3

See Resolution O in I.2.c above.

Acknowledgments

The Chairman, Patrick Masambu (Uganda), thanked the vice-chairmen Mr Jianyong Chen (China) and Mr Cleveland Thomas (Trinidad and Tobago).

He also thanked the conveners of the ad hoc groups and informal consultations, Mr Jianyong Chen (China), Mr Saif Bin Ghelaita (UAE), Mr Sherif Guinena (Egypt), Ms Verenita Harris (USA), Mr Nabil Kisrawi (Syria), Ms Pauline Tsafak-Djoumessi (Cameroon), Ms Jie Zhang (China).

He noted that many other delegates had made very significant contributions by facilitating additional informal consultations and that it would not be practical to list all the names.

He also thanked the ITU staff, Richard Hill (TSB), Tatiana Kurakova (TSB), Marco Obiso (BDT), Stefano Polidori (TSB) and Patricia van Den Heuvel (TSB).

2.5 – Working Group 2 of the Plenary: Bridging the standardization gap

Chairman: Mr Maurice Ghazal (Lebanon)

1 Introduction

Working Group 2 was chaired by Mr Maurice Ghazal (Lebanon) and Vice-Chairpersons Mr Aboubakar Haman (Cameroon) and Ms Tran Thanh Ha (Viet Nam), with the assistance of Mr Paolo Rosa (TSB) and Mr Ewan Sutherland (TSB).

- 1.1 WG2 Terms of Reference:
- To examine issues arising from the relevant results of the Plenipotentiary Conference, including:
 - Resolution 25 (Strengthening the regional presence);
 - Resolution 30 (Special measures for the least developed countries and small island developing states);
 - Resolution 34 (Assistance and support to countries in special need for rebuilding their telecommunication sector);
 - Resolution 123 (Bridging the standardization gap between developing and developed country);
 - Resolution 137 (Next-generation network deployment in developing countries).
- To consider proposals from Member States and Sector Members related to standardization gap issues, including creation of regional groups.
- To consider proposals related to conformance testing.
- To report to the Plenary meeting on specific decisions to be taken by the Assembly.
- 1.2 Working Group 2 of the Plenary (Bridging the Standardization Gap) held five meetings in the period 21 to 28 October 2008.
- 1.3 The meetings took into account the documents allocated to it in DT/9 and DT/9 Cor.1, as detailed in OJ 3, 6, 13, 19 and 23.
- 1.4 The first meeting discussed the procedures to be adopted to make progress with the work of WG2. The secretariat was asked to produce a compilation of all contributions containing proposals for revisions to Resolutions 17, 26, 43, 44 and 54 (WD/02 and WD/02 Rev.1). The intention of the meeting was to create ad hoc groups or drafting groups depending on the extent of progress on each draft resolution.

2 Standardization and developing countries

Resolutions 17 and 44

Under this item, contributions were considered concerning Resolutions 17 and 44.

In the discussion of Res. 17, some concerns were raised about the boundary of work between TSB and BDT in the assistance provided to developing countries. In particular, some members were concerned at proposals for assistance in the examination of conformance and interconnection.

To progress the work, the meeting created a drafting group chaired by Mr J-J. Massima (Gabon), with a dozen countries.

For Resolution 44, an ad hoc group was formed chaired by Mr N. Kisrawi (Syrian Arab Republic). The chairmanship was taken over by Mr M. Ghazal (Lebanon) and later by Mr J-J. Massima (Gabon).

The results of the two groups for revisions to Res. 17 and Res. 44 were submitted to the WG2. Following their adoption, they were submitted to the WTSA Plenary as 144 and 168, respectively.

Creation of a Flagship Group based in Mexico

Document 56 Rev.1 (IAP/56/36) (CITEL) invited support from ITU-T in efforts to bridge the standardization gap, including capacity building, in the Spanish-speaking countries of the Americas.

It proposed the implementation of various activities such as the development of a permanent national and regional campaign on standardization, the drafting of handbooks, guidelines, online courses, to facilitate the structuring of specialization courses on ICTs and workshops, in order to take advantage of the support available from ITU-T. This proposal was supported by all delegations, with the suggestion that part of the voluntary fund for bridging standardization gap be used to support this activity. Moreover, similar initiatives could be extended to other regions, with an appropriate coordination mechanism between regions.

3 Regional preparations for WTSA

The meeting considered a number of contributions concerning the revision of Res. 43. The meeting agreed to create an ad hoc group chaired by Mr M. Rodrigo Canazza (Brazil), seconded by Senegal, to consolidate the proposals.

WG2 did not have time to discuss the document and it was agreed to put it forward directly to the WTSA Plenary as Doc.165.

4 Regional groups

Proposals were considered concerning regional groups addressed in Resolutions 26 and 54. The meeting, following detailed consideration, decided to maintain two separate resolutions and not to merge them as had been suggested.

The meeting considered the various proposals submitted by the membership, then created an ad hoc group to give detailed consideration to the proposals on Res. 26 and 54, with the results contained in Doc.163 and Doc.173, both submitted to the WTSA Plenary.

Additionally the meeting gave favourable consideration to the proposal for the creation of a regional group on QoS for the Americas, contained in Doc.56 Rev. 1 (IAP/56/32) (CITEL).

5 ITU Mark and type approval of equipment

One of the primary issues considered by WG2 was the proposal for an ITU Mark. Ghana, the Arab States and the African Telecommunications Union (ATU) had submitted three contributions concerning the ITU Mark, each containing a proposal for a new Resolution: [K], [HH] and [LL].

The meeting agreed to create an ad hoc group, chaired by Mr J Peprah (Ghana). This was to prepare a consolidated proposal, taking into account the contributions from members, in particular, three proposals for new Resolutions.

The ad hoc group prepared the consolidated proposal DT/33 to WG2. During the discussion of some parts of the text, it proved impossible to reach a consensus and the meeting accepted the proposal of the Chairperson to ask the WTSA Plenary to decide on the outstanding issues. Document C-Doc.162 was forwarded to the WTSA plenary.

6 Organizational arrangements

Under this item there were presented two new draft Resolutions, [C] Doc.79 (Uganda) and [N] Doc.71 Add. 2 (ATU). The first concerned the terms of references for vice-chairs of TSAG and ITU-T study groups, to give them an explicit role in bridging the standardization gap. The second called on multinational operators to encourage and to facilitate the participation of their employees in developing countries in ITU-T activities, as an important means to bridge the standardization gap.

Once again, an ad hoc group was formed with the results submitted to the WG2 meeting as DT/48 [C] and DT/50 [N]. WG2 did not have time to discuss the two documents and it was agreed to put them forward directly to the WTSA Plenary as Doc. 173 and 167 respectively.

7 Computer Emergency Response Teams (CERTs)

A draft new Resolution, [L] Doc.71 Add. 6, had been submitted by the ATU, addressing the need to create national Computer Emergency Response Teams (CERTs) in developing countries. WG2 assigned discussion of the details of Res. [L] to the group established for draft Resolutions [C] and [N].

The results were submitted to the WG2 meeting as DT/49. Unfortunately, WG2 did not have time to discuss the document, so that it was agreed to transmit them directly to the WTSA Plenary as Doc.166.

8 Health effects of electro-magnetic radiation

This issue was not considered as it had already been addressed by COM 4 as explained to WG2 by the Chairperson of COM 4.

9 World ICT Implementation Committee

The meeting considered a proposal, addressed to the Council, contained in Doc.76 (Lebanon), to establish a World Telecommunication/ICT Implementation Committee (WTICTIC). The objective was to assist developing countries with information on current and future regulatory, technical, economical and operational aspects of telecommunications, to provide an overview of the different international telecommunication infrastructures and of the status of recent work in the study groups of all three ITU Sectors.

The Chairperson, as presenter of Doc. 76, asked the elected members of the Council to endorse the proposal.

10 Voluntary contributions

This issue, related to Res. 34, had been allocated to COM 2, which asked WG2 for comments because of the relevance to bridging standardization gap. The meeting did not have time to discuss this matter and left the WTSA Plenary to take any necessary decisions on the conclusions arrived at by COM 2.

11 Results of the work of Working Group 2

11.1 New and revised resolutions

11.1.1 Resolution 17

Working Group 2 agreed to request the Plenary meeting to approve the revised Resolution 17 as contained in Doc. 144.

11.1.2 Resolution 26

Working Group 2 agreed to request the Plenary meeting to approve the revised Resolution 26 as contained in Doc. 163.

11.1.3 Resolution 43

Working Group 2 agreed to submit to the Plenary meeting for consideration and possible approval the revised Resolution 43 as contained in Doc. 165.

11.1.4 Resolution 44

Working Group 2 agreed to request the Plenary meeting to approve the revised Resolution 44 as contained in Doc. 168.

11.1.5 Resolution 54

Working Group 2 agreed to request the Plenary meeting to approve the revised Resolution 54 as contained in Doc. 173.

11.1.6 Resolution [C]

Working Group 2 agreed to submit to the Plenary meeting for consideration and possible approval the revised Resolution [C] as contained in Doc. 163.

11.1.7 Resolution [L]

Working Group 2 agreed to submit to the Plenary meeting for consideration and possible approval the revised Resolution [L] as contained in Doc. 166.

11.1.8 Resolution [N]

Working Group 2 agreed to submit to the Plenary meeting for consideration and possible approval the revised Resolution [N] as contained in Doc. 167.

11.1.9 Resolution [I&I Testing]

Working Group 2 agreed to submit to the Plenary meeting for consideration and possible approval the revised Resolution [I&I Testing] as contained in Doc. 162.

Res.		Status
17	Telecommunication standardization in relation to the interests of developing countries	R
26	Assistance to the regional tariff groups	R
43	Regional preparations for WTSAs	R
44	Bridging the standardization gap between developing and developed countries	R
54	Creation of regional groups	R
С	Instituting basic Terms of References for TSAG and ITU-T Study Group Vice Chairs (elected as regional representatives) as an avenue of bridging the standardization gap between developing and developed countries	N
L	Encourage the creation of national Computer Emergency Response Teams (CERTs), particularly for Developing countries	N
N	Enhancing participation telecommunication operators from developing countries	N
I&I	[Studies related to conformance and interoperability testing, assistance to developing countries, and a possible future ITU Mark Program]	N

Section 3 – Other reports and documents

Title	Document number
Committee meeting reports	
Committee 2 – Budget Control	
Report of the first and second meetings	141
Committee 3 – Working Methods of ITU-T	
Report of the first meeting	127
Report of the second meeting	134
Report of the third meeting	139
Report of the fourth meeting	146
Report of the fifth meeting	179
Committee 4 – Work Programme and Organization of ITU-T	
Report of the first meeting	126
Report of the second meeting	133
Report of the third meeting	137
Report of the fourth and fifth meetings	171
Working Group 1 of the Plenary: Issues relevant to the WSIS outcome related to ITU-T and to the work of Study Groups	
Report of the first session	124 + Rev.1
Report of the second session	132 + Rev.1 + Rev.1 Corr.1
Report of the third session	135 + Corr.1
Report of the fourth session	150
Report of the fifth session	153
Working Group 2 of the Plenary: Bridging the Standardization Gap	
Report of the first and second sessions	130
Report of the third session	140 + Corr.1
Report of the fourth and final sessions	177
Report by the Director of the Telecommunication Standardization Bureau	
TSB report on the activities of the ITU Telecommunication Standardization Sector (ITU-T)	33
Action plan related to the resolutions and decision of PP-06 and of WTSA-04	33 Add.1 and Corr.1 to Add.1
ITU-T 2005–2008; slide presentation by TSB Director	33 Add.2
Final list of participants	180
List of WTSA-08 documents	182 Rev.1



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