This electronic version (PDF) was scanned by the International Telecommunication Union (ITU) Library & Archives Service from an original paper document in the ITU Library & Archives collections.

La présente version électronique (PDF) a été numérisée par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'un document papier original des collections de ce service.

Esta versión electrónica (PDF) ha sido escaneada por el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un documento impreso original de las colecciones del Servicio de Biblioteca y Archivos de la UIT.

هذه النسخة الإلكترونية (PDF) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراه الضوئي بالمسح تصوير نتاج (ITU) والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلاً.

此电子版（PDF版本）由国际电信联盟（ITU）图书馆和档案室利用存于该处的纸质文件扫描提供。

Настоящий электронный вариант (PDF) был подготовлен в библиотечно-архивной службе Международного союза электросвязи путем сканирования исходного документа в бумажной форме из библиотечно-архивной службы МСЭ.

© International Telecommunication Union

International Telecommunication Union

BIBLIOTHÈQUE DE L'UIT GENÈVE

RESOLUTIONS RA-2000

Istanbul, 1-5 May 2000

Radiocommunication ASSEMBLY

THE RADIOCOMMUNICATION SECTOR OF ITU

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

Inquiries about radiocommunication matters

Please contact:

ITU
Radiocommunication Bureau
Place des Nations
CH-1211 Geneva 20
Switzerland

Telephone:	+41 22 730 5800
Fax:	+41 22 730 5785
E-mail:	brmail@itu.int
X.400:	S=brmail; P=itu; A=400net; C=ch

Placing orders for ITU publications

Please note that orders cannot be taken over the telephone. They should be sent by fax or e-mail.

ITU
Sales and Marketing Service
Place des Nations
CH-1211 Geneva 20
Switzerland

Telephone:	+41 22 730 6141 English
Telephone:	+41 22 730 6142 French
Telephone:	+41 22 730 6143 Spanish
Fax:	**+41 22 730 5194**
Telex:	421 000 uit ch
Telegram:	ITU GENEVE
E-mail:	**sales@itu.int**
X.400:	S=sales; P=itu; A=400net; C=ch

The Electronic Bookshop of ITU: **www.itu.int/publications**

© ITU 2000

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without written permission from ITU.

ITU-R RESOLUTIONS

	Title	Page
Res. ITU-R 1-3	Working methods for the Radiocommunication Assembly, the Radiocommunication Study Groups and the Radiocommunication Advisory Group	1
Res. ITU-R 2-3	Conference Preparatory Meeting	19
Res. ITU-R 4-3	Structure of Radiocommunication Study Groups	22
Res. ITU-R 5-3	Work programme of Radiocommunication Study Groups for [2000-2002]	27
Res. ITU-R 6-1	Liaison and collaboration with the ITU Telecommunication Standardization Sector	51
Res. ITU-R 7-1	Telecommunication development including liaison and collaboration with the ITU Telecommunication Development Sector	57
Res. ITU-R 8-1	Radiowave propagation studies and measurement campaigns in developing countries	61
Res. ITU-R 9-1	Liaison and collaboration with other organizations	63
Res. ITU-R 11-2	Development of basic automated spectrum management system	65
Res. ITU-R 12-1	Handbooks and special publications for development of radio-communication services	66
Res. ITU-R 15-3	Appointment and maximum term of office for Chairpersons and Vice-Chairpersons of Radiocommunication Study Groups	67
Res. ITU-R 17-2	Integration of International Mobile Telecommunications-2000 (IMT-2000) and systems beyond with existing networks	70
Res. ITU-R 19-1	Dissemination of ITU-R texts	71
Res. ITU-R 21-2	Computer programs for radio-frequency management	72
Res. ITU-R 22-1	Improvement of national radio spectrum management practices and techniques	74

		Page
Res. ITU-R 23-1	Extension of the international monitoring system to a worldwide scale	75
Res. ITU-R 25-2	Computer programs and associated reference numerical data for radiowave propagation studies	77
Res. ITU-R 27	HF field-strength measurement campaign	78
Res. ITU-R 28-1	Standard-frequency and time-signal emissions	80
Res. ITU-R 33-1	Presentation of texts on terminology	81
Res. ITU-R 34-1	Guidelines for the selection of terms and preparation of definitions	82
Res. ITU-R 35-1	The organization of vocabulary work	87
Res. ITU-R 36-1	The coordination of vocabulary and related subjects	89
Res. ITU-R 37	Radiowave propagation studies for system design and service planning	91
Res. ITU-R 38-2	Study of regulatory/procedural matters	92
Res. ITU-R 39-1	Further studies concerning unwanted emissions	94
Res. ITU-R 40	Worldwide databases of terrain height and surface features	95
Res. ITU-R 41-1	Collaboration with the international organization for standardization (ISO) and the international electrotechnical commission (IEC) on broadcasting technologies	96
Res. ITU-R 43	Rights of associates	98
Res. ITU-R 44	Updating of certain maintained CCIR/ITU-R Recommendations	100
Res. ITU-R 45	The provisional application of an alternative procedure for the approval of Recommendations	102
Res. ITU-R 46	Compatibility between radiocommunication systems and high data rate telecommunication systems using electricity power supply or telephone distribution wiring	104
Res. ITU-R 47	Future submission of satellite radio transmission technologies for IMT-2000	105
Res. ITU-R 48	Strengthening the regional presence in the Radiocommunication Study Group work	108
Res. ITU-R 49	Appointment and maximum term of office for the Chairperson and Vice-Chairpersons of the Radiocommunication Advisory Group	110
Res. ITU-R 50	Role of the Radciocommunication Sector in the ongoing development of	111

RESOLUTION ITU-R 1-3

WORKING METHODS FOR THE RADIOCOMMUNICATION ASSEMBLY, THE RADIOCOMMUNICATION STUDY GROUPS, AND THE RADIOCOMMUNICATION ADVISORY GROUP

(1993-1995-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that the duties and functions of the Radiocommunication Assembly are stated in Article 13 of the Constitution and Article 8 of the ITU Convention;

b) that the duties, functions and organization of the Radiocommunication Study Groups are briefly described in Articles 11 and 20 of the Convention;

c) that rules of procedure of conferences and other meetings of the ITU have been adopted by the Plenipotentiary Conference;

d) that further to Article 11A of the Convention, the Radiocommunication Advisory Group has requested that the Radiocommunication Assembly take certain actions with respect to the Radiocommunication Advisory Group,

resolves

that the working methods of the Radiocommunication Assembly and the Radiocommunication Study Groups shall be as follows*:

PART I

Working methods

1 The Radiocommunication Assembly

1.1 The Radiocommunication Assembly, in undertaking the duties assigned to it in Article 13 of the Constitution and Article 8 of the Convention , shall conduct the work of each Assembly by setting up Special Committees, as may be required, to address organization, work programme, budget control, and editorial matters.

---

* In accordance with No. 160G of the Convention the Radiocommunication Advisory Group adopts its own working procedures compatible with those adopted by the Radiocommunication Assembly.

1.2 There shall also be established a Steering Committee, presided over by the Chairman of the Assembly, and composed of the Vice-Chairmen of the Assembly and the Chairmen and Vice-Chairmen of the Committees.

1.3 Heads of Delegations shall:

- consider the proposals regarding the organization of the work and the establishment of relevant Committees;
- draw up the proposals concerning the designation of Chairmen and Vice-Chairmen of the Committees, Study Groups, special Committee on Regulatory/Procedural matters, Conference Preparatory Meeting and the Radiocommunication Advisory Group.

1.4 All Special Committees referred to in § 1.1 shall cease to exist with the closing of the Radiocommunication Assembly except the Editorial Committee. The Editorial Committee shall be responsible for the form of any texts prepared during the meeting and of any amendments made by the Radiocommunication Assembly to texts. This Committee shall also be responsible between Radiocommunication Assemblies for coordinating the work of the Editorial Groups set up by the Study Groups concerning texts prepared for approval before or at the next Radiocommunication Assembly. For this purpose, the Chairman and Vice-Chairmen of the Editorial Committee shall remain in office until the next Radiocommunication Assembly.

1.5 The Radiocommunication Assembly may also establish, by Resolution, committees to address specific matters. Committees so established may function beyond the closing of that Radiocommunication Assembly if the terms of reference contained in the establishing Resolution so permit.

1.6 The Radiocommunication Assembly shall consider the reports of the Director, Radiocommunication Bureau and the Study Group Chairmen; it shall, in particular, approve arrangements for the consideration and approval of draft Recommendations adopted by the Study Groups, and Resolutions (as far as possible draft Recommendations which have not been identified as needing further discussion should be approved in a group or in groups); and it shall take note of the Recommendations approved since the last Radiocommunication Assembly.

1.7 The Radiocommunication Assembly shall:

- approve the programme of work arising from the review of existing Questions and new Questions, determining the priority, urgency and time-scale for the completion of their study, taking into account the financial implications (see Resolution ITU-R 5);
- decide, in the light of the approved programme of work, on the need to maintain, terminate or establish Study Groups, and allocate to each of them the Questions to be studied;
- give special attention to problems of particular interest to developing countries by grouping Questions of interest to the developing countries as far as possible, in order to facilitate their participation in the study of those Questions;
- delete any Question that a Study Group Chairman reports at two consecutive meetings of the Assembly as receiving no study contributions, unless a Sector Member reports that it is undertaking studies on that Question and will contribute the results of those studies prior to the next Assembly, or a newer version of the Question is submitted.

1.8 In accordance with No. 137A of the Convention, the Radiocommunication Assembly may refer specific matters within its competence to the Radiocommunication Advisory Group for advice.

1.9 The Radiocommunication Assembly shall report to the next World Radiocommunication Conference on the progress in matters that may be included in agenda of future Radiocommunication Conferences as well as on the progress of ITU-R studies in response to requests made by previous Radiocommunication Conferences.

1.10 A Radiocommunication Assembly may express its opinion relating to the duration or agenda of a future Assembly or, when appropriate, to the application of the provisions of Article 26 of the Convention relating to the cancellation of a Radiocommunication Assembly.

2 Radiocommunication Study Groups

2.1 Each Study Group shall perform an executive role, including the planning, scheduling, supervision, delegation and approval of the work and other related matters.

2.2 The work of each Study Group, within the scope defined in Resolution ITU-R 4, shall be organized by the Study Group itself on the basis of proposals by its Chairman.

2.3 Each Study Group shall maintain a plan for its work that considers a period of at least four years ahead, taking due account of the related schedule of World Radiocommunication Conferences and Radiocommunication Assemblies. The plan should be reviewed at each meeting of the Study Group.

2.4 The Study Groups will normally set up Working Parties to study the Questions assigned to the Study Group. Each Working Party will study one or several Questions and will prepare draft Recommendations and other texts for consideration by the Study Group.

2.5 The Study Group may establish one or more Task Groups to which it may assign the studies of those urgent Questions and the preparation of those urgent Recommendations that cannot reasonably be carried out by a Working Party; appropriate liaison between the work of a Task Group and the Working Parties may be required.

2.6 Establishment of a Task Group shall be an action taken by a Study Group during its meeting and shall be the subject of a Decision. For each Task Group, the Study Group shall prepare a text listing:

- statement of the specific matters to be studied within the Question assigned and the subject of the draft Recommendation to be prepared;
- the reporting date;
- the name and address of the Chairman and any Vice-Chairmen.

In addition, for the case of an urgent Question or topic arising between Study Group meetings, such that it cannot reasonably be considered at a scheduled Study Group meeting, the Chairman, in consultation with the Vice-Chairmen and the Director, Radiocommunication Bureau, (hereinafter, the Director) may take action to establish a Task Group, in a Decision indicating the urgent Question or topic to be studied.

2.7 When necessary, Joint Working Parties (JWP) or Joint Task Groups (JTG) may be established for the study of Questions requiring the participation of experts from more than one Study Group.

2.8 When Working Parties or Task Groups are assigned preparatory studies on matters to be considered by World or Regional Radiocommunication Conferences, the final reports of the Working Parties or Task Groups may be submitted directly to the Conference Preparatory Meeting (CPM) process, normally at the meeting called to consolidate Study Group texts into the draft CPM Report, or exceptionally via the relevant Study Group.

2.9 Study Groups, Working Parties and Task Groups shall conduct their work as far as possible by correspondence, using modern means of communication.

2.10 The Director will maintain a list of Member States and Sector Members participating in each Study Group, Working Party or Task Group as well as in each Joint Rapporteur Group (see § 2.12).

2.11 In some cases, when urgent or specific issues arise that require analysis, it might be suitable to appoint a Rapporteur, who, being an expert, can carry out preliminary studies or conduct a survey among Member States and Sector Members participating in the work of the Study Groups mainly by correspondence. It might also be useful to appoint a Rapporteur to prepare draft Recommendation(s) or other ITU-R texts. In this case, the Rapporteur should submit the draft as a contribution to the relevant Working Party or Task Group in due time before the meeting to allow for comments. A Rapporteur must have clearly defined Terms of Reference and may be appointed by a Working Party, a Task Group or by the Study Group.

2.12 In some special cases, the establishment of a Joint Rapporteur Group (JRG) consisting of Rapporteur(s) and other experts from more than one Study Group might be envisaged. A Joint Rapporteur Group should report to the Working Parties or Task Groups of the relevant Study Groups. The provisions in §§ 2.10, 8.4, 8.5, 8.13 and 9.1 concerning Joint Rapporteur Groups will apply only to those Joint Rapporteur Groups which have been identified by the Director in consultation with the Chairmen of the relevant Study Groups.

2.13 Each Study Group shall set up an Editorial Group to ensure that the technical vocabulary used is correct. In addition, it shall also ensure that the texts to be approved have the same meaning in the different working languages of the ITU and are easily comprehensible to all users. Participation in the Editorial Group should be arranged beforehand and participants should plan either to extend their work beyond the close of the Study Group meeting for such periods as may be required and agreed, or to complete the work by correspondence as soon as possible.

2.14 The Chairman of the Study Group may establish a Steering Group to assist in the organization of the work.

2.15 In addition, should a Chairman, after the Radiocommunication Assembly has adjourned, consider that additional meetings of his Study Group are required, for which no provision was made by the Radiocommunication Assembly, should sufficient funds be available in the Study Group's budget, he may propose that his Study Group meet. Before such additional meetings are held, the Chairman shall consult with the Director to ensure that the provisions of §§ 2.17 and 2.18 below are appropriately considered especially as they apply to available resources.

2.16 Study Groups shall consider at their meetings, the draft Recommendations, progress reports and other texts prepared by Task Groups and Working Parties. To facilitate participation, a draft agenda shall be published, at latest, six weeks in advance of each meeting, indicating, to the extent possible, specific days for consideration of different topics.

2.17 For meetings held outside Geneva, the provisions of Resolution 5 of the Plenipotentiary Conference (Kyoto, 1994) apply; invitations to hold meetings of the Study Groups or their Task Groups and Working Parties away from Geneva should be accompanied by a statement indicating the host's acceptance of *resolves* 2 of Resolution 5 (Kyoto, 1994).

2.18 To ensure the efficient use of the resources of the Radiocommunication Sector and of the participants in its work and to reduce the amount of travel involved, the Director, in consultation with the Chairmen, shall establish and publish a programme of meetings in a timely manner. This programme should take into account relevant factors, including:

- the expected participation when grouping the meetings of certain Study Group, Working Party or Task Group;
- the desirability of contiguous meetings on related topics;
- the capacity of the ITU resources;
- the requirements for documents to be used in meetings;
- the need for coordination with the other activities of the ITU and other organizations;
- any directive issued by the Radiocommunication Assembly concerning the Study Group meetings.

2.19 A Study Group meeting should, wherever appropriate, be held immediately after Working Party and Task Group meetings. The agenda of such a Study Group meeting should contain the following points:

- if some Working Parties and Task Groups have met earlier and have prepared draft Recommendations, for which the approval process in accordance with § 10 is to be applied, a list of such draft Recommendations and the specific intent of the proposal in summarized form;
- a description of the topics to be addressed by the Working Party and Task Group meetings just before the Study Group meeting for which draft Recommendations may be developed.

2.20 The agenda for Working Party and Task Group meetings, which are immediately followed by a Study Group meeting, should indicate as specifically as possible the topics to be addressed, and should indicate where it is anticipated that draft Recommendations are to be considered.

2.21 With prior notice of a requirement and to the extent necessary and possible within available resources, the use of the working languages should be allowed during Task Group and Working Party meetings.

2.22 Each Study Group may adopt draft Recommendations. The draft Recommendations shall be approved according to the provisions of § 10.

2.23 Each Study Group may adopt draft Questions for approval in accordance with the provisions of § 3.

2.24 Each Study Group may also adopt draft Resolutions for approval by the Radiocommunication Assembly.

2.25 Each Study Group may approve Decisions, Opinions, Handbooks and Reports.

The Study Group may establish other procedures for the approval of Handbooks, e.g. by the Working Party concerned.

3 Questions to be studied by the Study Groups

3.1 In accordance with No. 129 of the Convention new or revised Questions referred to the Radiocommunication Assembly by the Plenipotentiary Conference, any other conference, the Council or the Radio Regulations Board shall be studied.

3.2 Concerning Questions submitted in accordance with § 3.1, the Director shall, as soon as possible, consult with the Study Group Chairmen and Vice-Chairmen and shall determine the appropriate Study Group to which the Question shall be assigned, and the urgency for the studies.

3.3 In accordance with Resolution ITU-R 5, studies may also be undertaken without questions on matters within the scope of the Study Group.

3.4 Other new or revised Questions, proposed within Study Groups, may be adopted by a Study Group and approved:

- by the Radiocommunication Assembly (see Resolution ITU-R 5);
- by consultation in the interval between Radiocommunication Assemblies, after adoption by a Study Group.

3.5 Each Question shall be assigned to only one Study Group.

3.6 The Study Group Chairman, in consultation with the Vice-Chairmen, shall assign the Question to an existing Working Party or Task Group or, dependent upon the urgency of a new Question, shall propose the establishment of a new Task Group, see § 2.6, or shall decide to refer the Question to the next Study Group meeting.

3.7 Each Study Group shall identify to the Director, Questions that may be suppressed because studies have been completed, may no longer be necessary or have been superseded. The Director shall collect such Questions and circulate them by consultation to Member States for approval of suppression under the same procedure given in § 3.4 above.

4 Preparations for World (and Regional) Radiocommunication Conferences

4.1 The procedures outlined in Resolution ITU-R 2 apply to the preparation for World Radiocommunication Conferences (WRCs). As appropriate, they may be adapted by a Radiocommunication Assembly to apply to the case of a Regional Radiocommunication Conference (RRC).

4.2 Preparations for WRCs will be carried out by the CPM (see Resolution ITU-R 2).

5 Coordination among Study Groups, Sectors and with other international organizations

5.1 Meetings of Study Group Chairmen and Vice-Chairmen

Shortly after the close of each Radiocommunication Assembly and once in each year, the Director shall call a meeting of the Chairmen and Vice-Chairmen. The purpose of the meeting shall be to ensure the most effective coordination of the work of the Study Groups. The Director shall serve as Chairman of this meeting. The meeting shall also consider the status of work in the Study Groups regarding agendas for the next two WRCs and make recommendations accordingly.

In addition, the Director may, after consultation with the Chairmen and Vice-Chairmen of the Study Groups, call meetings of Chairmen and Vice-Chairmen at other times to discuss subjects which require urgent consideration.

5.2 Liaison Rapporteurs

Coordination between Study Groups may be ensured by the appointment of Study Group Liaison Rapporteurs to participate in the work of the other Study Groups or with Study Groups of the other two Sectors.

5.3 Intersector Coordination Groups

In specific instances, complementary work on certain topics may be conducted by Study Groups in both the Radiocommunication Sector and the Telecommunication Standardization Sector. In such circumstances, it may be agreed between the two Sectors to establish an Intersector Coordination Group (ICG). For details on this process see Resolution ITU-R 6.

5.4 Other international organizations

When cooperation and coordination with other international organizations is necessary, the interface shall be provided by the Director. Liaison on specific technical matters, following consultation with the Director, may be carried out by Working Parties or Task Groups, or by a representative appointed by a Study Group.

PART II

Documentation

6 Radiocommunication Assembly and Radiocommunication Study Group texts

6.1 Definitions

The Radiocommunication Assembly and Radiocommunication Study Group texts are defined as follows:

6.1.1 Question

A statement of a technical, operational or procedural problem, generally seeking a Recommendation (see Resolution ITU-R 5).

6.1.2 Recommendation

An answer to a Question or part(s) of a Question which, within the scope of existing knowledge and studies, gives specifications, data or guidance; the recommended way or ways of undertaking a specified task; or a recommended procedure or procedures for a specified application and which is considered to be sufficient to serve as a basis for international cooperation. When Recommendations provide information on various systems relating to one particular radio application, they should be based on criteria relevant to the application, and should include, where possible, an evaluation of the recommended systems, using those criteria. In such cases, the relevant criteria and other pertinent information are to be determined, as appropriate, within the Study Group. Recommendations should be drafted taking account of the statement on intellectual property rights, given in Annex 1.

6.1.3 Resolution

A text giving instructions on the organization, methods or programmes of Radiocommunication Assembly or Study Group work.

6.1.4 Opinion

A text containing a proposal or a request destined for another organization (such as other Sectors of the ITU, international organizations, etc.) and not necessarily relating to a technical subject.

6.1.5 Decision

A text giving instructions on the organization of the work of a Study Group.

6.1.6 Report

A technical, operational or procedural statement, prepared by:

- a Study Group on a given subject related to a current Question;
- a CPM.

6.1.7 Handbook

A text which provides a statement of the current knowledge, the present position of studies, or of good operating or technical practice, in certain aspects of radiocommunications, which should be addressed to a radio engineer, system planner or operating official who plans, designs or uses radio services or systems, paying particular attention to the requirements of developing countries. It should be self-contained, require no familiarity with other ITU radiocommunication texts or procedures, but should not duplicate the scope and content of publications readily available outside the ITU.

6.2 Presentation

6.2.1 Texts should be as brief as possible and should relate directly to the Question being studied.

6.2.2 Each text should include a reference to related texts and, where appropriate, to pertinent items of the Radio Regulations.

6.2.3 Texts shall be presented showing their number, their title and an indication of the year of their approval, and where appropriate, of any revisions.

6.3 Numbering

6.3.1 Recommendations shall be numbered in series according to a list prepared by the Director.

6.3.2 Reports shall be numbered in a similar way to Recommendations.

6.3.3 Questions shall be numbered in a separate series for each Study Group.

6.3.4 Opinions, Resolutions and Decisions shall be numbered in separate series.

6.3.5 When revised, a text shall retain its number with the addition of a hyphen and digit indicating the number of successive revisions.

6.4 Publications

6.4.1 Publication of approved texts shall be according to the following scheme:

- all Recommendations in force shall be published as soon as possible after approval in an electronic form;
- all Recommendations in force shall be published in paper form in Volumes every four years;
- in the intervening period, new and modified Recommendations shall be published in paper form in Supplements at appropriate intervals as determined by the Director in consultation with the Study Group Chairman;
- all Resolutions and Opinions shall be published following each Radiocommunication Assembly.

6.4.2 Each Volume for a given Series of Recommendations should include:

- a plan of the Books of the last Radiocommunication Assembly;
- a plan of the Volumes;
- the distribution of texts between Volumes;

- a table of contents;
- an index of the Recommendations in numerical order;
- a list of other texts of the Study Group, including Questions, Resolutions, Opinions and Reports in force, indicating their title and the Volume in which they are published;
- an introductory preface prepared by the Study Group Chairman when appropriate;
- the scope of the relevant Study Group, as well as the names of its Chairman and Vice-Chairmen;
- the texts of the Recommendations compiled by theme;
- the texts of Resolutions and Opinions related to the content of the Volume.

6.4.3 New Reports, Reports with significant amendments and those fulfilling a specific need shall be produced as soon as possible after approval by the Study Group.

Reports shall be produced in the most economical form, taking advantage of modern text preparation methods.

6.4.4 Handbooks should in general be published in electronic and printed bound form and updated and/or complemented by the issue of supplements. If necessary, they can include software or data in computer readable form for programs described in the text.

6.4.5 Publication of the texts of the Radiocommunication Assembly should involve the use of both printed and electronic formats.

The texts of approved Questions, Recommendations, Resolutions, Opinions and Decisions should be included in the ITU databases and be available for access by outside terminals.

7 Preparatory documentation

7.1 Radiocommunication Assemblies

Preparatory documentation shall include:

- draft texts, prepared by Study Groups, for approval;
- a report from the Chairman of each Study Group and CPM, reviewing the activities of the Group since the preceding Radiocommunication Assembly, including from each Study Group Chairman a list of Questions for which no input documentation has been received for the period mentioned in § 1.7. Should a Chairman believe that a certain Question should continue an explanation must be given;
- a report by the Director which should include proposals for the future work programme;
- a list of Recommendations adopted since the previous Radiocommunication Assembly;
- contributions submitted from Member States and Sector Members addressed to the Radiocommunication Assembly.

7.2 Radiocommunication Study Groups

Preparatory documentation shall include:

- any directives issued by the Radiocommunication Assembly with respect to the Study Group, including this Resolution;
- draft Recommendations and other texts prepared by Task Groups or Working Parties;
- proposals for approval of draft Recommendations between Radiocommunication Assemblies (see § 10);
- progress reports from each Task Group, Working Party and Rapporteur;
- the contributions to be considered at the meeting, which may include documentation prepared by the Bureau on the basis of current literature, with a view to updating existing texts;
- the Chairman's report, summarizing the conclusions of any work carried out by correspondence and preparing the work to be accomplished at the meeting;
- the conclusions of the preceding meeting, in so far as they have not been included in the official texts referred to above;
- an outline agenda indicating: draft Recommendations to be considered, Questions to be considered, reports from Task Groups and Working Parties to be received, and Reports to be approved.

8 Contributions to Radiocommunication Study Group studies

8.1 The Director, following consultation with the Study Group Chairmen, shall issue guidelines concerning the length and form of preparation for contributions, and dealing with numbering, figures, formulae, etc.

8.2 The Director shall also issue guidelines encouraging contributions provided on diskette or electronically.

8.3 The Director may return a document which does not comply with the guidelines, for it to be brought into line.

8.4 Each contribution should clearly indicate the Question or topic, the Task Group, Working Party, Joint Rapporteur Group or, when of a general nature, the Study Group.

8.5 Contributions should be sent to the Chairman and Vice-Chairmen of the Study Group concerned, the Chairman of the Task Group or Working Party or the Rapporteur(s) of the Joint Rapporteur Group and any relevant Rapporteur and at the same time to the Director for numbering, translation, reproduction and distribution.

8.6 Contributions submitted by participants at least three months before the opening of the meeting at which they will be considered shall be distributed by the Director not later than one month before the opening of the meeting at which they are to be examined.

8.7 Contributions for consideration by correspondence submitted well before the date of the meeting should be distributed promptly by the Director.

8.8 Reports from the Chairmen of Study Groups, Working Parties and Task Groups should be submitted at least two months before the opening date of the meeting and shall be distributed by the Director.

8.9 Exceptionally, participants may submit in one or more of the working languages, delayed contributions which they consider essential and which cannot be submitted by the time-limit given in § 8.6. Delayed contributions from participants for Study Group consideration must be submitted at least seven days prior to the start of the meeting. Delayed contributions from participants to Task Group and Working Party meetings which can be published in at least the original working language(s) provided by participants and which can be made available by the Radiocommunication Bureau before the meeting will be placed on the agenda of the first session of the meeting, but will be considered only if the meeting concerned so decides. It is recognized that the Director cannot make a firm commitment regarding translation for delayed contributions. Taking account of the provisions of § 2.19, the arrangements in this section do not apply to submissions prepared by relevant ITU meetings.

8.10 In addition, contributions which are not available to participants at the opening of the meeting shall not be considered.

8.11 Participants are encouraged to submit contributions through electronic means following the procedures outlined in the Radiocommunication Bureau Guidelines.

8.12 The Director shall maintain records and copies of all contributions received, in numbered series.

8.13 Contributions and other documents shall be distributed to those who have indicated a wish to participate in the Study Group, Working Party, Joint Working Party, Task Group, Joint Task Group or Joint Rapporteur Group concerned (see § 9.1).

8.14 When articles are referred to in documents submitted to the Radiocommunication Bureau, such references or bibliography should be to published works which are readily available through library services.

9 Circulation of information

9.1 The Director shall issue, at regular intervals, information which will include:

- an invitation to participate in the work of the Study Groups for the next study period;
- a request form to be completed for the receipt of the documentation;
- a schedule of meetings for at least the next 12 months with updates, as appropriate;
- all Study Group meeting invitations;
- CPM preparatory documents and final Reports;
- preparatory documents for the Radiocommunication Assembly.

The following information will be provided based on responses to requests for documentation as outlined above:

- Study Group circulars which will include invitations to all Working Party, Task Group and Joint Rapporteur Group meetings with a form for individual participation and draft agenda;
- Study Group, Working Party, Task Group and Joint Rapporteur Group documents;
- other information which will assist Member States and Sector Members.

9.2 Information on Study Group activities will also be available in electronic form, as appropriate.

PART III

10 Approval of Recommendations

10.1 Introduction

10.1.1 Due to rapid and continuing changes in telecommunication technologies and consequent changes in radiocommunication services and their operational and technical functions, it is desirable to employ procedures for expeditious approval of radiocommunication Recommendations.

10.1.2 When the study of a Question has reached a mature state resulting in a draft new or revised Recommendation, the approval process to be followed is in two stages:

- adoption by the Study Group concerned (see § 10.2);
- approval by the Member States (see § 10.3).

Although not explicitly mentioned below, this process may also be used for the deletion of existing Recommendations.

10.1.3 There may be exceptional circumstances where no Study Group meeting has been scheduled at a suitable time prior to a Radiocommunication Assembly, and where a Task Group or Working Party has prepared draft proposals for new or revised Recommendations which require urgent action. In these cases, if at its previous meeting the Study Group decides, the Study Group Chairman may submit such proposals directly to the Radiocommunication Assembly and should outline the reasons for such urgent action.

10.1.4 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 Nos. 129 and 149 of the Convention. Alternatively, or additionally, approval may be sought for amendment of an existing Recommendation within the Study Group's mandate.

10.1.5 Where a draft Recommendation (or revision) falls, exceptionally, 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 procedures below.

10.1.6 In the interests of stability, revision of a Recommendation should not normally be considered for approval within two years, unless the proposed revision complements rather than changes the agreement reached in the previous version.

10.2 Adoption of a new or revised Recommendation by a Study Group

10.2.1 Adoption at a Study Group meeting

10.2.1.1 A Study Group may consider and adopt draft new or revised Recommendations, when the draft texts have been prepared sufficiently far in advance of the Study Group meeting so that it is anticipated that the draft texts in the working languages will have been distributed in either paper and/or electronic forms at least four weeks prior to the start of the Study Group meeting.

10.2.1.2 Upon request of the Study Group Chairman, the Director shall explicitly indicate the intention to seek approval of new or revised Recommendations under this procedure for adoption at a Study Group meeting when announcing the convening of the relevant Study Group meeting. The announcement shall include the specific intent of the proposal in summarized form. Reference shall be provided to the document where the text of the draft of the new or revised Recommendation may be found.

This information shall be distributed to all Member States and Sector Members and should be sent by the Director so that it shall be received, so far as practicable, at least three months before the meeting.

10.2.1.3 The Study Group should approve a document stating the summaries of the proposed new Recommendations and the summaries of modifications for the proposed revised Recommendations. This document should be included in an appropriate notification dispatched by the Director.

10.2.2 Adoption by a Study Group by correspondence

10.2.2.1 When a draft new or revised Recommendation has not been anticipated for specific inclusion in the agenda of a Study Group meeting, or when there has been insufficient time for a draft text to be prepared in the working languages prior to the Study Group meeting as indicated in § 10.2.1.1, the participants at the Study Group meeting may decide, after due consideration, to seek adoption of the draft new or revised Recommendation by the Study Group by correspondence (see also § 2.9).

10.2.2.2 The Study Group meeting should approve a document giving a summary of the proposed new Recommendation or of the modifications of the proposed revised Recommendation. If the Study Group adopts the Recommendation following the procedure given below, this document should be included in the appropriate notification of the approval process dispatched by the Director.

10.2.2.3 Immediately following the Study Group meeting, the Director should circulate these draft new or revised Recommendations to all Member States and Sector Members participating in the work of the Study Group for full Study Group consideration by correspondence. The circulation should be made as soon as possible in the available languages, and followed, again as soon as possible, in the remaining working languages.

10.2.2.4 The period for Study Group consideration shall extend for at least two months following the circulation of the draft new or revised Recommendations and shall end after the texts of the draft new or revised Recommendations have been available in the working languages for at least four weeks.

10.2.2.5 If within this period for Study Group consideration no objections are received from Member States, the draft new or revised Recommendation shall be considered to be adopted by the Study Group.

10.2.2.6 However, if objections to the adoption of the text are received within this period, the Director and the Study Group Chairman shall consult the Member State making the objection with a view to resolving the problem.

10.2.2.7 If the Director and Study Group Chairman determine that an objection to the text can be resolved through editorial corrections, the document may be sent forward through the appropriate approval process with these corrections identified. If there are objections to the text that cannot be corrected editorially, the following procedure shall be followed. If this text is in response to questions of category C1 or to other matters relating to the WRC, the text should be forwarded to the Radiocommunication Assembly. In other cases, the Study Group Chairman should seek the agreement of the administration concerned to forward the text to the Radicommunication Assembly and, if this agreement is not obtained, refer the text back to the Study Group, unless there is sufficient evidence that the technical objection has already been adequately discussed within the Study Group. In this latter case, the Study Group Chairman should forward the text via the Director, BR to the Radiocommunication Assembly, indicating that the text has not been adopted within the Study Group, and the administration concerned should be notified of this action. Furthermore, the Radiocommunication Bureau shall send, as soon as possible, to the Radiocommunication Assembly, Task Group or Working Party, as appropriate, the reasons given by the Director and Study Group Chairman for their decision and the detailed objection from the administration that objected to the draft new or revised Recommendation.

10.3 Approval of new or revised Recommendations

10.3.1 When a draft new or revised Recommendation has been adopted by a Study Group, by either of the above procedures, then the text shall be submitted for approval by Member States.

10.3.2 Approval of new or revised Recommendations may be sought:

- at a Radiocommunication Assembly;
- by consultation of the Member States as soon as the relevant Study Group has adopted the text.

10.3.3 At the Study Group meeting where a draft is adopted or where it is decided to seek adoption by Study Group correspondence, the Study Group shall decide to submit the draft new or revised Recommendation for approval either at the next Radiocommunication Assembly or by consultation of the Member States.

10.3.4 When it is decided to submit a draft to the Radiocommunication Assembly, the Study Group Chairman shall inform the Director and request that he takes the necessary action to ensure that it is included in the agenda for the Assembly.

10.3.5 When it is decided to submit a draft for approval by consultation the following conditions and procedures apply.

10.3.5.1 At the Study Group's meeting the decision of the delegations representing Member States to apply this approval procedure must be unopposed. A delegation may advise at the Study Group meeting that it is abstaining from the decision to apply the procedure. This delegation's presence shall then be ignored for the purposes of this decision. Such an abstention may subsequently be revoked, but only during the course of the Study Group meeting.

Exceptionally, but only during the Study Group meeting, delegations may request more time to consider their positions. Unless advised of formal opposition from any of these delegations within a period of one month after the last day of the meeting, the approval process by consultation shall continue. If formal objection is received, the draft shall be submitted to the next Radiocommunication Assembly (see § 10.3.3).

10.3.5.2 For the application of the approval procedure by consultation, within one month of a Study Group's adoption of a draft new or revised Recommendation, according to one of the methods in § 10.2, the Director shall request Member States to indicate within three months whether they approve or do not approve the proposal. This request shall be accompanied by the complete final text, in the working languages, of the proposed new or revised Recommendation.

10.3.5.3 The Director shall also advise Sector Members participating in the work of the relevant Study Group under the provisions of Article 19 of the Convention, that Member States are being asked to respond to a consultation on a proposed new or revised Recommendation, but only Member States are entitled to respond. This advice should be accompanied by the complete final texts, for information only.

10.3.5.4 If 70% or more of the replies from Member States indicate approval, the proposal shall be accepted. If the proposal is not accepted, it shall be referred back to the Study Group.

Any comments received along with responses to the consultation shall be collected by the Director and submitted to the Study Group for consideration.

10.3.5.5 Those Member States who indicate that they do not approve are encouraged to advise their reasons and to participate in the future consideration by the Study Group and its Working Parties and Task Groups.

10.3.5.6 The Director shall promptly notify, by circular letter, the results of the above procedure for approval by consultation. The Director shall arrange that this information is also included in the next available ITU Notification.

10.3.6 Should minor, purely editorial amendments or correction of evident oversights or inconsistencies in the text as presented for approval be necessary, the Director may correct these with the approval of the Chairman of the relevant Study Group.

10.3.7 The ITU shall publish the approved new or revised Recommendations in the working languages as soon as practicable, indicating, as necessary, a date of entry into effect.

10.3.8 Any Member States or Sector Members 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.

10.3.9 The Director shall inform the next Radiocommunication Assembly of all cases notified in conformity with § 10.3.8.

ANNEX 1

Statement on Radiocommunication Sector patent Policy*

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

ITU-R Recommendations are non-binding international documents. Their objective is to ensure the rational, equitable, efficient and economical use of radio-frequency spectrum and satellite orbits or to recommend on various radiocommunication matters. To meet this objective, which is in the common interests of all those participating in radiocommunications (network and service providers, suppliers, users, frequency spectrum managers) it must be ensured that Recommendations, their applications, use, etc. are accessible to everybody. It follows therefore that a commercial (monopolistic) abuse by a holder of a patent embodied fully or partly in a Recommendation must be excluded. To meet this requirement in general is the sole objective of the code of practice. The detailed arrangements arising from patents (licensing, royalties, etc.) are being left to the parties concerned, as these arrangements might differ from case to case.

---

* This statement will be reviewed by the Radiocommunication Advisory Group to include issues related to copyright once the Telecommunication Standardization Sector's copyright policy has been adopted.

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

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

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

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

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

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

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

RESOLUTION ITU-R 2-3

CONFERENCE PREPARATORY MEETING

(1993-1995-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that the duties and functions of the Radiocommunication Assembly, in preparing for World Radiocommunication Conferences (WRCs) are stated in Articles 13 of the ITU Constitution and 8 of the ITU Convention;

b) that special arrangements are necessary for such preparations,

resolves

1 that a Conference Preparatory Meeting (CPM) shall be set up on the basis of the following principles:

- that the CPM should be permanent;
- that it should address topics on the agenda of the immediately forthcoming conference and make provisional preparations for the subsequent conference;
- that invitations to participate should be sent to all Member States of the ITU and to Radiocommunication Sector Members;
- that documents should be distributed to all Member States of the ITU and to Radiocommunication Sector Members wishing to participate in the CPM;
- that the terms of reference of the CPM should include the updating, rationalization, presentation and discussion of material from Radiocommunication Study Groups and the Special Committee, together with consideration of new material submitted to it;

2 that the scope of the CPM shall be:

- on the basis of contributions from administrations, the Special Committee, the Radiocommunication Study Groups (see also Provision No. 156 of the Convention), and other sources (see Article 19 of the Convention) concerning the regulatory, technical, operational and procedural matters to be considered by World and Regional Radiocommunication Conferences, the CPM shall prepare a consolidated report to be used in support of the work of such conferences. In the preparation of these reports, differences in approach as contained in the source material shall be reconciled to the extent possible. In the case where the approaches cannot be reconciled, the differing views and their justification shall be included in the report;

3 that the working methods shall be as presented in Annex 1.

ANNEX 1

Working methods for the Conference Preparatory Meeting

1 Regulatory studies of technical and operational matters will be undertaken by the appropriate Study Groups.

2 The CPM will normally hold two meetings during the interval between WRCs.

2.1 The first meeting will be for the purpose of coordinating the work programmes of the relevant Study Groups, and preparing a draft structure for the CPM Report, based on the agenda for the next two WRCs, and for taking into account any directives which may have come from the previous WRC. This meeting will be of short duration and will normally occur in the week following the conclusion of the previous WRC, and should be associated with a meeting of Study Group Chairmen and Vice-Chairmen.

2.2 The second meeting will be for the purpose of preparing the report for the next WRC. This meeting shall also review progress on preparatory studies for agenda items to be considered at the WRC following the next scheduled WRC. The meeting will be of adequate duration to accomplish the necessary work (two to three weeks) and will be timed to ensure publication of the Final Report at least six months before the next WRC.

2.3 The first meeting will identify issues for study in preparation for the next WRC and, to the extent necessary, for the subsequent WRC. These issues should be derived from the draft and provisional Conference agendas and should, as far as possible, be self contained and independent. For each issue a single group (which could be a Study Group, Task Group or Working Party, etc.) should be identified to take responsibility for the preparatory work, inviting input and/or participation from other groups as necessary. As far as possible, existing groups should be used for this purpose, with new groups being established only where this is considered to be necessary.

2.4 Meetings of the groups identified should be scheduled to facilitate maximum participation by all interested members. The groups should base their output on existing material plus new contributions. The output of each group should form contributions to the CPM Final Report to the WRC without the need for formal consideration by the relevant Study Group. Where the relevant Study Group has not considered the output from the respective group, this should be clearly indicated, and the output should be submitted to the CPM by the Study Group Chairman.

2.5 In order to facilitate the understanding by all participants of the contents of the draft CPM Report, overview presentations by the CPM management of the chapters will be made at the early stages of the meeting as part of the regularly scheduled sessions.

3 The work of the CPM will be directed by a Chairman and two Vice-Chairmen. The Chairman will be responsible for preparing the report to the next WRC.

4 The Chairman or the CPM may appoint Chapter Rapporteurs to assist in guiding the development of the text that will form the basis of the CPM Report, and to provide continuity of material through the consolidation of Study Group texts into a cohesive report.

5 The Chairman shall convene a meeting of the responsible Working Party/Task Group Chairmen, Study Group Chairmen, CPM Vice-Chairmen, Chapter Rapporteurs and Radiocommunication Bureau Staff to consolidate the output from the responsible Working Parties or Task Groups into a draft CPM Report, that will be an input document to the CPM.

6 The consolidated draft CPM Report shall be translated into the three working languages of the Union and distributed to Member States a minimum of two months prior to the date schedule for the second meeting of the CPM.

7 Every effort shall be made to ensure that the volume of the final CPM Report is kept to a minimum. To this end, Working Parties/Task Groups/Study Groups are urged to maximize the use of references to approved ITU-R Recommendations in preparing CPM texts.

8 In relation to working arrangements, the CPM shall be considered as an ITU meeting in accordance with No. 172 of the Constitution.

9 In preparing for the CPM, maximum use should be made of electronic means for the distribution of contributions to participants.

10 The other working arrangements shall be in accordance with the relevant provisions of Resolution ITU-R 1.

RESOLUTION ITU-R 4-3

STRUCTURE OF RADIOCOMMUNICATION STUDY GROUPS

(1993-1995-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) provision No. 133 and Article 11 of the ITU Convention;

b) that the work of the Radiocommunication Study Groups is involved with developing the technical, operational and procedural bases for efficient use of the radio spectrum and the geostationary-satellite orbit;

c) that cooperation between the Radiocommunication Sector and international and regional organizations with regard to the development of standards for radiocommunication systems and operations would provide considerable benefits,

resolves

1 that seven Radiocommunication Study Groups shall be set up as shown in Annex 1;

2 that, in liaison with the Telecommunication Standardization Sector, the Telecommunication Development Sector, the ITU General Secretariat and with other interested organizations, the Radiocommunication Bureau organizes the work of a Coordination Committee for Vocabulary, the scope of which is given in Annex 2.

ANNEX 1

The Radiocommunication Study Groups

STUDY GROUP 1

(SPECTRUM MANAGEMENT)

(Spectrum planning, utilization, engineering, sharing and monitoring)

Scope:

1 Development of principles and techniques for effective spectrum management, sharing criteria and methods, techniques for spectrum monitoring and long-term strategies for spectrum utilization and economic approaches to national spectrum management as well as, in association with the appropriate bodies of the ITU, facilitation of the collection and dissemination of information concerning computer programs prepared for the implementation of relevant Recommendations.

2 To provide assistance in matters within its competence to developing countries in cooperation with the Telecommunication Development Sector.

3 Study a limited number of specific urgent Questions concerning inter-service sharing and compatibility referred to it by the Radiocommunication Assembly or, if the Question arises during the interval between the Assemblies, by the decision of a meeting of the Study Group Chairpersons and Vice-Chairpersons or by the Director after consultation with interested Study Group Chairpersons and Administrations. The Radiocommunication Assembly or the Director, as the case may be, shall establish a time schedule for the completion of this work.

Development of Recommendations or of a Report to the Conference Preparatory Meeting in answer to those urgent Questions concerning inter-service sharing and compatibility requiring special attention. This course of action shall be followed if the matter cannot be dealt with more expeditiously through the mechanism of joint working parties, joint task groups or ad hoc rapporteur groups, as assigned by the Radiocommunication Assembly, or if the Question arises during the interval between Radiocommunication Assemblies, by the Director after consultation with interested Study Group Chairpersons and Administrations.

Chairperson:	R. MAYHER	(United States of America)
Vice-Chairpersons:	T. JEACOCK	(United Kingdom)
	N. KISRAWI	(Syrian Arab Republic)
	A. PAVLIOUK	(Russian Federation)

STUDY GROUP 3

(RADIOWAVE PROPAGATION)

Scope:

Propagation of radio waves in ionized and non-ionized media and the characteristics of radio noise, for the purpose of improving radiocommunication systems.

Chairperson:	R.G. COLE	(Australia)
Vice-Chairpersons:	B. ARBESSER-RASTUBURG	(ESA)
	D.V. ROGERS	(Canada)

STUDY GROUP 4

(FIXED-SATELLITE SERVICE)

Scope:

Systems and networks for the fixed-satellite service and inter-satellite links in the fixed-satellite service, including associated tracking, telemetry and telecommand functions.

Chairperson:	Y. ITO	(Japan)
Vice-Chairpersons:	J.M.P. FORTES	(Brazil)
	V. RAWAT	(Canada)
	A.G. REED	(United Kingdom)
	J. SESEÑA NAVARRO	(Spain)

STUDY GROUP 6

(BROADCASTING SERVICES)

Scope:

Radiocommunication broadcasting (terrestrial and satellite), including vision, sound, multimedia and data services principally intended for delivery to the general public.

Broadcasting makes use of point-to-everywhere information delivery to widely available consumer receivers. When return channel capacity is required (e.g. for access control, interactivity, etc.), broadcasting typically uses an asymmetrical distribution infrastructure that allows high capacity information delivery to the public with lower capacity return link to the service provider. The production and distribution of programs (vision, sound, multimedia, data, etc.) may employ contribution circuits among studios, information gathering circuits (ENG, SNG, etc.), primary distribution to delivery nodes, and secondary distribution to consumers.

The Study Group, recognizing that radiocommunication broadcasting extends from the production of programmes to their delivery to the general public, as detailed above, studies those aspects related to production and radiocommunication, including the international exchange of programs as well as the overall quality of service.

Chairperson:	A. MAGENTA	(Italy)
Vice-Chairpersons:	J.A. FLAHERTY	(NABA)
	S. GLOTOV	(Ukraine)
	J. KUMADA	(Japan)
	H. KUSSMANN	(Germany, Federal Republic of)
	R. NAJM	(ASBU)
	K.M. PAUL	(India)
	L. OLSON	(United States of America)
	V. STEPANIAN	(Iran, Islamic Republic of)

STUDY GROUP 7

(SCIENCE SERVICES)

Scope:

1 Systems for space operation, space research, earth exploration and meteorology, including the related use of links in the inter-satellite service.

2 Radio astronomy and radar astronomy.

3 Dissemination, reception and coordination of standard-frequency and time-signal services, including the application of satellite techniques, on a worldwide basis.

Chairperson:	R.M. TAYLOR	(United States of America)
Vice-Chairpersons:	R. JACOBSEN	(Australia)
	G. de JONG	(Netherlands, Kingdom of the)
	V. MEENS	(France)
	M.B. VASILIEV	(Russian Federation)

STUDY GROUP 8

(MOBILE, RADIODETERMINATION, AMATEUR AND RELATED SATELLITE SERVICES)

Scope:

Systems and networks for the mobile, radiodetermination and amateur services, including related satellite services.

Chairperson:	C. VAN DIEPENBEEK	(Netherlands, Kingdom of the)
Vice-Chairpersons:	T. MIZUIKE	(Japan)
	V.A. STRELETS	(Russian Federation)
	R.L. SWANSON	(United States of America)

STUDY GROUP 9

(FIXED SERVICE)

Scope:

Systems and networks of the fixed service operating via terrestrial stations.

Chairperson:	V.M. MINKIN	(Russian Federation)
Vice-Chairpersons:	A. HASHIMOTO	(Japan)
	H. MAZAR	(Israel, State of)
	K. MEDLEY	(United States of America)

ANNEX 2

CCV

(COORDINATION COMMITTEE FOR VOCABULARY)

Scope:

Coordination within the Radiocommunication Study Groups, and liaison with the Telecommunication Standardization Study Groups, the Telecommunication Development Study Groups, the ITU General Secretariat and other interested organizations (mainly the International Electrotechnical Commission (IEC)) concerning:

- vocabulary, including abbreviations and initials;
- related subjects (quantities and units, graphical and letter symbols).

Chairperson:	J.P. HUYNH	(France)
Vice-Chairpersons:	L.W. BARCLAY	(United Kingdom)
	P. GARCÍA-BARQUERO	(Spain)

RESOLUTION ITU-R 5-3

WORK PROGRAMME OF RADIOCOMMUNICATION STUDY GROUPS [FOR 2000-2002]

The ITU Radiocommunication Assembly,

considering

a) those parts of Resolution ITU-R 1 concerning the Questions to be studied by the Radiocommunication Study Groups;

b) Resolution 82 of the Plenipotentiary Conference (Minneapolis, 1998) relating to the alternative procedure for the approval of ITU-R Questions and Recommendations, and Resolution ITU-R 45,

resolves

1 that the categories used to identify the priority and urgency of Questions to be studied should be:

C: Conference-oriented Questions associated with work related to specific preparations for, and decisions of, world and regional radiocommunication conferences:

C1: Very urgent and priority studies, required for the next World Radiocommunication Conference;

C2: urgent studies, expected to be required for other radiocommunication conferences;

S: Questions which are intended to respond to:

– matters referred to the Radiocommunication Assembly by the Plenipotentiary Conference, any other conference, the Council, the Radio Regulations Board;

– advances in radiocommunication technology or spectrum management;

– changes in radio usage or operation:

S1: urgent studies which are intended to be completed within two years;

S2: important studies, necessary for the development of radiocommunications;

S3: required studies, expected to facilitate the development of radiocommunications;

If necessary, following a world or regional radiocommunication conference, the Director of the Radiocommunication Bureau, in consultation with the Chairmen of the Study Groups concerned, may assign appropriate categories to Questions which are related to the decisions of the conference or to the agendas of future world or regional radiocommunication conferences.

2 that Questions identified as suitable for approval by the alternative procedure according to Resolution ITU-R 45 should be within the categories S1, 2 or 3; such Questions shall be identified as "/AP";

3 that, as early as possible in the study period beginning in 2000, the Study Groups shall identify which of their Questions, if any, are suitable for approval by the alternative procedure according to Resolution ITU-R 45. Identification of Questions using this procedure is subject to being approved, without opposition, by correspondence.

This approval procedure for the identification of Questions should not delay the starting of the process for the approval of the Recommendations under the alternative procedure in accordance with Resolution ITU-R 45.

4 that the work programme for the next study period shall be the Questions listed in Annex 1 with Categories C and S. These Questions shall be referred to the appropriate Study Group. The texts of the Questions listed in Annex 1 are to be found in Document 1 of the series of documents for the next study period of the appropriate Study Group;

5 that the work programme also includes studies on matters relevant to agenda items of WRCs or relevant WRC Resolutions with the scope of the Study Group,

further resolves

6 that Conference-oriented Questions for study by the Study Groups shall:

- address topics seeking a Recommendation or a report to a conference;
- address a single specific issue;
- include a specified target date for the output;

7 that each Question shall:

- indicate in a concise form the reason for the study;
- specify the scope of the study as precisely as possible;
- indicate the form in which the response should be prepared (e.g. as a Recommendation or other text, etc.) and, when possible, an outline of the contents of the expected response;
- specify the date when a complete or partial response is needed or the time period for the study, together with the milestones for the progress of the study;
- be modified to take account of partial answers;
- identify relevant Study Groups working in closely related areas, to which the text of the Question should be sent for consideration;

8 that Study Groups shall consider all their Questions and make proposals to each Assembly:

- so as to bring them into conformity with *further resolves* 4 and 5;
- for the categorization of Questions in accordance with *resolves* 1;
- for the deletion of Questions, where the study has been completed, where no contributions are expected within the next study period, or, in conformance with Resolution ITU-R 1, § 1.7, where no contributions have been made; such Questions shall be identified as category D;

9 that each Study Group shall report to each Radiocommunication Assembly the progress that has been made in respect of each Question allocated to it with categories C1, C2 or S1;

10 that, as a part of the work programme, a Study Group may also undertake studies, within the scope of its mandate, for the revision of an existing Recommendation or on a topic for which a new Question would normally be required. Where such study is expected to continue beyond the date of the next Radiocommunication Assembly, an appropriate Question should be drafted for approval by the Assembly.

ANNEX 1

Questions assigned by the Radiocommunication Assembly to Study Group 1

Spectrum management

Question ITU-R No.	Title	Category
45-4/1	Techniques and technical criteria for frequency sharing	S2
66/1	Methods and algorithms for frequency planning	S3
202-1/1	Measurement of various interference sources to digital communication systems (according to their interference effect)	S3
205-1/1	Long-term strategies for spectrum utilization	S2
206/1	Strategies for economic approaches to national spectrum management and their financing	S2
207/1	Assessment, for spectrum planning and strategic development, of the benefits arising from the use of the radio spectrum	S2
208/1	Alternative methods of national spectrum management	S2
209/1	Parameters of radio equipment required for spectrum management and the efficient use of the radio spectrum	S1
210/1	Wireless power transmission	S3
211/1	Unwanted emissions	C2
212/1	Development of method(s) for the determination of the coordination area around earth stations	C1
213/1	Technical and operating parameters and spectrum requirements for short-range devices	S2
214/1	Monitoring of digital broadcasting signals	S2
215/1	Monitoring of the radio coverage of land mobile networks to verify compliance with a given license	S2
216/1	Spectrum redeployment as a method of national spectrum management	S2
217/1	Compatibility between short range devices operating within the band 59-64 GHz and industrial, scientific and medical (ISM) applications operating in the band 61-61.5 GHz	S2
218/1	Techniques for measurement of radiation from high data rate telecommunication systems using electricity power supply of telephone distribution wiring	S2
219/1	Remote access to radio monitoring equipment of other administrations	S2
220/1	Characterization of various interference sources to analogue and digital communication systems (according to their interference effect)	S3
221/1	Compatibility between radiocommunication systems and high data telecommunication systems using electricity power supply or telephone distributing wiring	S2
222/1	Definition of the spectral properties of transmitter emissions	S1

ANNEX 2

Questions assigned by the Radiocommunication Assembly to Study Group 3

Radiowave propagation

Question ITU-R No.	Title	Category
201-2/3	Radiometeorological data required for the planning of terrestrial and space communication systems and space research application	S2
202-1/3	Methods for predicting propagation over the surface of the Earth	S2
203-2/3	Propagation prediction methods for terrestrial broadcasting, fixed (broadband access) and mobile services at frequencies above 30 MHz	S1
204-3/3	Propagation data and prediction methods required for terrestrial line-of-sight systems	S2
205-1/3	Propagation data and prediction methods required for trans-horizon systems	S2
206-3/3	Propagation data and prediction methods for fixed- and broadcasting-satellite services	S2
207-3/3	Propagation data and prediction methods for satellite mobile and radiodetermination services above about 0.1 GHz	S2
208-1/3	Propagation factors in frequency sharing issues affecting fixed-satellite services and terrestrial services	S2
209/3	Variability and risk parameters in system performance analysis	S2
211-1/3	Propagation data and propagation models for the design of short-range wireless communication and access systems and wireless local area networks (WLAN) in the frequency range 300 MHz to 100 GHz	S1
212-1/3	Ionospheric properties	S3
213/3	The short-term forecasting of operational parameters for ionospheric and trans-ionospheric radiocommunications	S3
214/3	Radio noise	S2
218-2/3	Ionospheric influences on space systems	S2
221/3	VHF and UHF propagation by way of sporadic E and other ionization	S3
222/3	Measurements and data banks	S2
223/3	Prediction of sky-wave propagation conditions, signal intensity and circuit performance at frequencies between about 1.6 and 30 MHz	S2
224-2/3	System performance and reliability at HF including the use of digital modulation techniques	S1
225-2/3	The prediction of propagation factors affecting systems at LF and MF including the use of digital modulation techniques	S1
226/3	Ionospheric and tropospheric characteristics along satellite-to-satellite paths	S2
227/3	HF channel simulation	S1
228/3	Propagation data required for the planning of space radiocommunication systems and space science service systems operating above 275 GHz	S1

ANNEX 3

Questions assigned by the Radiocommunication Assembly to Study Group 4

Fixed-satellite service

Question ITU-R No.	Title	Category
7-3/4	Baseband transmission variability, delay and echoes in systems in the fixed-satellite service	S2
42-1/4	Characteristics of antennas at earth stations in the fixed-satellite service	S1
44-1/4	Use of transportable transmitting earth stations in the fixed-satellite service including use for feeder links to broadcasting satellites	S2
46-2/4	Preferred multiple-access characteristics in the fixed-satellite service	S2
55-2/4	Feeder links in the fixed-satellite service used for the connections to and from geostationary satellites in various mobile-satellite services	S1
63-1/4	Frequency sharing of the fixed-satellite service with terrestrial radio services other than the fixed service under the provisions of Article 14 of the Radio Regulations	S3
67-1/4	Frequency sharing between the fixed-satellite service and the Earth exploration-satellite (passive) and space research (passive) services near 19 GHz	C1
68-1/4	Frequency sharing of the fixed-satellite service and the inter-satellite service with other space radio services under provisions of Article 14 of the Radio Regulations	S2
70-1/4	Protection of the geostationary-satellite orbit against unacceptable interference from transmitting earth stations in the fixed-satellite service at frequencies above 15 GHz	S2
73-1/4	Availability and interruptions to traffic on digital paths or circuits in the fixed-satellite service	S2
75-3/4	Performance objectives of international digital transmission links in the fixed-satellite service	S1
76-1/4	Voice and data signal processing for international digital transmission links in the fixed-satellite service	S2
77-1/4	Video signal processing for international digital transmission links in the fixed-satellite service	S2
78-1/4	Use of satellite communication systems in the B-ISDN	S2
81-1/4	Frequency sharing among networks in the fixed-satellite service, the mobile-satellite service and those of satellites equipped to operate in more than one service in the 20-50 GHz band	S2

Question ITU-R No.	Title	Category
201-1/4	Digital satellite systems in the FSS in synchronous transport networks based on the SDH	S1
202-1/4	Interference criteria in the fixed-satellite service for the optimum inhomogeneous use of the available capacity of the geostationary orbit	S1
203-1/4	The impact of using small antennas on the efficient use of the geostationary-satellite orbit	S1
204/4	Interference of undetermined origin on Earth-to-satellite links	S2
205-1/4	Frequency sharing between non-geostationary satellite feeder links in the fixed-satellite service used by the mobile-satellite service	S1
206-3/4	Sharing between non-geostationary satellite feeder links in the fixed-satellite service used by the mobile-satellite service and other space services, and networks of the fixed-satellite service using geostationary satellites	S1
208/4	Use of statistical and stochastic methods in evaluation of interference between satellite networks in the fixed-satellite service	S2
209/4	The use of frequency bands allocated to the fixed-satellite service for both the up and down links of geostationary-satellite systems	S2
214/4	Technical implications of steerable and reconfigurable satellite beams	S1
216/4	Interruptions to traffic due to site diversity arrangements and/or equipment protection arrangements on digital paths or circuits in the fixed-satellite service	S2
218-1/4	Compatibility between on-board processing satellites in the FSS and terrestrial networks	S2
219-1/4	Protection of non-geostationary satellite feeder links in the fixed-satellite service used by the mobile-satellite service from radio-relay systems in the shared frequency bands	S2
220/4	Interference criteria for systems in the fixed-satellite service using spread spectrum multiple access	S2
221/4	Selection of radio stars visible in southern hemisphere for use in determining *G/T* values for antennas in the fixed-satellite service	S2
222/4	Protection ratio masks for TV/FM carriers	S2
223/4	Interference criteria for short-term interference events into the fixed-satellite service networks	S1
224/4	Technical coordination and optimization methods for systems in the fixed-satellite service to be used under Appendix 30B of the Radio Regulations	S1
226-1/4	Use of portable and transportable transmitting earth stations for digital transmission of digital high-definition television for news gathering and outside broadcasts via satellite	S1
227/4	Use of digital transmission techniques for satellite news gathering (sound)	S2

Question ITU-R No.	Title	Category
230/4	Studies on efficient use of FSS orbit/spectrum resources resulting from Resolution 18 (Kyoto-94)	C1
231/4	Sharing between networks of the fixed-satellite service using non-geostationary satellites and other networks of the fixed-satellite service	S1
232/4	Use of regenerative processing in FSS allocations	S2
233/4	Dedicated user digital satellite communications systems and their associated architectures	S2
234/4	Phase jitter and wander requirements for satellite earth station modems	S1
235/4	Use of operational facilities to meet power-flux-density limitation under Article 28 of the Radio Regulations	S1
236/4	Interference criteria and calculation methods for the fixed-satellite service	S1
237-2/4	Sharing criteria for systems in the fixed-satellite service involving a large number of non-geostationary satellites with systems in the fixed service for bands in the 10-30 GHz range	S1
239/4	Sharing criteria between systems utilizing inter-satellite links	C1
240/4	Technical implications of possible definition of the quasi-geostationary orbit on the fixed-satellite service sharing frequency bands with the fixed service	C1
241-1/4	Technical implications of possible definition of the quasi-geostationary orbit on the fixed-satellite service using geostationary and non-geostationary orbits	C1
242/4	Sharing between feeder links for the mobile-satellite service and the aeronautical radionavigation service in the space-to-Earth direction in the band 15.4-15.7 GHz and the protection of the radioastronomy service in the band 15.35-15.4 GHz	C1
243-1/4	Sharing between feeder links for the mobile-satellite service and the aeronautical radionavigation service in the Earth-to-space direction in the band 15.45-15.65 GHz	C1
244/4	Sharing between feeder links of the mobile-satellite (non-geostationary) service in the band 5 091-5 250 MHz and the aeronautical radionavigation service in the band 5 000-5 250 MHz	C2
245/4	Out-of-band and spurious emission limits	C1
246/4	Sharing between the inter-satellite service, Earth-exploration satellite (passive) service and other services in frequency bands above 50 GHz	C1
247/4	Design objectives for radiation patterns applicable to non-geostationary-satellite orbit/mobile-satellite service feeder link Earth stations operating in the 5/7 GHz band	S1
248/4	Frequency sharing between systems in the fixed-satellite service and wireless digital networks around 5 GHz	S1
249/4	Interoperability of equipment for digital transmission of television news gathering via satellite news gathering (SNG)	S1
250-1/4	Feasibility of the fixed-satellite service sharing with the fixed service operating on the same frequencies in the range 30-52 GHz	S1

Question ITU-R No.	Title	Category
251-1/4	Frequency sharing criteria between systems in the fixed-satellite service and systems in the fixed service using high-altitude platform stations	S1
252/4	Criteria for the protection of Appendix 30B Plan against interference from NGSO systems	S1
253/4	Determination of coordination area for Earth stations operating with non-geostationary satellites in the fixed-satellite service in the frequency bands shared with the fixed service	S1
254/4	Sharing feasibility of earth stations on board vessels operating in the fixed-satellite service with stations in the fixed service in the bands 3 700-4 200 MHz and 5 925-6 425 MHz	S1
255/4	Sharing criteria for very small aperture terminal (VSAT) systems in the fixed-satellite service using the same frequency band with point-to-multipoint systems used for fixed wireless access (FWA) in the fixed service in the band 3 400-3 700 MHz	S2
256/4	Criteria and methodologies for sharing between the fixed-satellite service and other services with allocations in the band 40.5-42.5 GHz	S1
257/4	Spectrum requirements for telemetry, tracking and control of FSS networks operating with service links in the bands above 17 GHz	S1
258/4	Feasibility of implementing 15 GHz non-GSO MSS feeder downlinks in the light of the protection requirements of the RAS in a nearby band	S1
259/4	Earth station off-axis e.i.r.p. density levels in the bands above 14.5 GHz allocated to the FSS	S1
260/4	Satellite news gathering (SNG) user's guide	S2
261/4	Allowable noise in fixed-satellite service systems due to interference	S1
262/4	Allowable error performance and availability degradations of fixed-satellite service systems due to long and short-term effects	S1
263/4	Performance objectives of digital links in the fixed-satellite service for transmission of IP packets	S1
264/4	Technical and operational characteristics of networks of the fixed-satellite service operating above 275 GHz	S1

ANNEX 4

Questions assigned by the Radiocommunication Assembly to Study Group 6*

Broadcasting service

Question ITU-R No	Title	category
44-2/10	LF, MF and HF sound broadcasting	S3
49-2/10	Receivers for sound broadcasting below 30 MHz	S3
55-1/10	Protection ratios in LF, MF and HF broadcasting	S2
56-1/10	Minimum usable field strength in LF, MF and HF broadcasting	S2
57-2/10	Sky-wave reception in LF, MF and HF broadcasting	S2
58-1/10	Coverage in LF, MF and HF broadcasting	S2
61-1/10	Single-sideband (SSB) system for broadcasting (HF)	S2
65-1/10	Short-distance broadcasting in band 7 (HF) in the Tropical Zone	S2
71/10	Transmission of supplementary information with a single transmitter in frequency-modulation sound broadcasting	S1
75/10	Immunity of FM broadcast receivers against interference	S2
76-3/10	Transmitting and receiving antennas at VHF and UHF	S1
78-1/10	Standards for the transmission of several sound signals in one television channel in terrestrial or satellite broadcasting including high-definition and enhanced definition television systems	S1
84-1/10	Sound systems for the hearing impaired	S2
85-2/10	Subjective assessment of sound quality in broadcasting using digital techniques	S2
91-1/10	Digital recording of sound programmes on magnetic tape for international exchange	S3
93-2/10	Characteristics of systems in the broadcasting-satellite service (sound) for individual reception by means of portable and vehicular receivers	C2
105-1/10	Multi-lingual services in multichannel sound systems	S2
107/10	Characteristics of terrestrial digital sound-broadcasting systems for reception by vehicular, portable and fixed receivers	S1
201-1/10	Transmitting and receiving antennas at LF and MF	S2
204-1/10	Frequency sharing issues related to the introduction of the broadcasting-satellite service (sound) in the frequency range 1-3 GHz	C2

* Study Group 6 is instructed to review all assigned Questions.

Question ITU-R No	Title	category
205-1/10	Evaluating fields from broadcasting transmitting systems operating at frequencies below 30 MHz for assessing exposure to non-ionizing radiation	S2
207/10	Standards for digital audio techniques	S2
208-1/10	Low bit-rate audio coding standards	S1
211-1/10	System parameters for multichannel sound systems	S3
213/10	Synchronized transmitters in LF and MF sound broadcasting	S2
214-1/10	Unified identification information for international exchange of sound-programme recordings	S1
215/10	Recording of sound programmes for international exchange	S2
216-1/10	Archival of sound programmes in broadcasting	S2
217-1/10	Digital broadcasting at frequencies below 30 MHz	S2
218-1/10	Broadcasting of film programmes with multichannel sound	S2
219/10	Spectrum management issues related to the introduction of the broadcasting-satellite service (sound) in the frequency range 1-3 GHz	S1
220/10	Subjective assessment of small, medium and large impairments in sound quality	S2
221/10	Calibration of the listening level for headphones in subjective listening texts	S1
222/10	Digital interactive sound, multimedia and data broadcasting systems	S1
223/10	Planning parameters for digital broadcasting at frequencies below 30 MHz	C1
224/10	Spectrum requirements for sound broadcasting	S1
225/10	Tolerable round-trip time delay for sound broadcast programme inserts	S1
226/10	Audio coding schemes for sound broadcast programme inserts	S1
227/10	Methodologies for subjective assessment and optimisation of audio and video quality	S2

Question ITU-R No.	Title	category
1-3/11	Colour television standards	S3
4-5/11	Protection ratios in television	S3
27-3/11	Standards for the high-definition television studio and for international programme exchange	S3
35-4/11	Synchronization necessary for the satisfactory reception of sound and picture signals	S1
36-2/11	Polarization of emissions in the terrestrial broadcasting service (television)	S3
42-2/11	Enhanced television	S3
43-1/11	Technical bases required for planning the broadcasting service (television) in bands 8, 9 and 10	S3
45-1/11	Processability margins required for contribution programme material in television production	S3
47-1/11	Standards for digital high definition television	S1
49-1/11	Characteristics of television signals radiated in bands above 2 GHz from terrestrial broadcasting transmitters	S2
55-1/11	Conditions for a satisfactory television service in the presence of reflected signals	S3
64-4/11	Objective picture quality parameters and associated measurement and monitoring methods for television images	S3
65-1/11	Interfaces for digital video signals	S1
72-1/11	Multiplexing of data services in a broadcasting channel	S3
73/11	International exchange of captioning material for television programmes	S3
74-1/11	Data broadcasting services provided in a broadcasting channel	S3
75/11	Methods of reducing interference to the broadcasting service (television) from other services operating in the same or adjacent bands	S3
77-1/11	Conditional-access broadcasting systems	S1
79/11	Terrestrial emission of enhanced television	S3
86-2/11	Frequency sharing for the feeder links to a broadcasting satellite (sound and television)	C1
89-1/11	Sharing studies between high-definition television (HDTV) in the broadcasting-satellite service and other services	C1
92-1/11	Digital techniques in the broadcasting-satellite service (sound and television)	S1
93-1/11	Transmitting and receiving antennas for the broadcasting-satellite service (sound and television) and for the associated feeder links	C1
94-2/11	Radiation of unwanted emissions from space stations in the broadcasting-satellite service (sound and television)	S1

Question ITU-R No.	Title	category
99-1/11	Telemetry, tracking and command signals and test signals for maintenance testing of broadcasting-satellite radio-frequency characteristics	S1
100-1/11	Satellite broadcasting of high-definition television (HDTV)	C2
101-1/11	Integrated services digital broadcasting (ISDB) in the broadcasting-satellite service (sound and television)	S2
103-1/11	Small format recording of television programmes on magnetic tape for international exchange	S2
104-3/11	Recording of television programmes on optical or magneto-optical disks for international exchange	S3
108-2/11	Digital recording of high definition television programmes for international exchange	S3
115-1/11	Interconnection specifications for audiovisual equipment related to broadcasting	S3
119-1/11	The harmonization of standards between broadcast and non-broadcast applications of television	S1
121-1/11	Digital terrestrial television broadcasting	S1
203/11	Coding for the broadcasting of digitally-encoded TV signals in terrestrial narrow-band channels	S1
204/11	Data broadcasting systems and services in an HDTV environment	S3
205/11	Parameters for integrated services digital broadcasting (ISDB)	S2
206-1/11	Standards for the digital encoding of colour television signals	S3
207-2/11	Generic bit-rate reduction coding of digital TV signals (SDTV, EDTV and HDTV) for contribution, for primary and secondary distribution, for emission and for related applications	S1
210-2/11	Planning parameters for television broadcasting using digital terrestrial narrow-band channels	S1
211-2/11	Subjective assessments of the quality of television pictures including alphanumeric and graphic pictures	S3
213/11	Target digital HDTV standard for use in the development of future systems for the studio and for international programme exchange	S1
214/11	User requirements for interconnection of digital HDTV studio equipment operating at full or reduced bit rate	S1
217/11	Digital multi-programme television emissions within a satellite transponder	C1
218-1/11	Technical characteristics of feeder links to broadcasting satellites operating in the 12, 17 and 21 GHz bands	C1
220/11	Characteristics of systems in the broadcasting-satellite service (sound and television) for reception by transportable and fixed receivers	S1
221/11	Characteristics of receiving systems in the broadcasting-satellite service (sound and television)	S2

Question ITU-R No.	Title	category
222/11	Satellite orbits and space station technology for the broadcasting-satellite service (sound and television)	S2
223/11	Protection ratios for interference studies and system planning in the broadcasting-satellite service (sound and television)	C1
224-1/11	Simultaneous transmissions of TV programmes on BSS and FSS services from a multiservice space station	S1
225/11	Overall coordination of the technical characteristics and associated test methods for the separate parts of the television signal chain	S2
226/11	Extremely high-resolution imagery	S3
230/11	Acquisition and recovery times in digital television encoding	S2
231/11	Digital HDTV studio interfaces	S1
233-1/11	Unified identification data for international exchange and archival of recordings and of films for television	S1
234/11	Subjective assessment of stereoscopic television pictures	S3
235/11	Digital coding and compression of stereoscopic television pictures	S3
236/11	User requirements for electronic news gathering (ENG)	S1
237/11	Data structure and requirements for multimedia-hypermedia broadcasting services	S3
238-1/11	Television recording format for long-term programme archives	S3
239-1/11	Recording of television programmes for international exchange	S3
240-1/11	Use of cinematographic film in television	S3
241/11	Interactive satellite broadcasting systems (television, sound and data)	S1
243/11	Enhancement of conventional analogue television	S3
244/11	Frequency requirements for electronic news gathering	S2
245-1/11	Use of CD-ROMS in television broadcasters' operation	S3
246/11	Recording of television programmes for delayed re-broadcasting at regional centres	S3
247/11	Access to orbit and spectrum resources for the broadcasting satellite service and the fixed satellite service «direct-to-home» applications	S2
248/11	Harmonization of methods for delivery of multichannel digital services to the home	S1
249/11	Use of computer technology in television broadcasting applications	S2
250/11	Digital coding for multi-programme television	S2
251-1/11	User requirements in the area of file management and transfer protocols for television recording in programme production	S3

Question ITU-R No.	Title	category
252/11	Serial data transport mechanism for packetized data within a television production studio based on, and compatible with, Recommendation ITU-R BT.656	S3
253/11	Assessment and optimization of quality of colour reproduction in television	S3
254/11	Adaptive image quality enhancement in future TV systems	S3
255/11	Auxiliary signals for digital codecs to assist editing and cascading	S3
256/11	Digital interactive television broadcasting systems	S1
257/11	Relationship between quality, quality evaluation methodology, and type of application, in a multimedia environment	S2
258/11	Multimedia evolution and common content format	S1
259/11	Tolerable round-trip time delay for television broadcast programme inserts	S1
260/11	Broadcast data systems to facilitate "client storage"	S1
261/11	Television and multimedia images quality levels	S1
262/11	Flexibility and interoperability in digital television broadcasting applications	S1
263/11	Broadcasting of copy protection signalling for television	S1
264/11	Emerging digital opportunities for the production of enhanced television	S1
265/11	Methodologies for subjective assessment of audio and video quality	S1
266/11	Reference signals for the component digital studio	S1
267/11	Sharing criteria for BSS networks in the 17.3-17.8 GHz band in Region 2, and in the 21.4-22 GHz band in Regions 1 and 3, and their associated feeder links	S1
268/11	Spectrum requirements for television broadcasting	S1
269/11	Recording formats to be used in international tape exchange for HDTV programme evaluation	S2

ANNEX 5

Questions assigned by the Radiocommunication Assembly to Study Group 7

Science services

Question ITU-R No.	Title	Category
101-2/7	Performance and reliability of frequency standards and their use in time-scales	S3
102-2/7	Terrestrial standard-frequency and time-signal dissemination	S2
104-2/7	Stability of standard-frequency and time-signal emissions as received	S3
110-2/7	Time codes	S2
111-1/7	Signal delays in antennas and other circuits and their calibration for high-accuracy time transfer	S2
118-2/7	Factors which affect frequency sharing between data relay satellite systems and systems of other services	S2
129-1/7	Unwanted emissions radiated from and received by stations of the science services	C2
139-3/7	Data transmission for Earth exploration-satellite systems	S2
141-3/7	Data transmission for meteorological satellite systems	S2
143-2/7	Preferred frequency bands for satellite systems for geodesy and geodynamics in the Earth exploration-satellite service	S2
144/7	Radiocommunication systems for the meteorological-aids service	S2
145-2/7	Technical factors involved in the protection of radioastronomical observations	S2
146-2/7	Criteria for evaluation of interference to radio astronomy	S2
149-1/7	Frequency utilization on the far side of the Moon	S2
152-2/7	Standard frequencies and time signals from satellites	S3
201-1/7	Two-way time transfer through communication satellites	S1
202-1/7	Protection criteria and frequency sharing between space VLBI and other space research systems	S2
203-1/7	Characteristics and telecommunication requirements for space VLBI	S2
205/7	Radio observations of pulsars	S2
206-1/7	Frequency comparisons of remotely located standards at the 10^{-15} level of uncertainty	S2
207-1/7	Time and frequency transfer using digital communication links	S1

Question ITU-R No.	Title	Category
211/7	Frequency sharing between the space research service and other services in the 37-38 GHz and 40-40.5 GHz bands	S2
213-1/7	Compatibility of spaceborne active sensors and systems in the services allocated above the band 5 250-5 460 MHz	C2
215-1/7	Frequency sharing between Earth exploration-satellite systems (passive), space research systems (passive) and systems in the fixed, mobile and fixed-satellite services in the band 18.6-18.8 GHz	C2
216-1/7	Frequency sharing between Earth exploration-satellite systems (passive), space research systems (passive) and systems in the fixed, mobile, fixed-satellite, mobile-satellite, inter-satellite and radiolocation services in the band 50.2-65 GHz	C2
218-1/7	Frequency sharing between active sensor systems in the Earth exploration-satellite service and systems operating in other services at around 440 MHz and 5 300 MHz	C2
219/7	Space operation and space research services frequency bands for telecommand links in the range 100 MHz to 1 GHz	C2
221/7	Preferred frequency bands and protection criteria for space research service observations (passive)	S2
222/7	Radio links between Earth stations and lunar and planetary missions by means of lunar and planetary data relay satellites	S2
223/7	The role of differential GPS networks in timing applications	S2
224/7	Algorithms for ensemble time scales and measurement systems	S3
226/7	Frequency sharing between the radio astronomy service and other services in bands above 70 GHz	C1
227/7	Percentage of time for which interference harmful to the radio astronomy service can be accepted	C2
228/7	Preferred frequencies for the Earth exploration-satellite (passive) and space research (passive) services above 70 GHz and the feasibility of sharing with other services in these bands	C1
229/7	Frequency sharing between the Earth exploration-satellite service (passive) and airborne altimeters in the aeronautical radionavigation service in the band 4 200-4 400 MHz	C2
230/7	Protection and sharing criteria for radio astronomy measurements from space	S2
231/7	EESS (active) and SRS (active) operating above 100 GHz	S2
232/7	Sharing between spaceborne passive sensors and other services in the 36-37 GHz band	S1
233/7	Sharing conditions between active sensor systems in the Earth exploration-satellite service and systems operating in other services around 35.5-36 GHz	S1
234/7	Frequency sharing between active sensor systems in the Earth exploration-satellite service and systems operating in other services in the 1 215-1 300 MHz band	S1
235/7	Technical and operational characteristics of applications of space science services operating above 275 GHz	S1

ANNEX 6

Questions assigned by the Radiocommunication Assembly to Study Group 8

Mobile, radiodetermination, amateur and related satellite services

Question ITU-R No.	Title	Category
1-3/8	Interference protection ratios and minimum field strengths required in the mobile services	S1
7-5/8	Characteristics of equipment for the land mobile service between 25 and 3 000 MHz	S2
12-4/8	Radio-paging systems	S2
35-1/8	Efficient use of the radio spectrum by radar stations in the radiodetermination service	S2
37-4/8	Systems with improved spectrum efficiency for the land mobile service	S1
40-4/8	Digital transmission in the land mobile service	S1
45-4/8	Technical and operating considerations for a global land and maritime distress and safety system	S3
48-4/8	Techniques and frequency usage in the amateur service and amateur-satellite service	S3
51-3/8	Automatic determination of location and guidance in the land mobile service	S1
62-2/8	Interference to the aeronautical mobile and aeronautical radionavigation services	S2
67-1/8	Multi-transmitter radio systems using quasi-synchronous (simulcast) transmission in the land mobile service	S2
72-1/8	Minimum channel separation and optimum systems of modulation, co-channel and adjacent-channel coordination criteria for simultaneous use of different modulation techniques in systems of the land mobile services between 25 and 3 000 MHz	S3
76-4/8	Data communication in the maritime mobile service	S3
77-4/8	Adaptation of mobile radiocommunication technology to the needs of developing countries	S1
83-3/8	Efficient use of the radio spectrum and frequency sharing within the mobile-satellite service (MSS)	C2
84-3/8	Use of non-geostationary-satellite orbits in mobile-satellite services	C2
85-1/8	Availability of circuits in mobile-satellite services	S2

Question ITU-R No.	Title	Category
87-3/8	Transmission characteristics for a mobile-satellite communication system	S2
88-1/8	Propagation and mobile earth station antenna characteristics for mobile-satellite services	S3
90/8	Technical and operating characteristics of systems providing radiocommunication using satellite techniques for distress and safety operations	S2
91-1/8	Technical and operating characteristics of the radiodetermination-satellite service	S2
92-1/8	Study on general questions relating to the Global Maritime Distress and Safety System (GMDSS)	S3
93-2/8	Automation of MF, HF and VHF maritime mobile communications	S2
96-1/8	Improved efficiency in the use of the band 156-174 MHz by stations in the maritime mobile service	S2
98/8	Transmission of digital data for the updating of electronic chart display systems (ECDIS)	S2
99/8	Interference due to intermodulation products in the land mobile services between 25 and 3 000 MHz	S3
101-2/8	Digitally encoded speech in the land mobile service	S1
103/8	Criteria for sharing between the mobile service and the space research, space operation and Earth exploration-satellite service space stations in the 2 025-2 110 MHz and 2 200-2 290 MHz bands	C2
104-1/8	Technical and operational considerations for multiservice satellites operating in the frequency bands from about 20 to about 50 GHz	C2
106/8	Criteria for sharing between the broadcasting-satellite service (sound) and complementary terrestrial broadcasting and the mobile, radiolocation and amateur services within the range 1-3 GHz	C2
107-1/8	Cellular land mobile telecommunication systems	S2
109/8	GMDSS requirements for mobile-satellite systems operating in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz	S2
110/8	Interference to the aeronautical mobile-satellite (R) service	S2
112/8	Performance objectives for digital mobile-satellite services	S3
113/8	Technical and operational characteristics of land mobile systems using multi-channel access techniques without a central controller	S2
114/8	Technical and operational characteristics of cordless telephones and cordless telecommunication systems	S2
201/8	Frequency sharing between mobile-satellite services and other services	C2
202-1/8	Spurious emissions of radar systems	S2
203/8	Use of the maritime radionavigation band 285-325 kHz (283.5-315 kHz in Region 1)	S1
205-1/8	Transport information and control systems (TICS)	S2

Question ITU-R No.	Title	Category
206/8	Technical and operational requirements for multimode mobile radio stations	S1
208/8	Evolution of land mobile systems towards IMT-2000	S1
209-1/8	Contributions of the mobile and amateur services and associated satellite services to the improvement of disaster communications	S1
210/8	Technical characteristics for mobile earth stations operating with global non-geostationary satellite systems in the mobile-satellite service (MSS) in the band 1-3 GHz	S1
211/8	Interference criteria and calculation methods for the mobile-satellite service (MSS)	S1
212-2/8	Nomadic wireless access systems including radio local area networks (RLANs) for mobile applications	S1
213/8	Transmission of data messages on shared private land mobile radio (PMR) channels	S1
214/8	The re-planning of bands in the land mobile service	S1
215-1/8	Frequency bands, technical characteristics, and operational requirements for fixed wireless access systems	S1
216-1/8	Compatibility of radionavigation and radiolocation services operating in the bands 2 900-3 300 MHz and 5 350-5 650 MHz	S2
217/8	Interference to the radionavigation-satellite service in the ICAO global navigation satellite system	S1
218/8	Essential technical requirements of mobile earth stations for global and regional geostationary mobile-satellite service systems in the band 1-3 GHz	S1
219/8	Technical criteria for spaceborne receivers operating in the radionavigation-satellite service in the space-to-space direction	S1
220/8	Spurious emission limits for stations of the mobile-satellite service	S1
221/8	Use of the frequencies between 2.8-22 MHz by the aeronautical mobile (R) service for data transmissions using class of emission J2DEN	S1
222/8	Essential technical requirements of mobile earth stations for global non-geostationary mobile-satellite service systems with primary allocations in bands below 1 GHz	S1
223/8	Internet protocol applications over mobile systems	S1
224/8	Adaptive antennas	S1
225/8	Interference to the aeronautical and maritime mobile services in the HF bands by unauthorized stations	S1
226/8	Characteristics of and protection criteria for radars operating in the radiodetermination service	S1
227/8	Technical and operational characteristics of emergency communications in the mobile-satellite service	S1

Question ITU-R No.	Title	Category
228/8	Future submission of satellite radio transmission technologies for International Mobile Telecommunications-2000 (IMT-2000)	S1
229/8	Future development of IMT-2000 and systems beyond IMT-2000	S1
230/8	Software defined radios	S2
231/8	Operation of wideband aeronautical telemetry in bands above 3 GHz	S2

ANNEX 7

Questions assigned by the Radiocommunication Assembly to Study Group 9

Fixed service

Question ITU-R No.	Title	Category
102-3/9	Availability of digital radio-relay systems	S1
107-1/9	Characteristics of radio-relay systems operating in frequency bands above about 17 GHz	S1
108-1/9	Radio-frequency channel arrangements for radio-relay systems operating in frequency bands above about 17 GHz	S2
110/9	Antenna radiation diagrams of radio-relay stations for use in sharing studies	S2
111-2/9	Sharing criteria between the broadcasting-satellite service (sound and television) and the fixed service	C1
113-1/9	Frequency sharing between radio-relay systems and systems of the earth exploration-satellite service and the space research service	S1
118-2/9	Sharing criteria between the mobile-satellite services and the fixed service in the band 1 to 3 GHz	S3
119-1/9	Limitation of unwanted emissions from radio-relay systems	S1
122-2/9	Effects of propagation on the design and operation of radio-relay systems	S2
125-4/9	Point-to-multipoint radio systems	S2
127-3/9	Maximum allowable performance and availability degradations of radio-relay systems due to various sources of interference	S1
133/9	Sharing criteria between the fixed and mobile services in the frequency bands between about 0.5 and 3 GHz	S2
136-1/9	Radio-frequency channel arrangements for digital radio-relay systems operating in frequency bands below about 17 GHz	S2
140-3/9	The use of mobile-derived technologies in fixed wireless access (FWA) applications	S2
142-2/9	Radio local area networks (RLANs)	S2
145-1/9	Characteristics required for high-speed data transmission over HF radio circuits	S2
147-2/9	Automatically controlled radio systems and networks in the HF fixed service	S2
158-1/9	Packet data transmission protocols for systems operating below about 30 MHz	S2
159/9	Effects of unwanted emissions from radar systems in the radiodetermination service on systems in the fixed service	S2

Question ITU-R No.	Title	Category
160-1/9	Radio-relay systems in a synchronous digital network	S2
161-3/9	Performance limits for bringing into service and maintenance of digital radio-relay systems	S1
163/9	Criteria for frequency sharing between the fixed service and the inter-satellite service operating in bands above about 20 GHz	S2
201-1/9	Protection of radio-relay systems from non-geostationary satellite feeder links in the fixed-satellite service used by the mobile-satellite service in the shared frequency bands	C1
202-1/9	Reference radiation patterns of omnidirectional and sectoral antennas in point-to-multipoint systems for use in sharing studies	S2
203/9	Influence of propagation conditions on the bringing-into-service procedure for digital radio-relay systems	S3
204/9	Radio-frequency signals transport through optical fibres	S2
205-1/9	The use of frequency adaptive HF systems	C1
206-2/9	Sharing criteria for systems in the fixed service with systems in the fixed-satellite service involving a large number of non-geostationary satellites for bands in the 10 30 GHz range	S1
209/9	Technical implications of possible definition of the quasi-geostationary orbit on the fixed service sharing frequency bands with the fixed-satellite service	S1
210-1/9	Error performance objectives for digital radio-relay sections operating at or above the primary rate of the digital hierarchy	S1
211/9	Inclusion of radio specific management functions into SDH telecommunication management network (TMN) from the network element view	S2
212-1/9	Fixed service systems utilizing "high altitude platform stations" (HAPS)	S1
213-1/9	Simulation of HF transmission through an ionospheric channel	S1
216/9	System characteristics and sharing criteria for FS operating in frequency bands below 1 GHz	S2
217-1/9	Feasibility of the FS sharing with the FSS operating at the same frequencies in the range 30-52 GHz	S1
218-1/9	Frequency sharing criteria for systems in the FS using HAPS and systems in the FSS	S1
219/9	Determination of coordination area related to the FS for Earth stations operating with non-GSO in the FSS	S1
220-1/9	Fixed wireless access systems conveying IP packets or ATM cells	S2
221/9	Spectrum vision for the fixed service	S2
222/9	Multi-function and multi-service communications across mixed-media radio transmission networks	S2
223/9	Possible improvements of Recommendation ITU-R F.1107	S1

Question ITU-R No.	Title	Category
224/9	Criteria for stations in the fixed service for sharing with stations in the radionavigation service in the band 31.8-33.4 GHz	S1
225/9	Improvements to Recommendation ITU-R F.758	S1
226/9	Sharing feasibility of stations in the fixed service with earth stations on board vessels operating in the fixed-satellite service in the bands 3 700–4 200 MHz and 5 925-6 425 MHz	S1
227/9	Sharing criteria for point-to-multipoint systems used for "fixed wireless access" (FWA) in the fixed service using the same frequency band with "very small aperture terminal" (VSAT) systems in the fixed-satellite service in the band 3 400–3 700 MHz	S2
228/9	Performance and availability objectives for access part of network formed wholly or partly by fixed service radio systems	S2
229/9	Frequency arrangements based on frequency blocks for systems in the fixed service	S2

RESOLUTION ITU-R 6-1*

LIAISON AND COLLABORATION WITH THE ITU TELECOMMUNICATION STANDARDIZATION SECTOR

(1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that the Radiocommunication (ITU-R) Study Groups are charged to focus on the following in the study of Questions assigned to them:

"a) use of the radio-frequency spectrum in terrestrial and space radiocommunications and of the geostationary-satellite and other satellite orbits;

b) characteristics and performance of radio systems;

c) operation of radio stations;

d) radiocommunication aspects of distress and safety matters;" (Article 11 of the ITU Convention, Nos. 151 to 154);

b) that the Telecommunication Standardization (ITU-T) Study Groups are charged 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;" (Article 14 of the Convention, No. 193);

c) that the two Sectors were given the responsibility of jointly agreeing on the assignment of studies and to keep the division of studies constantly under review (Nos. 158 and 195 of the Convention);

d) that the initial allocation of work between ITU-T and ITU-R has been completed;

considering further

Resolution 16 of the Plenipotentiary Conference (Minneapolis, 1998),

noting

that Resolution 18 of the World Telecommunication Standardization Conference (Geneva, 1996) provides mechanisms for ongoing review of the allocation of work and cooperation between the ITU-R and ITU-T Sectors,

---

* This Resolution should be brought to the attention of the ITU Telecommunication Standardization Sector.

resolves

1 to refer to the Radiocommunication Advisory Group in collaboration with the Telecommunication Standardization Advisory Group, the continuing review of new and existing work and its distribution between the two Sectors, for approval by Members in accordance with the procedures laid down for the approval of new or revised Questions taking into account the activities and results of the ongoing restructuring efforts within ITU;

2 that the principles for the allocation of work to the Radiocommunication Sector and Telecommunication Standardization Sector (see Annex 1) should be used to give guidance in the allocation of work to the Sectors;

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

a) the procedure as given in Annex 2 should be applied, or

b) a joint meeting may be arranged by the Directors, or

c) the matter should be studied by relevant Study Groups of both Sectors with appropriate coordination (see Annex 3).

invites

the Directors of the Radiocommunication and Telecommunication Standardization Bureaux to strictly observe the provisions of *resolves* **3.** and to identify ways and means of strengthening this cooperation.

ANNEX 1

Principles for the allocation of work to the Radiocommunication and Telecommunication Standardization Sectors

1 General

Principle 1

The approach to work in a Sector needs to be task-oriented, with an appropriate Study Group (or designated group) responsible for coordination. Further assignment of detailed tasks within a given work item or subject area would then occur, with special arrangements for handling work which crosses Sector boundaries.

Work planning may start with a service or system concept, and would include development of overall network or service architectures and identification of interfaces through to more detailed specification and linking of tasks.

Activity related to ongoing review of existing Recommendations needs to be accommodated as a general area of work.

2 Roles of the Sectors

Within a task-oriented approach, experts of both Sectors should be able to work as part of a well-managed team.

Principle 2

Standardization Sector work includes interworking arrangements required for either radio-based equipment within a public telecommunication network or radio systems requiring interconnection for the carriage of public correspondence.

Note 1 - Public correspondence: any telecommunication which offices and stations must, by reason of their being at the disposal of the public, accept for transmission.

In addition, the Recommendations developed by the Telecommunication Standardization Sector need to provide for the capabilities required to support the particular characteristics of radio systems. Similarly, the work of the Radiocommunication Sector should complement the work of the Standardization Sector, especially where it relates to the use of radio-based technology in telecommunication networks. The two Sectors will therefore both need to consider interface questions.

The term "public correspondence" should not be interpreted too restrictively in principle 2 (and elsewhere). The word "includes" is intended to imply that the carriage of related classes of traffic (e.g. government, service) or user applications are not excluded.

Principle 3

Radiocommunication Sector work related to network standards includes studies addressing the characteristics, performance, operation and spectrum aspects of radio-based equipment or radio systems as necessary to support the interconnection and interworking arrangements identified by the Telecommunication Standardization Sector.

The characteristics of radio-based equipment refer to those characteristics dealing with the equipment and the physical environment in which the equipment must work. Examples include performance, modulation, coding, error correction, maintenance and other aspects that may affect the interface signals and protocols that are able to be supported.

Principle 4

Before specific tasks are allocated, services, network architectures, and interfaces should be identified as clearly as possible.

For example, the Telecommunication Standardization Sector and the Radiocommunication Sector would jointly identify interfaces to be supported by the system under study. The Radiocommunication Sector will also need to identify the scope and capabilities of radio systems needed to meet the interface requirements and achieve optimum spectrum/orbit utilization.

Principle 5

Work unique to the Radiocommunication Sector covers matters related to spectrum and orbit utilization and efficiency and, *inter alia*, all aspects of services not used for public correspondence, for example radiodetermination, independent mobile radio services, broadcasting, safety and distress operation, remote sensing, amateur radio, and radioastronomy.

Principle 6

The studies in one Sector must complement those of the other Sector where a task crosses Sector boundaries noting that in some cases, joint studies may be required as the most practical option. To guide actual work allocations, the coordinating Sector (as user) could produce statements on "desirable/required characteristics". The potential provider Sector (or Study Group) could on its own initiative, or in response, develop statements of technology capability in the form of "achievable/typical characteristics".

Mutual dependency will require continued cooperation where both Sectors have an interest in the work. In establishing tasks toward standards for a service based on technology of both Sectors, the coordinating Sector must make best use of established sources of skill and knowledge. Joint ad hoc Groups could be established as needed to ensure the best possible progress and information exchange, where necessary.

3 Coordination on new study Questions

Coordination on study Questions is needed. A key element of such arrangements is the maintenance of a satisfactory pace, quality of output and avoidance of delays in progressing current work.

Principle 7

Standardization work should continue in both Sectors while suitable arrangements are developed and put in place to maintain the pace and quality of output.

Coordination on study Questions should be monitored and reviewed by the Advisory Groups for the purpose of ensuring timely and progressive output.

Some new study Questions may include components which fall into both Sectors. In line with the project approach and efficient management practice, such Questions should be revised so that the tasks for each Sector can be clearly identified, or establish joint arrangements, if necessary.

Principle 8

Study Groups should continue as efficient and effective sources of special skills in the task-oriented environment.

Task orientation should not lead to numerous, independent project groups which potentially duplicate or diverge from established work. Where it is appropriate to establish a special group (e.g. to address interface or interworking issues), it should draw skills from the relevant Study Groups, appropriately limiting the scope of the project group, while following the guidelines in *resolves* 3. In this way, compatibility and consistency across multiple applications is maintained. Recommendations from such special groups, in any case, have to be approved by the appropriate Study Group prior to submission to the ITU Members for approval.

ANNEX 2

Procedural method of cooperation

With respect to *resolves* 3a), the following procedure should be applied:

a) the Radiocommunication and Telecommunication Standardization Advisory Groups may jointly nominate the Sector which will be leading in the work and will finally approve the deliverable;

b) the leading Sector will request the other Sector to indicate those requirements which it considers essential for integration in the deliverable;

c) the leading 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 leading Sector shall consult with the other Sector in case it meets 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 leading Sector shall seek once more the views of the other Sector.

In the determination of the work responsibility it may be appropriate to progress the work by drawing jointly on the skills of both Sectors.

ANNEX 3

Coordination of the radiocommunication and telecommunication standardization activities through Intersector Coordination Groups

With respect to *resolves* 3c) 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 be leading in 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 Chair and a Vice-Chair, one representing each Sector;

e) the ICG shall be open to members of both Sectors in accordance with Nos. 86 to 88 and 110 to 112 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 Radiocommunication Assembly or by the World Telecommunication Standardization Assembly following a recommendation by the advisory group of the other Sector;

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

RESOLUTION ITU-R 7-1

TELECOMMUNICATION DEVELOPMENT INCLUDING LIAISON AND COLLABORATION WITH THE ITU TELECOMMUNICATION DEVELOPMENT SECTOR

(1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that one of the purposes of the Union is to "foster international cooperation and solidarity in the delivery of technical assistance to the developing countries and the creation, development and improvement of telecommunication equipment and networks in developing countries by every means at its disposal, ..." (No. 14 of the ITU Constitution);

b) that a further purpose of the Union is also to "undertake studies, make regulations, adopt resolutions, formulate Recommendations and Opinions and collect and publish information concerning telecommunication matters" (No. 18 of the Constitution);

c) that the Constitution and the ITU Convention consolidate the activities of the ITU relating to radiocommunications in the Radiocommunication Sector and the activities relating to the technical cooperation with, and assistance to, developing countries in the Telecommunication Development Sector;

d) that Nos. 159 and 160 of the Convention require that the Radiocommunication Study Groups "... pay due attention to the study of Questions and to the formulation of Recommendations directly connected with the establishment, development and improvement of telecommunications in developing countries at both the regional and international levels." and that, for the purpose of facilitating the review of activities in the Radiocommunication Sector, "... measures should be taken to foster cooperation and coordination with ... the Telecommunication Development Sector";

e) that Resolution 5 of the World Telecommunication Development Conference (Valletta, 1998) instructs the Director of the Telelecommunication Development Bureau in close collaboration with the Director of the Radiocommunication Bureau and the Director of the Telecommunication Standardization Bureau, to consider and implement the best ways and means to assist developing countries, and in particular least developed countries, in preparing for and participating actively in the work of the three Sectors, and notably in the Sector advisory bodies and conferences and in the Study Groups of particular relevance to developing countries,

f) that Resolution 66 of the Plenipotentiary Conference (Rev. Minneapolis, 1998) instructs the Director of the Telelecommunication Development Bureau to implement, as a priority, in close coordination with the Director of the Radiocommunication Bureau and the Director of the Telecommunication Standardization Bureau, strategies and mechanisms to encourage and facilitate the efficient use by the developing countries, and in particular least developed countries, of the Web-based documents and publications of the Union,

g) that in accordance with No. 134 of the Convention , the Radiocommunication Assembly shall "group Questions of interest to developing countries, as far as possible, in order to facilitate their participation in the study of those Questions",

noting

a) the very limited material and financial resources available to the developing countries, preventing them from participating regularly in the work of the Radiocommunication Study Groups;

b) the adverse effects which the absence of the developing countries from Study Group activities has on the universal nature of Study Group decisions and, possibly, on their effective application;

c) that the procedure for adopting Recommendations by correspondence necessitates adequate exchange of information to obtain the broadest possible support;

d) that, since the Radiocommunication Study Group work now involves Radiocommunication Conference preparation including procedures and other matters related to the Radio Regulations, all countries, irrespective of their level of development, need to be fully informed of developments in the studies,

further considering

a) the important function of the Telecommunication Development Bureau in the provision of efficient consultancy to developing countries and the need to benefit in this respect from the expertise existing in the Secretariat of the Radiocommunication Bureau;

b) that the complementary activities of engineers in the two Sectors, when appropriately coordinated, would benefit greatly the developing countries,

recognizing

1 that the developing countries themselves should, to the extent possible:

1.1 participate in an active manner in the work of the Radiocommunication Study Groups, and provide any relevant technical information they possess concerning the conditions in their respective countries;

1.2 exchange technical information on Study Group matters among themselves in areas of common interest;

1.3 take advantage of the participation of countries of the same region in the meetings of the Study Groups;

1.4 when they face difficulties which may be of interest to other administrations during the course of operating radio services, be encouraged to submit contributions to the Radiocommunication Bureau describing these difficulties. The Director of the Bureau will communicate these contributions to the appropriate Study Group(s),

resolves

1 that the Radiocommunication Advisory Group and the Director of the Radiocommunication Bureau shall cooperate actively with the Director of the Telecommunication Development Advisory Group and the Director of the Telecommunication Development Bureau in identifying and implementing means facilitating developing countries to participate in the Study Group's activities;

2 that, in order to facilitate this participation, Questions which are of interest to developing countries shall be grouped as far as possible in a limited number of Study Groups as stipulated in No. 134 of the Convention;

3 that the participation of developing countries may be facilitated through extensive use of modern communication means and the Telecommunication Development Bureau should be urged to consider possibilities for providing developing countries with such means;

4 that, pursuant to No. 224 of the Convention, the Director of the Radiocommunication Bureau shall assist the Director of the Telecommunication Development Bureau in organizing worldwide and/or regional information meetings, seminars or workshops that will provide developing countries with the required information on ITU-R activities;

5 that, pursuant to No. 166 of the Convention, the Director of the Radiocommunication Bureau shall provide assistance to the developing countries in their preparations for radiocommunication conferences;

6 that the Director of the Radiocommunication Bureau, assisted by the Radiocommunication Study Groups, shall provide the Telecommunication Development Bureau with the necessary assistance in the development and updating of handbooks;

7 that the Director of the Radiocommunication Bureau, assisted by the Radiocommunication Study Groups, shall contribute to and participate in the work of the Telecommunication Development Study Groups , when considering relevant studies to which they may give valuable inputs;

8 that the Director of the Radiocommunication Bureau shall cooperate with Directors of the other two Bureaux relating to the activities in the development of, and updating of, handbooks with the view to avoiding duplication of effort;

9 that, in the process of cooperating actively with the Telecommunication Development Bureau, all radiocommunication activities of the Union in the field of telecommunication development should be closely coordinated in the interest of achieving efficiency, effectiveness and avoiding duplication of effort,

instructs the Chairmen of the Study Group and the Director of the Radiocommunication Bureau

1 to take all appropriate actions for the implementation of this Resolution, among others, by motivating participants in the Radiocommunication Sector to provide assistance to the Telecommunication Development Sector,

urges administrations and members of the Radiocommunication Sector

1 to actively participate in the implementation of this Resolution, among others, by providing experts to assist developing countries, by contributing to the information meetings and seminars, by providing the necessary expertise in matters under consideration by the Telecommunication Development Study Groups and by hosting trainees from developing countries.

RESOLUTION ITU-R 8-1

RADIOWAVE PROPAGATION STUDIES AND MEASUREMENT CAMPAIGNS IN DEVELOPING COUNTRIES

(1993-2000)

The ITU Radiocommunication Assembly,

considering

a) the importance of radiowave propagation measurement campaigns for acquiring data for the planning and coordination of various radiocommunication services, particularly at regional and sub-regional levels in developing countries;

b) that various recommendations of world radiocommunication conferences have requested the Radiocommunication Study Groups to encourage and assist in initiating the study of radiowave propagation and radio noise in those areas where few or no measurements have been made;

c) that Resolution 5 of the WARC-79 invites the Secretary-General to offer the assistance of the Union to developing countries in the tropical areas that endeavour to carry out national propagation studies and to arrange funds and resources for this purpose, and urges administrations to submit the results of these propagation measurements including noise levels for sound broadcasting to the Study Groups,

recognizing

a) that there continue to be many regions of the world, particularly in the tropics, for which propagation data are not available,

noting with satisfaction

a) the contributions made by some Member States and Sector Members to the radiowave propagation measurements in some areas of Africa, South America and Asia,

resolves

1 that Radiocommunication Study Group 3 should identify within its work programme and in consultation with the concerned countries, radiowave propagation studies relating to tropical and subtropical regions of the world for which there is a lack of data. The programme of work of Radiocommunication Study Group 3 should clearly define study programmes in which engineers and scientists from the developing countries also contribute to collecting data and to developing analytical methods;

2 that scientists and engineers from developing countries should be encouraged to participate actively in these study programmes and carry out studies on topics identified by Radiocommunication Study Group 3:

- by means of research in their home countries;
- by participation, whenever possible, in meetings held in connection with Radiocommunication Study Group or Working Party meetings, in the regions concerned;
- by means of working visits to radiowave propagation laboratories of Member States and Sector Members participating in the work of the Radiocommunication Study Groups;

3 that the Radiocommunication Bureau, with appropriate support from Radiocommunication Study Group 3, should collaborate closely with the Telecommunication Development Bureau in identifying suitable propagation measurement campaigns in the regions of interest and should offer all necessary technical guidance to the Telecommunication Development Bureau in the establishment of any such measurements;

4 that the Director of the Radiocommunication Bureau, in close cooperation with the Director of the Telecommunication Development Bureau and the administrations concerned, be requested to determine the objectives, scope, technical means and staff required for carrying out identified propagation measurement campaigns and to seek through the Secretary-General funding and other arrangements from appropriate sources to implement the above decisions with respect to propagation measurement activities;

5 that Member States and Sector Members be urged to make contributions (in cash and/or in kind) to support the radio propagation measurement campaigns in the developing countries;

6 that the administrations interested in the measurement campaigns be requested to designate suitably qualified personnel to participate actively in these campaigns.

RESOLUTION ITU-R 9-1*

LIAISON AND COLLABORATION WITH OTHER ORGANIZATIONS

(1993-2000)

The ITU Radiocommunication Assembly,

bearing in mind

Article 50 of the ITU Constitution, and

considering

a) that a number of organizations dealing with radiocommunications exist;

b) that such organizations have the potential for identifying, defining and proposing solutions of particular problems of interest to the Radiocommunication Study Groups and for assuming responsibility for maintaining standards for such systems;

c) that one objective of the Radiocommunication Study Groups is to harmonize the work in radiocommunications with that of regional bodies and other international bodies;

d) that making reference in ITU-R Recommendations to organizations dealing with radiocommunications can minimize publication and translation costs to ITU, noting that it may increase the customer's total cost of acquiring such ITU-R Recommendations when the costs of non-ITU referenced documents are also included;

e) that such organizations may offer a means of improving the dissemination and effectiveness of ITU-R Recommendations,

noting

a) that references to standards published outside of the ITU-R are not appropriate in ITU-R Recommendations that may be incorporated-by-reference into the Radio Regulations;

b) that groups have been formed, at the international level, to exchange information on standardization, to facilitate harmonization of standards and to complement the formal processes of standardization bodies, in particular the ITU, in the work of developing international standards,

considering further

a) the spirit of Resolution 71 of the Plenipotentiary Conference (Minneapolis, 1998), which resolves *inter alia* that the responsible ITU-R study groups should

---

* This Resolution should be brought to the attention of the Telecommunication Standardization Sector and the Telecommunication Development Sector.

- encourage greater participation by Member States, Sector Members and other organizations in ITU-R activities, *inter alia* by concluding formal and informal task-oriented cooperation arrangements
- establish partnerships by concluding a range of formal and informal cooperation agreements with other intergovernmental organizations and with other organizations at the national and regional levels;
- develop innovative mechanisms for international cooperation outside the formal structures defined in the Constitution and Convention (e.g., Memoranda of Understanding (MoUs));

resolves

1 that administrations should encourage organizations dealing with radiocommunications to take into account the global activities of the Radiocommunication Study Groups;

2 that ITU-R Recommendations, as determined by the Study Group, may reference approved standards which are maintained by other recognized external organizations, e.g. standards development organizations;

instructs the Director

1 to take all the necessary steps in support of requests from Study Groups and Working Parties through the Study Group Chairperson, in collaboration with the Secretary-General and within the framework of the ITU's regional activities, to encourage increased involvement by these organizations in the Radiocommunication Study Group activities and to develop Memoranda of Understanding (MoUs) as required for the exchange of technical information on a reciprocal basis pending appropriate copyright agreements.

RESOLUTION ITU-R 11-2

DEVELOPMENT OF BASIC AUTOMATED SPECTRUM MANAGEMENT SYSTEM

(1993-1995-1997)

The ITU Radiocommunication Assembly,

considering

a) that the development of a system to manage spectrum data would support and facilitate national spectrum management and monitoring, coordination among administrations and notification to the Radiocommunication Bureau (BR);

b) that data elements used in national spectrum management have been reflected in the Preface to the International Frequency List (IFL) and Recommendation ITU-R SM.667;

c) that administrations should maintain spectrum management data with an automated database management system;

d) that many administrations have been successful in implementing automated database management systems (DBMS) in the development and maintenance of their national spectrum management data;

e) that computer programs which accomplish engineering analysis are described in the ITU Catalogue of Software for Radio Spectrum Management;

f) that a Windows Basic Automated Spectrum Management System (WINBASMS) has been developed by the BDT in a multilanguage version (English, French and Spanish) and in close cooperation with Radiocommunication Study Group 1 and the BR based on those guidelines contained in Recommendation ITU-R SM.1048;

g) that WINBASMS is designed primarily to assist developing countries in spectrum management in order for them to abandon inefficient old-fashioned means of managing the spectrum,

resolves

1 that the BR should continue its endeavours to assist the BDT in implementing WINBASMS in different countries through the participation of Study Group 1 experts in relevant accelerated training projects in order for the BDT to start training different language groups;

2 that Study Group 1 and the BR should assist the BDT in providing WINBASMS software in other official languages of the Union in order for the BDT to make this software widely used;

3 that Study Group 1 in cooperation with the BR should continue to assist the BDT in improving WINBASMS.

RESOLUTION ITU-R 12-1

HANDBOOKS AND SPECIAL PUBLICATIONS FOR DEVELOPMENT OF RADIOCOMMUNICATION SERVICES

(1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that close cooperation shall be carried out among the Radiocommunication, Telecommunication Standardization and Telecommunication Development Sectors (No. 79 of the ITU Constitution);

b) that Radiocommunication handbooks and special publications constitute an authoritative source of technical material relating to radiocommunications that may be of direct benefit to developing countries,

bearing in mind

a) that there is a need to disseminate information contained within handbooks and special publications as widely as possible throughout the ITU membership in a form which is readily understandable and that can be applied practically, especially in the training of technicians and engineers for use in developing countries,

resolves

1 that in establishing priorities for the preparation and publishing of handbooks and special publications, special consideration should be given to the needs of developing countries,

invites

1 the Telecommunication Development Sector to indicate what special subjects would be most useful to developing countries so that planning for handbooks and special publications may be undertaken.

RESOLUTION ITU-R 15-3

APPOINTMENT AND MAXIMUM TERM OF OFFICE FOR CHAIRPERSONS AND VICE-CHAIRPERSONS OF RADIOCOMMUNICATION STUDY GROUPS

(1993-1995-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that No. 133 and No. 148 of the ITU Convention provide for the establishment of Radiocommunication Study Groups;

b) that No. 149 of the Convention and other related provisions indicate the nature of the work of the Study Groups;

c) that No. 242 of the Convention requires the Radiocommunication Assembly to appoint Chairpersons and Vice-Chairpersons of Study Groups, taking account of competence and equitable geographical distribution;

d) 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 Chairpersons and Vice-Chairpersons to be appointed from different Member countries;

e) that Resolution 77 of the Plenipotentiary Conference (Minneapolis, 1998) set a timing for the next Radiocommunication Assembly which departs from the two-yearly frequency of previous Assemblies,

taking into account

f) that a maximum time in office of approximately eight years for Study Group Chairpersons and Vice-Chairpersons provides for a reasonable amount of stability while providing the opportunity for different individuals to serve in these capacities,

resolves

1 that candidates for the posts of Study Group Chairpersons and Vice-Chairpersons of the Radiocommunication Study Groups should be identified, by Member States of the ITU, Radiocommunication Sector Members and, if possible, by the concerned Study Group, as soon as feasible once the structure of the Study Groups is clear; the procedures to be followed should be as given in Annex 1. The qualifications required for such posts are given in Annex 2;

2 that candidates for the posts of Study Group Chairpersons and Vice-Chairpersons should be identified, taking into account that for each Study Group the Assembly will appoint the Chairperson and those Vice-Chairpersons deemed necessary;

3 that nominations for the posts of Study Group Chairpersons and Vice-Chairpersons should be accompanied by a biographical profile highlighting the qualifications of the individuals proposed. The Director will circulate the profiles to the Heads of Delegation present at the Assembly;

4 that the term of office for both Chairpersons and Vice-Chairpersons should be limited so as to terminate at the end of the Radiocommunication Assembly at which the officer will have served for a period of more than seven years;

5 that the period in office in one appointment (e.g. as a Vice-Chairperson) does not count towards the period in office for another appointment (e.g. as a Chairperson) and that steps should be taken to provide some continuity between Chairpersons and Vice-Chairpersons.

ANNEX 1

Procedure for the appointment of Chairpersons and Vice-Chairpersons of the Radiocommunication Study Groups

1 Positions of Chairpersons and Vice-Chairpersons are known in advance by the Study Group and the Director.

Since this Resolution indicates the maximum terms of office for Chairpersons and Vice-Chairpersons, this should be the most frequent case.

a) In order to help the Radiocommunication Assembly appoint Chairpersons/Vice-Chairpersons, ITU-R members and the concerned Study Groups should be encouraged to indicate to the Director, BR suitable candidates at least three months before the opening of the Radiocommunication Assembly.

b) On the basis of received proposals, the Director will circulate to 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 2.

c) On the basis of this document and any relevant received comments, the Heads of Delegation, at a suitable time during the Assembly, should be invited to prepare, in consultation with the Director, a consolidated list of designated Study Group Chairpersons and Vice-Chairpersons to be submitted in a document to the Radiocommunication Assembly for final approval.

2 Vacant positions of Chairpersons and Vice-Chairpersons occur in mid-term between Radiocommunication Assemblies.

In the case where a Vice-Chairperson is unable to continue his/her duties, the replacement will be deferred to the next Radiocommunication Assembly, following the procedure outlined in § 1 (see also No. 244 of the Convention).

In the case where a Study Group Chairperson is unable to carry out his/her duties, and pending appointment by the next Radiocommunication Assembly according to the procedure outlined in §1, the functions will be undertaken by the longest serving Vice-Chairperson, or by another Vice-Chairperson as agreed in consultation between the concerned Vice-Chairpersons and the Director, and will act as Chairperson until the next Radiocommunication Assembly (see also No. 244 of the Convention).

3 The situations which cannot be considered with the above two situations will be dealt with on a case-by-case basis at the Radiocommunication Assembly.

For example, if a merger of two existing Study Groups is envisaged, some proposals can be forthcoming from the relevant Study Groups. Therefore the procedure outlined in § 1 can still be applied.

However, if the Radiocommunication Assembly decides to set up a completely new Study Group, discussions will have to be held at the Radiocommunication Assembly and conclusions reached.

ANNEX 2

Qualifications of the Chairpersons and Vice-Chairpersons

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

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

As regards competence, the following qualifications *inter alia* appear to be of paramount importance when appointing Study Group Chairpersons and Vice-Chairpersons:

- knowledge and experience;
- continuity in participation in the relevant Study Group;
- managerial skills;
- availability.

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

RESOLUTION ITU-R 17-2

INTEGRATION OF INTERNATIONAL MOBILE TELECOMMUNICATIONS-2000 (IMT-2000) AND SYSTEMS BEYOND WITH EXISTING NETWORKS

(1993-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that, with the changing radiocommunication environment, a world process for technological harmonization needs to be advanced further to ensure inter alia, global interconnection and interoperability;

b) that the introduction of new technologies and services is of great importance for the modernization and expansion of telecommunication networks;

c) that IMT-2000 will be a key enabler for the growth of those networks;

d) that IMT-2000 involves both terrestrial and space components;

e) that the work has been well advanced on IMT-2000 in connection with Question ITU-R 77/8;

f) that studies are in progress regarding the future development of IMT-2000 and on systems beyond IMT-2000 in connection with Questions ITU-R 77/8, 228/8 and 229/8,

resolves to request the Secretary-General

1 to continue to develop, in conjunction with the Directors of the Radiocommunication, Telecommunication Standardization and Telecommunication Development Bureaux, appropriate measures to enable all countries of the world, and particularly the developing countries to make better plans for the smooth integration of IMT-2000 and systems beyond IMT-2000 with their existing public networks.

RESOLUTION ITU-R 19-1

DISSEMINATION OF ITU-R TEXTS

(1978-1986-1990-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) the decisive importance for radiocommunication of the information contained in the ITU-R texts;

b) that a wider dissemination of the information contained in these texts would promote technical progress;

c) that the ITU has developed the Telecom Information Exchange Services (TIES) and publishes texts on the ITU website,

resolves

1 that the administrations should ensure the dissemination of ITU-R texts within their countries, by the means which they consider to be the most suitable and in the most appropriate fields;

2 that the Director of the Radiocommunication Bureau should take all the necessary steps, requesting the collaboration of the Secretary-General of the Union, to give emphasis to the importance attached to the wider dissemination and knowledge of ITU-R texts;

3 that participants in the work of the Radiocommunication Sector should take advantage of the benefits realized by the dissemination of information through electronic means.

RESOLUTION ITU-R 21-2

COMPUTER PROGRAMS FOR RADIO-FREQUENCY MANAGEMENT

(1986-1990-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that many administrations and organizations create, use and exchange various computer programs for radio-frequency management;

b) that all administrations and organizations would benefit from the exchange of these programs, particularly if procedures are employed that enable them to be used with computers that are universally available to the maximum possible extent;

c) that some computer programs have already been offered for such an exchange and are described in the ITU-R catalogue of software for radio spectrum management and made available through the Radiocommunication Bureau (BR),

noting

a) Resolution No. 7 (WARC-79) of the World Administrative Radiocommunication Conference (Geneva, 1979) relating to the development of national radio-frequency management;

b) that Resolution No. 14 (WARC-79) relating to the transfer of technology, indicated needs for cooperation activities,

decides

1 that administrations and other participants in the Radiocommunication Study Groups work should be encouraged to submit their computer programs in accordance with Annex 1;

2 that the Director, BR, should be requested to:

2.1 invite administrations and organizations which have such computer programs to consider the possibility of making them available to other parties through the BR in a format that is compatible with computers to the maximum possible extent;

2.2 distribute by means of the ITU website the computer programs which have been submitted;

2.3 distribute, as requested, the programs that have been made available, in the form they were received and without review with minimum administrative cost;

2.4 transfer radio-frequency management programs to Study Group 1 for review and to examine them for their adequacy of documentation, and correctness;

2.5 make arrangements for the BR to provide advice to the administrations that have little or no computer personnel or expertise with problems that may arise with their installation and use of these programs on microcomputers.

ANNEX 1

Information for the submission of programs

1 The program should be submitted on a data storage medium in current use by the ITU-R. Floppy disks, CD-ROMs or e-mail and websites may be used.

2 The program should not be copy protected.

3 The documentation should preferably include:

- description of the engineering method used in the program and applicable limitations,
- the users' manual,
- samples of typical input data and expected output data to demonstrate operation of the program,
- the program documentation to permit maintenance of the code,
- inventory of data elements used in the program,
- information about the computer hardware and additional software packages used to run the program.

4 Summary information about the program should contain:

- title of the program,
- sub-title of the program if any,
- submitter/source address, telephone and e-mail,
- description of the program, with indication of the documentation's language,
- programming language and preferably source code,
- mode of operation,
- hardware and software requirement (i.e. monitor, printer, memory, storage capacity, RAM), operating system,
- input requirements, including data file(s),
- auxiliary data file(s),
- data output,
- output medium,
- date of last revision,
- references.

RESOLUTION ITU-R 22-1

IMPROVEMENT OF NATIONAL RADIO SPECTRUM MANAGEMENT PRACTICES AND TECHNIQUES

(Question ITU-R 45/1)

(1990-1997)

The ITU Radiocommunication Assembly,

considering

a) that the administrations of many developing countries need to strengthen the national radio-frequency management organization in order to effectively carry out their responsibilities at both the international and national level;

b) that administrations of developing countries take into account the guidelines indicated in the Radiocommunication Bureau (BR) Handbook on Radio Regulations, and other relevant ITU documents including the ITU-R Handbooks on National Spectrum Management and Spectrum Monitoring;

c) that Radiocommunication Study Group 1 continues the efforts to provide Recommendations and handbooks on national frequency management including the use of computer-aided spectrum management,

decides

1 that Radiocommunication Study Group 1 should take note of the special requirements of national spectrum management organizations from developing countries and devote particular attention to these matters during the regular meetings of the Study Group and its Working Parties;

2 that such meetings shall be aimed at developing practices and techniques to improve spectrum management and include discussions concerning the establishment of computer-aided spectrum management systems;

3 that personnel involved in spectrum management from developing and developed countries and representatives from the BR are particularly invited to participate in the spectrum management studies of Study Group 1.

RESOLUTION ITU-R 23-1

EXTENSION OF THE INTERNATIONAL MONITORING SYSTEM TO A WORLDWIDE SCALE

(Question ITU-R 32/1)

(1963-1970-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that Article S16, *International monitoring,* of the international Radio Regulations (RR) provides that administrations agree to continue the development of monitoring facilities to assist, to the extent practicable, in the implementation of the RR to help ensure efficient and economical use of the radio-frequency spectrum, and to help in the prompt elimination of harmful interference, taking into account the relevant ITU-R Recommendations;

b) that Article S16 also provides that administrations shall, as far as they consider practicable, conduct such monitoring as may be requested of them by other administrations or by the Bureau;

c) that Recommendation 36 (WRC-97) invites ITU-R to study and make recommendations concerning the (monitoring) facilities required to provide adequate coverage of the world with a view to ensuring efficient use of resources in international monitoring in reducing apparent congestion in the use of orbit and spectrum resources;

d) that there are still wide areas of the world where the facilities available to the international monitoring system are inadequate or non-existent, particularly since facilities for the monitoring of emissions originating from space stations are expensive;

e) that the General Secretariat maintains and publishes the List of International Monitoring Stations (List VIII) indicating their capabilities, telephone numbers, telegraphic addresses, telex numbers, facsimile numbers and e-mail addresses;

f) that it is of utmost importance to satisfy the needs of the Radiocommunication Bureau, laid down by the Radio Regulations (RR), that all countries having domestic monitoring facilities make them available for international monitoring to the maximum possible extent,

resolves

1 that all administrations now participating in the international monitoring system, including for monitoring of space station emission levels, should be urged to continue to do so to the maximum extent possible;

2 that administrations, which do not at present participate in the international monitoring system, should be urged to make monitoring facilities available to that system, in accordance with Article S16 of the RR using the relevant information contained in the ITU-R Handbook on Spectrum Monitoring, latest revision;

3 that cooperation between monitoring stations of different administrations should be encouraged and improved with a view to exchanging monitoring information, including for information related to space station emissions, and to settling harmful interference caused by transmitting stations that are difficult to identify or cannot be identified;

4 that administrations, located in those areas of the world where monitoring facilities are inadequate, should be urged to promote the establishment of monitoring stations for their own use and make them available for international monitoring, in accordance with Article S16 of the RR;

5 that data supplied by the monitoring stations participating in the international monitoring system may be used by the Bureau to prepare summaries of useful monitoring data in application of Article S16 of the RR;

6 that administrations with more advanced terrestrial and space monitoring systems be urged to accept officials from other administrations to train them in the techniques of monitoring, direction finding, and geolocation. Initial contact for training may be made to the appropriate centralizing office as incorporated in the List of International Monitoring Stations (List VIII) published by the ITU General Secretariat.

NOTE 1 - The Administrations of Germany, Australia, Canada, the United States of America, France, Italy, Japan, Portugal and the United Kingdom have offered to receive officials from other administrations.

RESOLUTION ITU-R 25-2

COMPUTER PROGRAMS AND ASSOCIATED REFERENCE NUMERICAL DATA FOR RADIOWAVE PROPAGATION STUDIES

(1978-1982-1986-1990-1993-1995-2000)

The ITU Radiocommunication Assembly,

considering

a) that methods of prediction of the state of the propagation environment and of radiowave propagation characteristics are given or referred to in ITU-R Recommendations;

b) that for effective use of such methods, computer programs and associated reference numerical data are needed;

c) that it is uneconomic for individual organizations to develop their own computer programs for these predictions;

d) that databanks and computer programs associated with Recommendations of the ITU-R P series (Radiowave propagation) are available from that part of the ITU-R Web site concerning Radiocommunication Study Group 3,

resolves

1 that the Director of the Radiocommunication Bureau should be requested to invite organizations which at present have their own computer programs, numerical reference data, and related documentation for the prediction methods described in the ITU-R Recommendations prepared by Radiocommunication Study Group 3, to make these available to the Radiocommunication Bureau through Radiocommunication Study Group 3.

RESOLUTION ITU-R 27

HF FIELD-STRENGTH MEASUREMENT CAMPAIGN

(1990-1991-1993)

The ITU Radiocommunication Assembly,

considering

a) that the Second Session of the World Administrative Radio Conference for the Planning of HF Bands Allocated to the Broadcasting Service (Geneva 1987) invited the Radiocommunication Bureau to undertake studies of the HF propagation prediction method adopted by the Conference and to recommend both improvements in the method and later, if necessary, an improved method to be used in the future for the HF bands allocated exclusively to the broadcasting service;

b) that significant improvements in HF propagation prediction methods for general service requirements seem unlikely until a substantial data base of new measurements becomes available;

c) that Recommendation ITU-R P.845 proposes a field-strength measurement campaign and identifies a need for coordination, training etc.;

d) that the above mentioned Conference also recommended administrations:

– to conduct HF field-strength measurement programmes;

– to contribute data, in a form suitable for study, to the Radiocommunication Bureau;

e) that administrations should be urged to undertake such measurements in the longer term,

decides

1 that administrations should be urged to assist in the campaign by providing transmissions from worldwide locations and by installing and operating, as far as possible, worldwide receiving stations;

2 that the measurement campaign should extend, if possible, through a complete solar cycle but that transmissions on fewer than five frequencies from one location would still provide a valuable facility for measurements;

3 that the Director of the Radiocommunication Bureau should coordinate the overall activity and disseminate the information necessary for running the campaign;

4 further, that the Director of the Radiocommunication Bureau should arrange for the receipt of data for the validation and incorporation into a data bank of the measurements;

5 that administrations, the Director of the Radiocommunication Bureau and other organs of the ITU, in so far as resources allow, should ensure that guidance and training in the installation and operation of measurement stations is provided where required.

RESOLUTION ITU-R 28-1

STANDARD-FREQUENCY AND TIME-SIGNAL EMISSIONS

(Question ITU-R 1/7)

(1963-1966-1970-1974-1986-2000)

The ITU Radiocommunication Assembly,

considering

a) the provisions of Article S26 of the Radio Regulations (RR),

resolves

1 that, whenever an assignment to a station operating standard-frequency emission is put into service, the administration concerned shall notify this assignment to the Radiocommunication Bureau, in accordance with the provisions of Chapter SIII of the RR; however, no notice should be submitted to the Radiocommunication Bureau until experimental investigations and operational coordination have been completed, in accordance with Chapter SIII, of the RR;

2 that, in addition, each administration should send all pertinent information on standard-frequency stations (such as frequency stability, changes in the phase of time pulses, changes in transmission schedule) to the Chairman, Radiocommunication Study Group 7, to the Director, Radiocommunication Bureau and, for official publication, to the Director, Bureau international des poids et mesures (BIPM) (International Committee of Weights and Measures);

3 that Study Group 7 should cooperate with the International Astronomical Union (IAU), the International Union of Radio Science (URSI), the International Union of Geodesy and Geophysics (IUGG), the International Union of Pure and Applied Physics (IUPAP) and the BIPM.

RESOLUTION ITU-R 33-1

PRESENTATION OF TEXTS ON TERMINOLOGY

(1982-1990-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that it is essential that the terminology work done within the ITU should be widely disseminated, as regards both terms and definitions;

b) that users generally have ITU publications at their disposal in one language only but are often required to read or write technical texts in one of the other working languages;

c) that texts on vocabulary and glossaries are not as a rule directly available to users interested in a particular volume;

d) that an alphabetical presentation of terms in a vocabulary results in a different order of terms for each language and that it is not very practical for users wanting to compare definitions in different languages;

e) that the user of vocabulary texts often wants each term to be grouped with other terms on the same subject, these terms being presented in a logical order,

resolves

1 that the texts on vocabulary and the parts of texts dealing specifically with definitions of terms, published by the Radiocommunication Sector, shall include the equivalents of all the terms defined in the other working languages of the ITU;

2 that the practical means of providing the equivalents of terms in addition to the full text of terms and definitions in one of the languages is left to the discretion of the BR (see examples given in Recommendations ITU-R V.573 and ITU-R V.662);

3 that in the texts on vocabulary and the parts of texts dealing specifically with definitions of terms, published by the Radiocommunication Sector, the terms are presented in a logical order by subjects which should be the same in all languages, and that the vocabulary should be completed if necessary by an alphabetical index giving the reference number of each term.

NOTE 1 - When an abbreviation (or initials) exists to represent a term, it should be given immediately after the term, in the different working languages.

RESOLUTION ITU-R 34-1

GUIDELINES FOR THE SELECTION OF TERMS AND PREPARATION OF DEFINITIONS

(1986-1990-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that the individual Radiocommunication Study Groups have a responsibility for the selection of terms and preparation of definitions;

b) that there is sometimes a wide diversity of approach in the implementation of these procedures;

c) that there is a need for conformity in their implementation,

resolves

that when selecting terms and preparing definitions, the Radiocommunication Study Groups should use the guidelines given in Annex 1.

ANNEX 1

Guidelines for the selection of terms and preparation of definitions

1. Introduction

Given below are guidelines for:

- selection of terms;
- preparation of definitions.

2. Terms

2.1 What is meant by a term?

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

2.2 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 should be added between brackets, for example:

- coverage area (of a space station);
- coverage area (of a terrestrial transmitting station).

2.3 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 (for instance when they are in the same field).

In such cases different terms should be found to express the different meanings of such ambiguous terms.

2.4 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.

3. Definitions

3.1 What is meant by definition?

To define, is to state clearly, accurately and precisely what is a concept. This should preferably be done in one sentence, expressing exactly the meaning of the term used to designate the concept.

A definition should describe the concept fully for the engineering experts and contain sufficient data for the concept to be perfectly understood and its limits properly identified. The definition must be simple, clear and relatively brief. If necessary, additional information should be in the form of notes.

3.2 Use of terms in definitions

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

- all the technical 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.

3.3 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 technical terms, thereby making the definition harder rather than easier to understand.

3.4 Changes to, or limitation of, generally accepted terms

No attempt should be made to modify or limit the established usage of a term, unless the use of the existing terms causes confusion or ambiguity. In this case the use of the term may be deprecated.

When certain general terms are used in a restricted sense in the telecommunications fields, the definition should include an indication of this constraint.

3.5 Formulation of definitions

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

3.6 Incomplete definitions

Care should be taken not to omit the specific characteristics of a term in its definition. Such definitions are incomplete. The term and its definition should be interchangeable.

3.7 Definitions with more than one term

It sometimes occurs that more than one term may apply to the same concept. In such cases the alternative term should also be shown (separated by a semicolon).

3.8 Definitions of limited application

In general, the definitions which appear in ITU publications are of limited application, i.e. are valid only in the particular publication or field concerned.

The International Telecommunication Constitution (Geneva, 1992) stipulates that the terms used in the Constitution and defined in its Annex shall have the meanings assigned to them in that Annex. The same applies to the terms used in the Geneva Convention and defined in the Annex thereto, those used in the Radio Regulations and defined in Article 1 thereof, and those used in the International Telecommunication Regulations and defined in Article 2 thereof. It is also stated that these terms and definitions do not necessarily apply for other purposes. The same considerations hold good for the terms defined by the experts of a Radiocommunication Study Group for the specific requirements of their Study Group.

However, when the experts of a Radiocommunication Study Group develop, for an existing term, a specific new definition which differs from an existing definition in a text that has already been approved, they should ensure that the new definition does not contradict the one which already exists for the same term.

In the case of definitions which are applicable in other Radiocommunication Study Groups, the relevant experts are requested to prepare their definitions to allow them to be used in the widest possible field.

3.9 Illustrations

Illustrations can often be used to clarify or explain a definition. The type of illustration used will depend on each specific case; an example of a graphical depiction of terms used in the transmission loss concept can be seen in Recommendation ITU-R P.341 (see also Recommendation ITU-R V.573, subsection A4).

3.10 Further use of terms and definitions

It should be borne in mind that it may be useful later to include a definition in a dictionary and, in this case, it would be valuable if the definition were fully comprehensible even when taken out of context. It could then be included in the dictionary without amendment.

4. Presentation of terms and definitions

4.1 For the presentation of terms and definitions, reference should be made to Resolution ITU-R 33 which states that the terms, definitions and where necessary the abbreviations, should be published in the different working languages and presented in a logical order by subject which is the same in each language.

4.2 Index of terms

Should there be a need for an index, complex terms may be shown under one or other of the key words.

4.3 Printing of terms

Initial letters of terms should be printed in upper-case or lower-case letters as they would appear within a sentence according to the usage in each language.

5. Further references

For further and more specific guidance on the drafting of terms and definitions, reference may be made to the following publications:

- ISO International Standard 704 "Principles and methods for terminology" (1987).
- "IEC Guide for work relative to terminology (TC 1)".

RESOLUTION ITU-R 35-1

THE ORGANIZATION OF VOCABULARY WORK

(1990-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that it is important for the work of the ITU and in particular of the Sectors and for liaison with other interested organizations that terms and their definitions be standardized as far as possible;

b) the importance of avoiding misunderstanding within the Radiocommunication Sector and between the Radiocommunication Sector and the Telecommunication Standardization Sector and the IEC, respectively, in the use of terms and definitions;

c) the need to establish lists of terms and definitions for information within the Radiocommunication Sector and for the information of the Telecommunication Standardization Sector and the IEC, and to update such lists rapidly and regularly,

resolves

1. that the Radiocommunication Study Groups, within their terms of reference, should continue their work on technical and operational terms and their definitions which may be required for regulatory or administrative purposes and also on specialized terms which may be required by them in the course of their work, these terms and definitions being published rapidly and regularly by the ITU;

2. that each Radiocommunication Study Group should assume responsibility for terminology in its particular field of interest with the assistance of the Coordination Committee for Vocabulary (CCV) if necessary;

3. that each Radiocommunication Study Group shall appoint a permanent Rapporteur for Vocabulary to coordinate its efforts regarding terms and definitions and related subjects and to act as a contact person for the Study Group in this domain. The Rapporteur may be assisted by experts in different languages and different technical subjects;

4. that the responsibilities of the Rapporteur for Vocabulary should be as given in Annex 1;

5. that each Radiocommunication Study Group should consider terms included within its texts and should define them if necessary, or at least explain new concepts or clarify the text used to express existing concepts. Dependent upon the generality of usage terms and definitions should be published in:

- a separate text of the Radiocommunication Study Group;
- a specifically labelled section of each text;
- within the text associated with the first usage of the term;

6. that where more than one Radiocommunication Study Group is defining the same concept, efforts should be made to select a single term and a single definition which is acceptable to all of the Radiocommunication Study Groups concerned;

7. that, when selecting terms and preparing definitions, the Radiocommunication Study Group, and those entities responsible to the Study Group, shall take into account the established use of terms and existing definitions in ITU Sectors as well as those found in the International Electrotechnical Vocabulary (IEV);

8. that the Secretariat should collect all new terms and definitions proposed by the Radiocommunication Study Group, and provide them to CCV which shall act as an interface with the Telecommunication Standardization Sector and the IEC;

9. that the CCV shall communicate with individual Rapporteurs for Vocabulary and, if necessary, promote meetings of experts where inconsistencies are found between terms and definitions in the Radiocommunication Sector, the Telecommunication Standardization Sector and the IEC. These mediation efforts should seek agreement to the extent that such agreement is feasible, with remaining inconsistencies duly noted;

10. that Radiocommunication Study Groups, administrations and other participants in the work of the Radiocommunication Sector, may submit contributions concerning vocabulary and related subjects to the CCV;

11. that Rapporteurs for Vocabulary should take into account any available Telecommunication Standardization Sector lists of emerging terms and draft IEV chapters, to seek consistency of Radiocommunication Sector terms wherever practicable.

ANNEX 1

Responsibilities of Rapporteurs for Vocabulary

1. The Rapporteurs shall study vocabulary and related subjects referred to them by:

- Working Parties or Task Groups of the same Radiocommunication Study Group;
- the Radiocommunication Study Group as a whole;
- the Chairman of the Radiocommunication Study Group;
- the Rapporteur for Vocabulary of another Radiocommunication Study Group, or by
- the CCV.

2. The Radiocommunication Rapporteurs shall be responsible for coordination of vocabulary and related subjects within their own Radiocommunication Study Groups and with other Radiocommunication Groups in conjunction with the CCV; the objective being to achieve the agreement of the Study Groups concerned.

3. The Rapporteurs shall be responsible for liaison between their Radiocommunication Study Group and the CCV with regard to the activities of the relevant IEC bodies for Vocabulary (TC 1) for technical documentation (TC 3) and for quantities and units and their symbols (TC 25).

RESOLUTION ITU-R 36-1

THE COORDINATION OF VOCABULARY AND RELATED SUBJECTS

(1990-1993-2000)

The ITU Radiocommunication Assembly,

considering

a) that it is desirable to seek the most efficient method of organizing vocabulary work within the Radiocommunication Sector;

b) that it is important for the work of the ITU, and in particular of the Sectors and for liaison with other interested organizations, that terms and their definitions, graphical symbols for documentation, letter symbols and other means of expression, units of measurement, etc., be standardized as far as possible;

c) the difficulty of achieving agreement on definitions when more than one Radiocommunication Study Group is involved;

d) that the Sectors are collaborating with the International Electrotechnical Commission (IEC) (Technical Committee No. 1) in order to provide and maintain an internationally agreed vocabulary of telecommunications;

e) that the Sectors are collaborating with the IEC (Technical Committee No. 3) in order to provide internationally agreed graphical symbols for diagrams and for use on equipment, approved rules for the preparation of documentation and for item designation;

f) that the Sectors are collaborating with the IEC (Technical Committee No. 25) in order to provide internationally agreed letter symbols and units;

g) that there is a continuing need for the publication of terms and definitions appropriate to the work of particular Radiocommunication Study Groups;

h) that unnecessary or duplicated work can be avoided by effective coordination of all work on vocabulary and related subjects carried out by the Radiocommunication Study Groups;

j) that the long-term objective of the terminology work must be the preparation of a comprehensive vocabulary of telecommunications in the working languages of the ITU,

resolves

1. that the coordination of work on vocabulary within the Radiocommunication Sector should be ensured by a Coordination Committee for Vocabulary (CCV) comprised of experts in the various working languages and members designated by interested administrations and other participants in the work of the Radiocommunication Sector, as well as the Rapporteurs for Vocabulary of the Radiocommunication Study Groups;

2. that the terms of reference of the CCV should be as given in Annex 1;

3. that the CCV should work mainly by correspondence according to Resolution ITU-R 1;

4. that the CCV should review and revise where necessary the Recommendations of the V series. New and revised Recommendations should be adopted by CCV and submitted for approval in accordance with Resolution R-1;

5. that administrations and other participants in the work of the Radiocommunication Sector may submit, to the CCV and to the Radiocommunication Study Groups, contributions concerning vocabulary and related subjects;

6. that the Chairman of the CCV should be chosen by the Radiocommunication Assembly.

ANNEX 1

Terms of reference for the Coordination Committee for Vocabulary

1. Vocabulary

1.1 To coordinate vocabulary work, including abbreviations and initials, within the Radiocommunication Sector and to seek agreement among all concerned Radiocommunication Study Groups to ensure acceptability of definitions.

1.2 To liaise with the Telecommunication Standardization Sector to ensure, so far as is practicable, that definitions of technical terms of common interest are mutually acceptable.

1.3 To liaise with the Language Division of the ITU General Secretariat, and with other organizations dealing with vocabulary work in the telecommunications field, for example with the IEC and the International Organization for Standardization (ISO) as well as the IEC-ISO Joint Technical Committee for Information Technology (JTC 1).

2. Related subjects

2.1 To ensure coordination between the Radiocommunication Study Groups concerning graphical symbols to be used in documentation or on equipment, the objective being to achieve the agreement of all Study Groups.

2.2 To ensure coordination between the Radiocommunication Study Groups concerning letter symbols and other means of expression, systematic classification, units of measurement, etc., the objective being to achieve the agreement of all Radiocommunication Study Groups, and to cooperate with the relevant IEC Technical Committee (Technical Committee No. 25) and with the ISO.

RESOLUTION ITU-R 37

RADIOWAVE PROPAGATION STUDIES FOR SYSTEM DESIGN AND SERVICE PLANNING

(1995)

The ITU Radiocommunication Assembly,

considering

a) that Radiocommunication Study Group 3 has the task of taking account of the characteristics and variability of radiowave propagation and of advising on prediction procedures suitable for use in service planning and performance evaluation;

b) that since propagation characteristics depend on geographical location, climate, local environment and atmospheric variability, the development of propagation prediction procedures by Radiocommunication Study Group 3 relies, *inter alia*, on the availability of measurement data and the maintenance of calibrated databanks;

c) that the acquisition of measurement data, and their subsequent use by Radiocommunication Study Group 3 in the development and improvement of prediction procedures, is a medium- to long-term process,

recognizing

a) that the service Radiocommunication Study Groups often have short-term needs for information for new systems and networks;

b) that, when designing such systems, relevant propagation data are sometimes submitted directly to the Radiocommunication Study Group concerned;

c) that these data, whilst fulfilling a particular short-term need, may be of limited value in other circumstances and may require further analysis prior to their use in studies on propagation prediction method development for other applications,

resolves

1 that, whenever possible, Radiocommunication Study Group 3 should be consulted on the most appropriate propagation information for each purpose that arises, where a current Recommendation may not seem to be wholly applicable;

2 that all input contributions to other Study Groups which contain propagation information should be referred to Radiocommunication Study Group 3, so that, in addition to the value of the contribution to the work of the other Study Group, the information may also be used in the future work of Radiocommunication Study Group 3;

3 that the series of Questions assigned to Radiocommunication Study Group 3 should be examined by all Study Groups to identify where additional study topics are required.

RESOLUTION ITU-R 38-2

STUDY OF REGULATORY/PROCEDURAL MATTERS

(1995-1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that the ITU Convention includes among the functions of Radiocommunication Study Groups the study of technical, operational and procedural matters to be considered by World and Regional Radiocommunication Conferences (CV 156);

b) that the Radiocommunication Assembly, 1995 (Resolution ITU-R 38) established a Special Committee to deal with matters relating to regulatory/procedural issues as part of preparations for World Radiocommunication Conferences;

c) that the Special Committee to deal with matters relating to regulatory/procedural issues has undertaken valuable work in preparation for World Radiocommunication Conferences (WRCs);

d) that a significant body of work of a regulatory/procedural nature might be identified in preparation for a future WRC;

e) that a mechanism should be put in place to facilitate such preparations,

recognizing

a) that the activation of that mechanism shall be the responsibility of the relevant WRC or the first session of the Conference Preparatory Meeting (CPM),

resolves

1 to maintain the infrastructure of the Special Committee to address the review of regulatory/procedural matters, the results of which may be used by administrations in their preparation for the relevant WRC;

2 that a decision to activate this Special Committee should be taken by a WRC or the first session of the CPM authorized by the WRC;

3 that the results of the studies by the Special Committee shall be contained in reports as contributions to the work of the CPM in preparing its report to the relevant WRC;

4 that the Special Committee shall be open to all the membership of the ITU-R;

5 that the Special Committee shall adopt the working methods of the Radiocommunication Study Groups wherever applicable, and shall be task oriented;

6 that the Special Committee shall identify suitable options for completing agenda items assigned to it, and, where appropriate, to draft example regulatory text in accordance with those options;

7 that the Special Committee will have a Chairperson and at least two Vice-Chairpersons appointed by a Radiocommunication Assembly,

instructs the Director

1 to draw the attention of the next WRC to this Resolution and invite the Conference or the first session of the CPM authorized by the WRC to identify whether there is likely to be a sufficient body of work of a regulatory/procedural nature in preparation for the following WRC to justify activating the Special Committee, and if so to task the Special Committee by identifying those agenda items for which attention will need to be given to regulatory/procedural aspects, thereby forming the primary basis of activity of the Special Committee;

2 to take the necessary measures to activate the Special Committee, if needed.

RESOLUTION ITU-R 39-1

FURTHER STUDIES CONCERNING UNWANTED EMISSIONS

(1997-2000)

The ITU Radiocommunication Assembly,

considering

a) that Radiocommunication Study Group 1 has created Task Group 1/5 to carry out urgent studies on unwanted emissions;

b) that in completing its programme of work in time for World Radiocommunication Conference (Geneva, 1997) (WRC-97), Task Group 1/3 experienced some difficulties with the timely availability of information from the other Radiocommunication Study Groups;

c) that the results of the studies of Task Group 1/5 are planned to be completed by October 2000,

invites

1 Radiocommunication Study Groups 3, 4, 6, 7, 8 and 9 to appoint Rapporteurs to participate in the work of Task Group 1/5 in order to assist in their efficient working and encouraging their members to attend the Task Group meetings,

urges administrations

1 to support Task Group 1/5 through submission of contributions and active participation in its work.

RESOLUTION ITU-R 40*

WORLDWIDE DATABASES OF TERRAIN HEIGHT AND SURFACE FEATURES

(1997)

The ITU Radiocommunication Assembly,

considering

a) that there is a requirement for planning purposes for improved worldwide methods of predicting field-strength which take account of terrain height and surface features (including ground cover such as buildings, vegetation, etc.);

b) that digital maps of terrain height are now becoming widely available with various data formats and resolutions, and that maps with 30 arc second resolution in latitude and longitude are available for most of the world;

c) that propagation predictions may be improved by the inclusion of more detailed information on terrain heights and surface features;

d) that the availability of digital maps of terrain height and surface features would be of considerable benefit to developing countries in the planning of their existing and newly introduced services;

e) that Radiocommunication Study Group 3 has an active work programme concerning the development of improved prediction methods,

resolves

1 that, initially, a terrain database with a 30 arc second horizontal resolution in latitude and longitude is suitable for worldwide methods of propagation prediction in the frequency range from 30 MHz to 3 GHz;

2 that administrations should review the terrain data available in this format, and should provide additional data so as to complete the worldwide extent of the database;

3 that administrations should be encouraged to make these terrain databases freely available for ITU purposes;

4 that administrations should encourage organizations involved in the production of terrain maps to produce databases of terrain height and surface features with a resolution equal to, or better than, 30 arc seconds for areas for which such data do not exist.

---

* This Resolution should be brought to the attention of Radiocommunication Study Group 1 for consideration of the use of a terrain data base for national spectrum management purposes.

This Resolution should also be brought to the attention of the Telecommunication Development Sector.

RESOLUTION ITU-R 41-1

COLLABORATION WITH THE INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) AND THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) ON BROADCASTING TECHNOLOGIES

(1997-2000)

The ITU Radiocommunication Assembly,

considering

a) the purposes of the Union set forth in Article 1 of the ITU Constitution relating to 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 organizations and those non-governmental organizations concerned with telecommunications;

b) the duties of the Radiocommunication Sector (Chapter II of the Constitution);

c) the studies requested to the Radiocommunication Study Groups (Article 11 of the ITU Convention);

d) the common interest of the International Standardization Organization (ISO) and the International Electrotechnical Commission (IEC) on one hand and Radiocommunication Sector on the other hand in the development of standards, on broadcasting technologies, which take full account of the needs of manufacturers, users and those responsible for broadcasting systems,

noting

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

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

c) the long-standing and fruitful cooperation already established between the former Radiocommunication Study Groups 10 and 11 with the ISO, IEC and ISO/IEC JTC 1 in areas of joint interest;

d) the increasing cost of developing international standards,

resolves

1 to invite the ISO and the IEC to continue to examine the work programme of Radiocommunication Study Group 6 in the early stages of its studies and vice versa, in order to identify subjects where coordination seems desirable, and to so advise the Director of the Radiocommunication Bureau;

2 to request the Director of the Radiocommunication Bureau, after consultation with the Study Group Chairperson concerned, to continue to reply and to furnish any additional information as it becomes available;

3 to request the Director of the Radiocommunication Bureau and the Radiocommunication Advisory Group to consider and propose further improvements to the procedures for cooperation between the Radiocommunication Sector, and the ISO and the IEC;

4 that the necessary contacts with the ISO and/or the IEC should be at the appropriate levels to develop suitable guidelines for cooperation;

5 to request the Chairperson of Radiocommunication Study Group 6 to take into account the related programmes of work and the progress of projects in the ISO, IEC and ISO/IEC JTC 1; further, to cooperate with these organizations as widely as possible and by appropriate means, in order to:

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

b) collaborate in drawing up other specifications in fields of joint interest;

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

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

8 that Member States of the ITU and Radiocommunication Sector Members can contribute significantly to the coordination between the Radiocommunication Sector on one hand and the ISO and the IEC on the other hand by ensuring adequate coordination of national activities associated with the three organizations.

RESOLUTION ITU-R 43

RIGHTS OF ASSOCIATES

(2000)

The ITU Radiocommunication Assembly,

considering

a) that the rapid pace of change in the radiocommunication environment and industry groups dealing with radiocommunications encourages the increased participation of interested entities and organizations in radiocommunication activities;

b) that entities or organizations with highly focussed areas of activity may be interested only in a small part of the radiocommunication activities but may be discouraged from doing so by the financial obligation incurred by Sector Members;

c) that Article 19 of the ITU Convention enables the Radiocommunication Sector to admit entities or organizations to participate as Associates in the work of a given Study Group or subgroups thereof;

d) that Articles 19, 20 and 33 of the Convention contain provisions relevant to the participation of Associates,

resolves

1 that interested entities or organizations may join the Radiocommunication Sector as Associates, and be entitled to take part in the work of a selected single Study Group and its subordinate groups;

2 that Associates may take part in the process of preparing recommendations within a single Study Group, including the roles of participating in meetings, submitting contributions and providing comments before the adoption of Recommendations, if any;

3 that Associates shall be granted access to all Study Group documentation in their chosen Study Group and other Study Groups as required by the work programme;

4 that Associates shall not be involved in voting for, or approval of Questions and Recommendations;

5 that an Associate may serve as Rapporteur (see § 2.11 of Resolution ITU-R 1), within the selected Study Group, except for liaison activities which are to be handled separately,

invites

1 the Council to determine a financial contribution for Associate membership to share in defraying the expenses of the Radiocommunication Sector and the Study Group concerned as asked for by Article 33 of the Convention and promote wider participation,

instructs the Director of the Radiocommunication Bureau

1 to take the necessary steps to implement this Resolution as soon as practicable.

RESOLUTION ITU-R 44

UPDATING OF CERTAIN MAINTAINED CCIR/ITU-R RECOMMENDATIONS

(2000)

The ITU Radiocommunication Assembly,

considering

a) that there are numerous CCIR/ITU-R Recommendations that have remained unchanged for a number of years;

b) that many of the above Recommendations require updating in order to reflect the recent changes, such as:

- ITU structural changes (CCIR to ITU-R, world administrative radio conference to world radiocommunication conference, IFRB to Radiocommunication Bureau, etc.);
- the need for replacing references to ex-CCIR Reports by those to ITU-R Recommendations;
- the renumbering of Radio Regulations provisions resulting from the simplification of the Radio Regulations, provided the Radio Regulation provision text is not changed;

c) that it is important to keep the ITU-R Recommendations up to date;

d) that the updating work should not create an undue workload on administrations and the secretariat,

resolves

1 that each Radiocommunication Study Group should review the maintained Recommendations and, if they are found no longer necessary, should propose their deletion;

2 that, where appropriate, each Radiocommunication Study Group is encouraged to update the maintained Recommendations as referred to in *considering* b);

3 that the above purely editorial updating should not be regarded as draft revisions of Recommendations, but each editorially updated Recommendation should be accompanied until the next revision by a footnote stating "Radiocommunication Study Group [*number of Study Group to be inserted as appropriate*] made editorial amendments to this recommendation in the year [*insert year in which amendments have been made*] in accordance with Resolution ITU-R 44";

4 that the Coordination Committee for Vocabulary should be regarded as a Radiocommunication Study Group in this Resolution;

5 that this Resolution shall not be applied to the updating of the ITU-R Recommendations incorporated by reference in the Radio Regulations and that such updating of ITU-R Recommendations shall be made through the ordinary procedure for revising ITU-R Recommendations in accordance with Resolution ITU-R 1,

instructs the Director of the Radiocommunication Bureau

1 with the cooperation of the Chairpersons and Vice-Chairpersons of the relevant Study Groups, Working Parties and Task Groups, to examine the maintained Recommendations and to prepare lists of the necessary editorial amendments for updating;

2 to submit the above lists to the meetings of the relevant Radiocommunication Study Groups for confirmation;

3 to report to the next Radiocommunication Assembly on the progress of the work.

RESOLUTION ITU-R 45

THE PROVISIONAL APPLICATION OF AN ALTERNATIVE PROCEDURE FOR THE APPROVAL OF RECOMMENDATIONS

(2000)

The ITU Radiocommunication Assembly,

considering

a) that an alternative procedure for the approval of Recommendations to facilitate the work of the Radiocommunication Sector has been envisaged by the Plenipotentiary Conference (Minneapolis, 1998);

b) that Resolution 82 of the Plenipotentiary Conference (Minneapolis, 1998) invites each Sector to develop its own procedures, if appropriate, for approving Questions and Recommendations using an alternative approval process;

c) that No. 246A of the ITU Convention indicates that: Member States and Sector Members shall adopt Questions to be studied in accordance with procedures established by the relevant conference or assembly, as appropriate, including the indication whether or not a resulting Recommendation shall be the subject of a formal consultation of Member States;

d) that No. 246B further states that: Recommendations resulting from the study of the above Questions are adopted by a Study Group in accordance with procedures established by the relevant conference or assembly, as appropriate. Those Recommendations which do not require formal consultation of Member States for their approval shall be considered as approved;

e) that Nos. 246D, 246E and 246H indicate that the provisions noted above shall not be used for questions and recommendations having policy or regulatory implications such as:

- Questions and Recommendations approved by the Radiocommunication Sector relevant to the work of radiocommunication conferences, and other categories of Questions and Recommendations that may be decided by the Radiocommunication Assembly;
- Questions and Recommendations where there is any doubt about their scope,

resolves

1 that the procedure set out below shall be used for the alternative approval of Recommendations on a provisional basis in the period until the next radiocommunication assembly;

2 that draft Recommendations, resulting from studies of those Questions identified without opposition in Resolution ITU-R 5 at a radiocommunication assembly, or those Questions approved without opposition by correspondence, as being suitable for the alternative procedure between radiocommunication assemblies, shall be considered by the Study Group as follows:

2.1 if the study group decides that, despite the previous identification of the Question as being suitable for the alternative procedure, the draft Recommendation has some policy or regulatory implication, then the Recommendation shall be considered for adoption and approval according to the provisions of § 10.2 and § 10.3 of Resolution ITU-R 1;

2.2 if the Study Group unanimously considers that § 2.1 above, does not apply (i.e. that the Recommendation is suitable for the alternative procedure), then the Recommendation should be considered for adoption using the procedure in § 10.2.2 of Resolution ITU-R 1;

2.3 Recommendations adopted under § 2.2 above shall be considered as approved. The provisions of § 10.3.5.6 to § 10.3.9 should apply to Recommendations approved in this way;

3 that the next Radiocommunication Assembly shall review the application of this procedure and, if appropriate, shall either include a definitive procedure within Resolution ITU-R 1, or extend the provisional application of an alternative procedure for the approval of Recommendations using the same or revised criteria.

RESOLUTION ITU-R 46*

COMPATIBILITY BETWEEN RADIOCOMMUNICATION SYSTEMS AND HIGH DATA RATE TELECOMMUNICATION SYSTEMS USING ELECTRICITY POWER SUPPLY OR TELEPHONE DISTRIBUTION WIRING

(2000)

The ITU Radicommunication Assembly,

considering

a) that a continuing growth in demand for telecommunications is expected so as to meet the needs of the information revolution;

b) that this need will require the exploitation of many types of telecommunications;

c) that the growing need for mobile or transportable telecommunications can be met only by the use of radiocommunications;

d) that in some cases radiocommunication provides the only means of ensuring safety-of-life for transportation systems and in the event of natural disasters;

e) that radiocommunication also provides an economic and flexible means of delivering a wide variety of radiocommunication services to users in environments ranging from dense urban areas to remote rural areas;

f) that where additional capacity is required for wire- or cable-based telecommunications, it may be provided by the installation of additional wires or cables;

g) that, in contrast to wire- or cable-based systems, the radio frequency spectrum is governed by considerations of frequency sharing and of unwanted emissions,

noting

1 that Telecommunication Standardization Study Group 5 carries out studies concerning wired telecommunication systems;

2 that particular care is needed to ensure that radiation from wire and cable systems do not unnecessarily degrade the performance of the radio systems,

resolves to request administrations

1 consider the compatibility between telecommunication systems, particularly between wire or cable systems and radio systems;

2 to carry out studies and submit their results to ITU.

---

* This Resolution should be brought to the attention of the CISPR and the Telecommunication Standardization Sector.

RESOLUTION ITU-R 47*

FUTURE SUBMISSION OF SATELLITE RADIO TRANSMISSION TECHNOLOGIES FOR IMT-2000

(2000)

The ITU Radiocommunication Assembly,

considering

a) that universal coverage and seamless global roaming are key IMT-2000 objectives, and the satellite component of IMT-2000 will form an essential part in realizing the complete IMT-2000 vision;

b) that IMT-2000 systems are defined by a set of interdependent ITU Recommendations to allow for the introduction into service of IMT-2000 in the 2000-2005 timeframe;

c) that Recommendation ITU-R M.1034 describes each of the various IMT-2000 satellite radio operating environments;

d) that the design of satellite Radio Transmission Technologies (RTTs) is based on an extensive range of technical and economical factors, some of which are in common with terrestrial technologies, some are unique to satellite technologies and some require different consideration when applied to satellite technologies;

e) that in response to a time limited ITU invitation and following evaluation by the ITU-R, six satellite RTTs have been adopted as satisfying the evaluation requirements for IMT-2000;

f) that IMT-2000 radio interfaces have been designed to be flexible and are expected to accommodate service requirements for an extended period,

further considering

a) that since satellite systems are particularly resource limited (for example, power and spectrum), satellite RTTs are optimized to the specific scenarios under which the satellite system will be operating and the market and environments to be served;

b) that, while a prime objective for IMT-2000 has been to minimize the number of radio interfaces, because of the constraints on satellite system design and deployment, a few satellite RTT's may be required for IMT-2000 (see Recommendations ITU-R M.1167 and ITU-R M.[IMT.RKEY]);

---

* This Resolution should be brought to the attention of ITU-T Study Group 11 and the TSAG.

c) that the set of services provided by IMT-2000 service providers and/or operators using a particular satellite system in a given environment is impacted by the particular design constraints for the radio interface for that system;

d) that Recommendation ITU-R M.816 recognizes that there may be later phases of IMT-2000 implementation with respect to high data rate of portable computing users and support of enhanced multimedia communications requirements, and further, that other service objectives may be identified in the work of ITU-R and ITU-T;

e) that for the satellite operating environments shown in Recommendation ITU-R M.1034, the choice of satellite constellation impacts on how operational requirements are met, but for several satellite systems under development choices of the specific satellite constellations have not yet been finalized;

f) that in Recommendation ITU-R M.1034, the operational scenario includes operation across various IMT-2000 radio operating environments, operation across multiple IMT-2000 operators and multiple types of IMT-2000 operators, and that there may be more than one type of satellite system within IMT-2000 each having a different internal configuration and different ownership;

g) that as satellite system optimization and development proceeds, in order to adapt to changes in market demands, business objectives, technology developments, and operational needs, and as commonalities with the terrestrial component of IMT-2000 are maximised as appropriate, it may be necessary to modify/update relevant ITU-R Recommendations,

resolves

1 that a proponent with a proposal for a new satellite RTT for IMT-2000 should submit the proposal to the ITU in accordance with Recommendation ITU-R M.1225;

2 that three (3) months later, the proponent that submitted an RTT, should submit a self-evaluation report to the ITU, taking into account Recommendation ITU-R M.1225;

3 that, based on evaluation reports received from the proponent and other evaluation groups established by Administrations of Member States of the ITU and ITU Sector Members, the ITU-R should evaluate the proposed RTT in relation to Recommendation ITU-R M.1225 and the criteria in Annex 1 below as to whether it qualifies as an IMT-2000 satellite radio interface;

4 that as soon as possible, the proponent that submitted a satellite RTT that qualifies as an IMT-2000 satellite radio interface should submit to the ITU the information needed to up-date Recommendations ITU-R M.[IMT.RKEY] and ITU-R M.[IMT.RSPC];

5 that once this evaluation process is completed by the ITU-R the new satellite radio interface should be entered into Recommendations ITU-R M.[IMT.RKEY] and ITU-R M.[IMT.RSPC],

further resolves

1 that modifications of existing satellite radio interfaces should be submitted to the ITU through an Administration of Member States of the ITU or an ITU Sector Member and after a review by the ITU-R, the modifications should be entered into the appropriate Recommendations ITU-R M.[IMT.RKEY] and/or ITU-R M.[IMT.RSPC],

instructs the Director

1 to inform the Administrations of Member States of the ITU and ITU Sector Members via a Circular Letter of any submission made according to *resolves* 1, and invite evaluation reports based on Recommendation ITU-R M.1225 to be submitted to the ITU within three (3) months of the date of the Circular Letter;

2 to implement suitable procedures to meet the requirements of *resolves* 3 above;

3 to review the procedures established in respect of this Resolution by the end of 2001.

ANNEX 1

IMT-2000 Satellite RTT Evaluation Criteria

The minimum performance capability for data services (excluding paging) is a user bit rate of 9.6 kbit/s. However, proponents are encouraged to provide higher user bit rates for applications involving vehicular or nomadic terminals.

Handover is required within a satellite system due to the relative movement between the terminal and the satellite spot beam.

RESOLUTION ITU-R 48

STRENGTHENING THE REGIONAL PRESENCE IN THE RADIOCOMMUNICATION STUDY GROUP WORK

(2000)

The ITU Radiocommunication Assembly,

considering

a) that the rights and obligations of Member States and Sector Members are stated in Article 3 of the Constitution and that this includes rights of equal access to participation in the work of ITU-R;

b) that the Plenipotentiary Conference, 1998, implemented Resolution 25 directing a greater regional presence in the work of ITU;

c) the difficulty that many developing countries, and countries remote from Geneva, have in participating in the work of ITU-R Study Groups,

considering

a) that the ITU regional presence should be viewed as an asset to the Union rather than as a liability,

recognizing

a) the difficulty faced by many countries, particularly developing countries with stringent budgetary constraints, in participating in the activities of ITU-R, including the ITU-R Study Group meetings;

b) the decision by the World Radiocommunication Conference (Geneva, 1997), in its Resolution 72, to instruct the Director of BR to consult regional telecommunication organizations on the means by which assistance can be given to their preparations for future world radiocommunication conferences, and that a significant component of such preparations is done in ITU-R Study Groups;

c) that ITU-R and Members' resources are limited, and that efficiency and effectiveness are therefore key considerations for activities to be undertaken by ITU,

noting

a) that Resolution 25 of the Plenipotentiary Conference (Rev.Minneapolis, 1998), which defined the general functions of the regional presence and instructed the Council to establish a group of experts to carry out a detailed evaluation of regional presence, with a view to improving its structure and management;

b) the confirmation by Council at its 1997 and 1999 sessions, stressing the need to adapt the organization and activities of the regional presence to the requirements and priorities of each region, as well as the need to strengthen the regional presence by enhancing its usefulness and effectiveness in all the regions of the world, particularly by broadening the range of its activities, where appropriate, to encompass all the activities undertaken by ITU;

resolves

1 to request the Director of BR to work with the ITU regional offices to encourage the holding of ITU-R meetings in the Regions;

2 to cooperate with the Director of BDT in enhancing the ability of the ITU regional and area offices to provide support for Study Group activities, as well as the necessary expertise, to strengthen cooperation and coordination with the relevant regional organizations and to facilitate the participation of all Member States and Sector Members in the activities of ITU-R.

RESOLUTION 49

APPOINTMENT AND MAXIMUM TERM OF OFFICE FOR THE CHAIRPERSON AND VICE-CHAIRPERSONS OF THE RADIOCOMMUNICATION ADVISORY GROUP

(2000)

The ITU Radiocommunication Assembly,

considering

a) that provisions for the Radiocommunication Advisory Group have been incorporated into Article 11A of the ITU Convention;

b) that No. 160G of the Convention states that the Radiocommunication Advisory Group shall "adopt its own working procedures compatible with those adopted by the radiocommunication assembly";

c) that the Radiocommunication Advisory Group has advised that its Chairperson and Vice-Chairpersons should be appointed by the Radiocommunication Assembly;

d) that the Radiocommunication Advisory Group has also advised that the procedures and qualifications for those positions should generally follow those for the appointment of Study Group Chairperson and Vice-Chairpersons;

e) that the Radiocommunication Advisory Group considered that, in respect of the maximum term of office, different factors applied for the Radiocommunication Advisory Group than for Study Groups;

f) that experience of ITU in general and of the Radiocommunication Sector in particular would be of particular value for officials of the Radiocommunication Advisory Group,

resolves

that the provisions of Resolution ITU-R 15 shall also apply to the posts of Chairperson and Vice-Chairpersons of the Radiocommunication Advisory Group with the following exceptions:

- the term of office for both the Chairperson and Vice-Chairpersons of the Radiocommunication Advisory Group should be limited so as to terminate at the end of the Radiocommunication Assembly at which the officer will have served for a period of more than four years;
- in the list of qualifications (Annex 2 of Resolution ITU-R 15) "continuity in participation in the relevant Study Group" should be replaced by "continuity in the activities of ITU in general and ITU-R in particular".

RESOLUTION ITU-R 50

ROLE OF THE RADIOCOMMUNICATION SECTOR IN THE ONGOING DEVELOPMENT OF IMT-2000

(2000)

The Radiocommunications Assembly

considering

a) that the scope of the ITU as a whole, and of the standardization activities within the ITU in particular, is currently under consideration in the ITU Reform Group;

b) that some contributions to the ITU Reform Group have proposed the formation of a single ITU joint ITU-R/ITU-T group on IMT-2000;

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

d) that Working Party 8F has a number of aspects within its terms of reference which have regulatory and/or policy implications;

e) that the RAG has advised the Director of the BR that close co-ordination at the working level between the ITU-R and ITU-T on an informal base is encouraged;

f) that WP 8F has proposed to ITU-T Study Groups that an excellent way forward to continue progress in both Sectors, and to progress relationships with organizations external to the ITU, is to develop a roadmap for each Sector to independently manage and advance their work on IMT-2000 within a complementary framework,

noting

a) Resolution ITU-R 6 on liaison and collaboration with the ITU Telecommunication Standardization Sector;

b) Resolution ITU-R 9 on liaison and collaboration with other recognized external organizations,

resolves

1 that a roadmap for ITU-R activities on IMT-2000 be developed by ITU-R Study Group 8 to ensure that this work is progressed effectively and efficiently with organisations external to the ITU;

2 that the effective co-ordination currently established between the ITU-T and ITU-R for IMT-2000 activities be continued,

invites

1 the Telecommunications Standardization Sector to develop a complementary roadmap for all ITU-T IMT-2000 activities, and to co-ordinate it with ITU-R to ensure full alignment and harmonization of the work programmes of both ITU-T and ITU-R,

instructs the Director

1 to bring this Resolution to the attention of the TSAG and WTSA.