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INTERNATIONAL TELECOMMUNICATION UNION

REPORT ON THE ACTIVITIES OF THE INTERNATIONAL TELECOMMUNICATION UNION in 1993

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1. INTRODUCTION

This Report is published pursuant to the provisions of No. 306 of the International Telecommunication Convention (Nairobi, 1982), which provides that the Secretary-General shall "..... with the assistance of the Coordination Committee, prepare an annual report on the activities of the Union which, after approval by the Administrative Council, shall be sent to all Members".

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2. MEMBERSHIP OF THE UNION

2.1 In 1993, the following nine countries became Members of the Union following their accession to the Nairobi Convention:

- Czech Republic, on 1 January,
- Republic of Georgia, on 7 January,
- Slovak Republic, on 23 February,
- Republic of Kazakhstan, on 23 February,
- Federated States of Micronesia, on 18 March,
- The Former Yugoslav Republic of Macedonia, on 4 May,
- Turkmenistan, on 7 May,
- Eritrea, on 6 August,
- Principality of Andorra, on 12 November.

As at 31 December 1993, there were therefore 182 Members of the Union.

2.2 In the course of 1993, three Members ratified the Constitution and Convention of the ITU, Nice, 1989, thus bringing to twenty-three the total number of ratifications as at 31 December 1993. Also in 1993, four Members ratified, and four acceded to, the Constitution and Convention of the ITU, Geneva, 1992.

2.3 Tables I and I Bis, in Annex 1 to the present Report, show the situation of Members with respect to the Nairobi Convention and the Administrative Regulations which complement it, as at 31 December 1993. It also include the situation with respect to the Constitution and Convention of Nice, 1989, and with respect to the Constitution and Convention of Geneva, 1992. Annex 1 also gives information regarding certain other conventions and agreements relating to telecommunications.

****

3. THE COUNCIL

3.1 The 1993 session of the Council was held at ITU Headquarters from 21 June to 1 July 1993. It was attended by representatives of 42 Members of the Council, namely:

Algeria (People's Democratic Republic of), Germany (Federal Republic of), Saudi Arabia (Kingdom of), Argentine Republic, Australia, Benin (Republic of), Brazil (Federative Republic of), Bulgaria (Republic of), Burkina Faso, Cameroon (Republic of), Canada, Cape Verde (Republic of), China (People's Republic of), Colombia (Republic of), Korea (Republic of), Cuba, Egypt (Arab Republic of), Spain, United States of America, France, Greece, India (Republic of), Indonesia (Republic of), Italy, Jamaica, Japan, Kenya (Republic of), Kuwait (State of), Malaysia, Mali (Republic of), Morocco (Kingdom of), Mexico, Nigeria (Federal Republic of), Pakistan (Islamic Republic of), Philippines (Republic of the), Romania, Russian Federation, Senegal (Republic of), Sweden, Switzerland (Confederation of), Tanzania (United Republic of), Thailand.

3.2 Mr. J.N. Sánchez Valle (Spain) and Mr. S. Mbaye (Senegal) were elected Chairman and Vice-Chairman of the Council, respectively, and the following Committees were set up:

Committee 1 - Finance

Chairman : Mr. P. Gagné (Canada)
Vice-Chairman : Mr. U. Mohr (Germany)

Committee 2 - Staff and Pensions

Chairman : Mr. S. Al-Basheer (Saudi Arabia)
Vice-Chairman : Mr. K. Mirski (Bulgaria)

Committee 3 - Development

Chairman : Mr. H. Vignon (Benin)
Vice-Chairman : Mr. M.A. Yusoff (Malaysia)

3.3 The Resolutions and Decisions adopted by the Council are summarized below:

3.3.1 Financial matters

3.3.1.1 Contributory shares for the defrayal of Union expenditure

The Council authorized Cuba to contribute in the 1/16 unit class (starting from 1 January 1993), Grenada in the 1/16 unit class (from 1 January 1994), Madagascar in the 1/8 unit class (from 1 January 1994), Sao Tome and Principe in the 1/16 unit class (from 1 January 1994), Zambia in the 1/16 unit class (from 1 January 1994), Bulgaria (provisionally) in the 1/4 unit class (from 1 January 1994) and Russia (provisionally) in the 28 unit class (from 1 January 1994).

(Resolutions 1033, 1034, 1035, 1036, 1037, 1044, 1045)

3.3.1.2 Revision of the Financial Regulations

The Council resolved to set up a working group to prepare a draft revised text of the Financial Regulations for approval by the Council at its 1994 session.

(Resolution 1041)

3.3.1.3 Financial Operating Report for 1992

The Council approved the Financial Operating Report and the Management Report of the ITU Staff Superannuation and Benevolent Funds for 1992.

(Resolution 1042)

3.3.1.4 External audit of ITU accounts for the period 1 January to 31 December 1992

The Council approved the accounts of the ITU for the period 1 January to 31 December 1992 as drawn up and audited by the External Auditor appointed by the Swiss Confederation.

(Resolution 1043)

3.3.1.5 External audit of the accounts of activities related to TELECOM 91

The Council approved the accounts of Telecom 91 as presented and audited by the External Auditor.

(Resolution 1047)

3.3.1.6 Budget of the ITU for 1994

The Council approved the budgets for 1994, namely:

- the Union budget amounting to 139,975,000 Swiss francs;
- the Technical Cooperation special accounts budget amounting to 5,213,000 Swiss francs;
- the supplementary publications budget amounting to 9,580,000 Swiss francs.

The contributory unit for 1994 was set at:

- for Members : 319,200 Swiss francs;
- agencies, etc. : 63,840 Swiss francs.

(Resolution 1050)

3.3.1.7 Stores, Reprography and Technical Services Capital Account

The Council decided to transfer the sum of 1,300,000 Swiss francs from the Stores, Reprography and Technical Services Capital Account to the Union's Reserve Account.

(Decision 449)

3.3.1.8 Exhibition Working Capital Fund

The Council decided to withdraw a sum of 1,049,033.18 Swiss francs from the Exhibition Working Capital Fund and to credit this amount to the Technical Cooperation special accounts.

(Decision 450)

3.3.2 Staff matters, pensions

3.3.2.1 Membership of the ITU Staff Pension Committee

The Council appointed the following persons to represent the Council on the ITU Staff Pensions Committee:

Members	Alternate Members	Term of Office
Mr. R. HUMES (Jamaica)	Mr. A. NODAROS (Greece)	Until the 1994 session of the Council
Mr. J.L. MONTEIRO (Cape Verde)	Mrs H.Y. KIM (Rep. of Korea)	Until the 1995 session of the Council
Mr. D. GARNIER (France)	Mr. P.G. TCHERNIKOV (Russia)	Until the 1996 session of the Council

(Resolution 1038)

3.3.2.2 Salaries, post adjustment rates and staff assessment rates of elected officials

The Council approved the salaries and rates with effect from 1 March 1993 and amended the Staff Regulations and Rules for elected officials.

(Resolution 1039)

3.3.2.3 Staff requirements in the Telecommunication Development Bureau (BDT)

The Council approved the extension of a number of fixed-term posts until 31 December 1995 in the Telecommunication Development Bureau (BDT).

(Resolution 1040)

3.3.2.4 Posts in Grades G.1 to P.5

The Council authorized the Secretary-General, after consultation with the Coordination Committee, to create, abolish or regrade as justified and in accordance with the promulgated classification standards established posts of the General Service and Professional categories in grades G.1 to P.5 without incurring expenses exceeding the limit of 0,5% of the credits allocated for established posts of the above-mentioned categories in the budget of the Union.

(Resolution 1046)

3.3.2.5 Decision on staff requirements

The Council approved the creation of two fixed-term posts until 31 December 1995 in the Telecommunication Development Bureau and the abolition of a number of posts in the General Secretariat, Radiocommunication Bureau, Telecommunication Standardization Bureau and Telecommunication Development Bureau.

(Resolution 1049)

3.3.3 Conferences and meetings

3.3.3.1 World Telecommunication Development Conference (WTDC-94)

The Council resolved that the World Telecommunication Development Conference (WTDC-94) should be convened in Buenos Aires (Argentina) from 21 to 29 March 1994 and established the agenda for the Conference. The Members of the Union were consulted with respect to the agenda, date and place of the Conference in Circular telegram A68 of 6 July 1993 and the Council's proposals were approved by the required majority.

(Resolution 1048)

3.3.3.2 Future work of the Voluntary Group of Experts to Study Allocation and Improved Use of the Radio-Frequency Spectrum and the Simplification of the Radio Regulations (VGE) and Associated Programme of Information Meetings

The Council approved budgetary provisions in 1994 for the VGE activities for a total of 314,000 Swiss francs, resolved that the information meetings should be convened in 1994 and in 1995 in Africa, America, Asia-Pacific and Europe, and recommended to the Plenipotentiary Conference (Kyoto, 1994) to provide the adequate resources for convening two VGE information meetings in 1995.

(Resolution 1051)

3.3.3.3 Date and duration of the 1994 session of the Council

The Council decided that its 1994 session will open in Geneva for a period of two weeks and two days from Monday, 2 May to Tuesday, 17 May 1994.

(Decision 448)

3.4 Resolution amended by the Council

The Council amended Resolution No 246 - Studies of complementary interest in the Telecommunication Standardization and Radiocommunication Sectors.

(Resolution 246)

3.5 Other major issues considered by the Council

- Working Group on strategic policies and plans
- Committee for ascertaining the facts concerning Israel's violation of the International Telecommunication Convention
- Implementation of APP Resolution 12 regarding the Rules of procedure for conferences and meetings
- Report of the Council to the Plenipotentiary Conference (Kyoto, 1994)
- World Telecommunication Day
- More efficient working methods of the Council
- Participation of entities and organizations other than administrations in the activities of the Union
- Premises at the Union Headquarters

****

4. CONFERENCES

4.1 World Telecommunication Standardization Conference (WTSC-93)

4.1.1 Pursuant to the decisions of the Additional Plenipotentiary Conference (Geneva, 1992), the activities of the Xth CCITT Plenary Assembly were included in the work of the World Telecommunication Standardization Conference.

The Conference concluded its work on Friday, 12 March 1993. Four hundred and fifty-nine delegates from 68 countries and 8 international organizations participated in the Conference, which opened in Helsinki (Finland) on 1 March and was chaired by Mr. Seppo J. Halme (Finland), assisted by five Vice-Chairmen: Mr. J.J. Silva (Brazil), Mr. Wang Zhanning (China), Mr. Y.A. Tolmachev (Russia), Mr. S. Mbaye (Senegal) and Mr. E.S. Barbely (United States of America).

One of the underlying tasks of the Conference was to further streamline the Telecommunication Standardization Sector of the ITU so as to increase its competitivity in the global standardization arena. That process had been initiated at Melbourne in 1988.

4.1.2 The Conference set up the following Committees to conduct its work:

Committee 1 - Steering Committee

(composed of the Chairman and Vice-Chairmen of the Conference, and of the Chairmen and Vice-Chairmen of the other Committees)

Committee 2 - Budget Control

Chairman: Mr. S.S. AL-BASHEER (Saudi Arabia)
Vice-Chairman: Mr. J.N. SANCHEZ VALLE (Spain)

Committee 3 - Working methods of the ITU Telecommunication Standardization Sector

Chairman: Mr. W. STAUDINGER (Germany)
Vice-Chairman: Mr. S. KANO (Japan)

Committee 4 - Structure and programme of the Study Groups

Chairman: Mr. M. ISRAEL (Canada)
Vice-Chairman: Mr. J. HAYDON (Australia)

Committee 5 - Technology of telecommunication networks - Reports by the Study Groups concerned

Chairman: Mr. H.K. PFYFFER (Switzerland)
Vice-Chairman: Mr. M. ASFAW (Ethiopia)

Committee 6 - Telecommunication services - Reports by the Study Groups concerned

Chairman: Mr. J.S. RYAN (United States of America)
Vice-Chairman: Mr. J. GALVAN TALLEDOS (Mexico)

Committee 7 - Editorial Committee

Chairman: Mr. P. GONIN (France)
Vice-Chairmen: Mr. D.A. HENDON (United Kingdom)
Mr. V. RUBIO CARRETON (Spain)

4.1.3 In accordance with its agenda, the Conference adopted several Resolutions covering the rules of procedure and working methods of the ITU Telecommunication Standardization Sector and its relations with regional and interregional organizations. Those Resolutions had been prepared by the Ad hoc Group, - Resolution 18 set up at Melbourne in 1988.

The Conference also adopted Resolutions on the functioning of the Intersector Coordination Groups and issued instructions for follow-up of the transfer of certain activities from the Radiocommunication Sector to the Telecommunication Standardization Sector, pursuant to the decisions of the Additional Plenipotentiary Conference (Geneva, 1992).

4.1.4 In addition, the Conference adopted 458 new or revised Recommendations submitted to it by the different Study Groups.

4.1.5 The Conference set up the 15 Study Groups of the Telecommunication Standardization Sector, approved their programmes and appointed their Chairmen and Vice-Chairmen.

4.2 Radiocommunication Assembly (RA-93)

See section 5.2.2.2.

4.3 World Radiocommunication Conference (WRC-93) (see also section 5.2.2.1)

4.3.1 The World Radiocommunication Conference (WRC-93) opened its session in Geneva on 15 November 1993. 615 delegates from 123 countries, as well as observers from United Nations specialized agencies, intergovernmental organizations operating satellite systems and international organizations concerned attended the Conference.

4.3.2 The Conference was convened, in response to Resolution 1032 of the Council, for a period of five days.

4.3.3 Mr. V. V. Timofeev (Russian Federation) was elected Chairman of the Conference, and Messrs. R. Beaird (United States of America), M. A. Johnson (United Kingdom of Great Britain and Northern Ireland), Cheikh T. Diongue (Republic of Senegal), Z. Wang (People's Republic of China) and M. J. Mulla (Kingdom of Saudi Arabia) were elected Vice-Chairmen.

4.3.4 The following structure of the Conference was set up:

Committee 1 - Steering Committee

(composed of the Chairman and Vice-Chairmen of the Conference and the Chairmen and Vice-Chairmen of the Committees)

Committee 2 - Credentials Committee

Chairman: Mr. B. Agnan (Republic of Benin)
Vice-Chairman: Mr. M. Takahashi (Japan)

Committee 3 - Budget Control Committee

Chairman: Mr. G. Kithinji (Republic of Kenya)
Vice-Chairman: Mr. V. Demirev (Republic of Bulgaria)

Committee 4 - Agendas Committee

Chairman: Mr. S. Pinheiro (Federative Republic of Brazil)
Vice-Chairman: Mr. R. N. Agarwal (Republic of India)

Committee 5 - Editorial Committee

Chairman: Mrs. A. M. Nebes (France)
Vice-Chairmen: Mr. M. Goddard (United Kingdom)
Mr. V. Rubio Carretón (Spain)

4.3.5 In accordance with its agenda, the Conference took the decisions considered necessary or appropriate. It adopted the following Resolutions and Recommendations as contained in its Final Acts and listed below:

Resolution 1 - Agenda for the 1995 World Radiocommunication Conference

Resolution 2 - Preliminary Agenda for the 1997 World Radiocommunication Conference

Recommendation 1 - Convening of a Regional Radiocommunication Conference to Review the Regional Agreement Concerning the Use by the Broadcasting Service of Frequencies in the Medium Frequency Bands in Regions 1 and 3 and in the Low Frequency Bands in Region 1 (Geneva, 1975)

Recommendation 2 - Mobile-Satellite Service Networks Published Under Resolution 46 (WARC-92)

4.3.6 The Conference completed its work on Friday, 19 November 1993, with the signature of the Final Acts by the delegates of 107 Members of the Union.

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5. ACTIVITIES OF THE GENERAL SECRETARIAT AND SECTORS

5.1 Activities of the General Secretariat

In 1993, the General Secretariat comprised five departments - Personnel, Finance, Conferences, Common Services, Information Services - together with the TELECOM Secretariat.

5.1.1 Office of the Secretary-General

5.1.1.1 External Affairs Unit (EAU)

Following the approval of the HLC recommendations by the Additional Plenipotentiary Conference in December 1992, the External Affairs Unit was established in February 1993 within the Office of the Secretary-General. The purpose of the Unit consists of creating a good understanding, working relationship and image of the ITU vis-à-vis the Members, the industry, the United Nations and other international organizations, the media and the general public and of establishing and maintaining accurate record of treaties and regulations entered into by the Members. Among others, the goal of the EAU is to make the ITU known not only to Governments but also to the industry, operators, international organizations, the media and the public at large; to develop a good understanding of the external telecommunications environment, the work of other organizations and bring it to the attention of the various Sectors and Departments of the Union; to provide an efficient administrative service to the Council, Plenipotentiary and World Conferences; to establish a good relationship with the media; to act as a catalyst in keeping ITU relevant and indispensable in the affairs of Nations; to maintain the ITU as a dynamic partner of the UN system in its field of competence; to create conditions for the effective marketing of the services and products of the ITU; to handle protocol matters and to organize events such as the World Annual Telecommunication Day. Besides, the Unit assists the Secretary-General and the Coordination Committee in all matters pertaining to external relations.

During the period under review, the Unit has been actively involved in maintaining and strengthening its relationships with international organizations (see item 7) namely within the framework of the Administrative Committee on Coordination and its subsidiary bodies. Within the spirit of Resolution 52, the Unit has coordinated, studied and provided comments on a number of JIU reports. Ever since the inception of the External Affairs Unit, participation of the ITU in the activities of the ACC has been enhanced. Through its active participation in the work of the ACC, the ITU has provided an interim Chairman for the Information Systems Coordination Committee (ISCC), given assistance to Agencies on the effective use of electronic mail and was invited to provide advice on teleconferencing as a means of system-wide tool for consultations. Close cooperation has been maintained with Members in order to assist them to promote telecommunications and support the mission of the ITU.

The Unit also:

- provided support to the Office of the Secretary-General in the convening of the World Telecommunications Advisory Council (WTAC) which met in Singapore and Geneva during 1993 - the Head of the External Affairs Unit serves as the Executive Secretary of WTAC.

- ensured that the information needs of Member countries, corporate entities and the public in general are met through press releases, briefings, press conferences, production of brochures, leaflets, slide shows, participation in joint publishing ventures, contribution of articles, video/sound recordings and teleconferencing. Preparation of public information programmes comprising

lectures, debates, elaboration of brochures in connection with the development conferences organized during the period under review generated a substantial amount of work on information dissemination by the Unit. The Unit also organized the World Telecommunication Day on the theme Human Development.

- brought forward policy papers on the work of the ACC to the attention of the Management Committee and Coordinating Committee.

5.1.1.2 Strategic Planning Unit (SPU)

The HLC recommendation to establish a Strategic Planning Unit was accepted by the 46th session of the Council in 1991 and implemented in 1992 with the following functions: (a) strategic planning; (b) operational analysis; (c) internal audit. The head of the unit was appointed in March, 1992 and staffing completed by mid-1993. The first two functions assigned to the unit are now fully operational, while the third is being provided on an interim basis by a special service agreement with a part-time auditor, in liaison with the Finance Department.

The SPU supports the Secretary-General, the Coordination Committee, and the Council in discharging their strategic planning responsibilities under the Geneva Constitution and Convention, and is conducting operational analyses of key functions in the General Secretariat and sectoral Bureaux.

In 1993, the unit's main activities were:

- preparing the Secretary-General's annual report to Council on strategic policies and plans;

- preparing a report to Council on enhanced participation by non-Administration entities and organizations, in response to APP Resolution 4;

- providing the secretariat for the Council Working Group on Strategic Policies and Plans;

- conducting operations reviews of the ITU publications programme, the External Affairs Unit, and the TELECOM secretariat;

- undertaking a pilot survey of Sector "members" concerning their satisfaction with ITU products and services and the current system of rights and obligations;

- contributing to the World Telecommunications Development Report;

- preparing speeches and articles for the Secretary-General and the Deputy Secretary-General.

5.1.1.3 Legal Affairs Unit (JUR)

The activities of the Legal Affairs Unit (JUR) have remained, in substance, comparable to previous years. In particular, the Unit has conducted studies and provided legal opinions in respect of all types of documents (international treaties and agreements, contracts, etc.) in a wide variety of areas such as general public international law, telecommunication law, treaty law, matters related to personnel, finance, development, privileges and immunities, taxation (both with the host country and with France), the purchase and rental of equipment and services, the extension of buildings, copyright and intellectual property, etc. It has also participated actively in drawing up draft revisions of the Staff Regulations and Staff Rules and of the Financial Regulations, and has carried out the legal functions related to the role of depositary for

international treaties and agreements entrusted to the Secretary-General. At the same time, the Legal Affairs Unit has been extremely active in drawing up the numerous contracts and agreements reached within the framework of the organization and holding of regional and world telecommunication exhibitions. Finally, the Unit participated in the work of the first World Radiocommunication Conference (15-19 November 1993), the Council and the VGE, as well as in internal ITU committees (Contracts Committee, Building Committee, Joint Advisory Committee), which it provided with legal opinions and advice whenever necessary.

5.1.1.4 Special Projects (TELECOM)

The programme of TELECOM events comprises the World TELECOM, traditionally held in Geneva, and the Regional exhibitions in Asia, Africa, the Americas and Eastern Europe. This report endeavours to present a picture on activities undertaken in 1993 to realise these several projects.

The growth of the TELECOM Secretariat and its associated events necessitated a move from its previous location into newer offices at 15, Chemin Louis Dunant. The consolidation has provided a more efficient layout, and has helped in reinforcing the image of TELECOM within a competitive marketplace, as well as offering a better environment to its clients.

Each Project Manager is responsible, under the Executive Director, for all activities for any project assigned to that Project Manager, including function and financial results. The reorganization of TELECOM along matrix management lines suggested in the Operations Review of TELECOM was approved by the Co-ordinating Committee and preparations were begun in 1993 for implementation in 1994.

Asia TELECOM 93

Asia TELECOM 93 took place at the World Trade Centre Singapore, 17 to 22 May 1993, at the invitation of Singapore Telecom and the Telecommunication Authority of Singapore. It was the third regional telecommunication exhibition and forum organized by ITU for the Asia-Pacific region, and took place just after the BDT regional development conference in Singapore. The generous support from co-hosts Singapore Telecom and the Telecommunication Authority of Singapore helped to make Asia TELECOM 93 the largest and most successful regional TELECOM to date.

Inaugurated by His Excellency Mr. Wee Kim Wee, President of the Republic of Singapore, Asia TELECOM 93 received 31 Ministers, 60 Directors-General, 65 Delegates of Administrations, and 150 CEOs & Senior Executives.

Some 32,017 visitors from 87 countries were registered and visited an exhibition which boasted the first double storey exhibits ever built in Singapore. There were 371 exhibitors from 27 countries and 14 national pavilions, using 23,700m^2 gross.

Forum

The Asia TELECOM 93 theme was "Telecommunity: the next era of growth" and the forum was divided into four symposia, each with a sub-theme:

Policy "Strategy for Expanding Telecommunications Infrastructure"

Discussion focused mainly on the strategic efforts required for regional integration - standards, co-operation and competition, future policies for satellite and mobile services

Technical "Technological challenge: Interfacing regional needs"

Issues addressed included those pertaining to the evolution and harmonization of rural and urban networks within the region, as well as the broader global aspects for the 21st century

Economic "Telecommunications: the platform for economic growth and development"

Telecommunications in the Asia-Pacific region were outlined, challenges defined, and actions to upgrade telecommunications infrastructure described

Regulatory "Effective transition through regulation"

Central to this symposium was the question of how regulation can facilitate the transition from the old telecommunications order to today's more liberal and competitive environment

There were 1,238 Delegates from 79 countries at the Forum and 168 Speakers from 34 countries and 13 international organizations.

Press

An international advertising campaign scheduled 62 advertisements in 18 worldwide trade and business publications. 199 international press representatives covered the event.

Africa TELECOM 94

Preparations began for Africa TELECOM 94 which will be held in the Cairo International Conference Centre (CICC), Cairo, Egypt from 25 to 29 April 1994 at the invitation of the Arab Republic of Egypt. His Excellency, Mr. Mohamed Hosni Mubarak, President of the Arab Republic of Egypt is expected to inaugurate the event at the Opening Ceremony which 2,400 guests will attend.

Exhibition

Focused on the Middle East and the African regions, Africa TELECOM 94 is expected to attract some 15,000 - 20,000 visitors to the exhibition where some 260 companies will construct exhibits on 13,000m^2 gross. By the end of 1993, space at the exhibition was sold out. New halls are being constructed at the CICC for the event.

Forum

There will be 210 speakers at the Forum, addressing the theme "Integrating Africa Regionally and Globally: A challenge for Telecommunications and Development". Policy, regulatory, economic and technical aspects will be addressed within a single forum which will have plenary, panel and workshop sessions. The workshops, a new feature, are designed to provide an opportunity for dialogue between delegates and speakers.

Press

An international advertising campaign has been scheduled to run in the trade press and on international television between May 1993 and April 1994, with a total of 81 advertisements placed in 33 media titles reaching an audience of over two and a half million readers worldwide.

TELECOM 95

Exhibition

Preparations for TELECOM 95, began at the closure of TELECOM 91. It may be worth noting that TELECOM 95 was over-booked by October 1991.

The Swiss Authorities, aware of the needs for more exhibition space, are building a new hall to be located on the other side of the motorway, which will be linked to Hall 5 by a covered passageway. Despite the fact that the new hall will provide an additional 16,000 m^2 gross, bringing the overall ground floor space availability to 86,500 m^2 gross, it has not been possible to accommodate all applicants. As a result, TELECOM has been obliged to downsize the space allocations of many exhibitors and to establish a waiting list.

TELECOM 95 allocated an area of exhibition space to new players from the expanded communications market, to reflect its conviction that these new technologies will combine to build the global interactive telecommunications networks of the future. Representatives of the computing, software, communications, networking and consumer electronics will thus be given a voice at TELECOM 95.

Floor plans were prepared in 1993. Based on our experience from TELECOM 91, it is expected that a further 30,000 m^2 will be utilised in upper floor constructions.

Ongoing negotiations are taking place with the Geneva Authorities regarding the construction of the 10,000 seat auditorium which Geneva is building adjacent to the Palexpo complex.

Forum

While Forum 95 will build on the results of its predecessors, its structure will be modified in order to incorporate the new and convergent nature of the evolving telecoms environment, to continue to attract top-level representatives from this enlarged industry and to enable interactive discussions between speakers and participants. Forum 95 will comprise two summits: the Strategies Summit and the Technology Summit.

The *Strategies Summit* will approach all policy, investment, development, economic and regulatory aspects with the aim of breaking down barriers for a truly global information society and economy. It will address the needs of the broad ITU membership, as well as the opportunities presented by the expanded communications market.

The *Technology Summit* will provide an interactive arena for users, traditional telecoms companies, computer and consumer electronics giants, broadcast and cable television interests, and entertainment and software companies, focusing on the "Convergence of technologies, services and applications".

Two Steering Committees have been established, and some 40 industry experts and administration members are supporting the Secretariat in its efforts to bring about a new and revitalised edition of Forum. Negotiations are underway to ensure that the level of representation in Forum from developing countries, and in particular from LDCs, will be at its highest level.

Book Fair 95

Book Fair 95, the World Book and Audio-visual Fair on Telecommunications and Electronics will cover a wide spectrum of literature and audio-visual material available in these fields. The Secretariat is currently examining ways in which Book Fair 95 can be enhanced by the inclusion of multi-media publishing products and services.

TELECOM 95 will indeed be unique among telecommunications events world-wide: as well as providing a showcase for state-of-the-art technology, it will also aim to address the benefits of telecommunications products and services for the elderly and people with disabilities, and to provide a platform for entrepreneurial Research & Development companies in Newly Industrialising Countries (NICs). It will equally endeavour to enable all Least Developed Countries (LDCs) - throughout the world - to avail of the exchange and transfer of knowledge. Even greater efforts will be deployed at TELECOM 95 to encourage this dialogue, when, it is hoped, an even larger proportion of developing country representatives will attend.

Contacts with exhibitors

On 29 November an Ad-Hoc Meeting was held in Geneva with exhibitors and general discussions on TELECOM events took place.

An Exhibitors Meeting took place on 30 November at Palexpo where TELECOM made a presentation on TELECOM 95 and the regional events. A question and answer session followed the presentation.

Americas TELECOM 96 / Asia TELECOM 97 / Europa TELECOM / Africa TELECOM 98 / TELECOM 99:

Preparations have already begun to select from the many invitations received those countries which will host future TELECOM events. Many factors will determine the choice of a location: the availability of adequate, modern and fully equipped exhibition facilities, combined with those for Forum; the availability of an infrastructure capable of supporting such events; the organisational and administrative support provided to TELECOM by these countries; accessibility of the country and the site itself all play an important role in the final selection process.

5.1.2 Personnel Department

The total number of posts in the Manning Table as of 31 December 1993 was 810 of which 719 posts were filled by officials holding permanent (568) or fixed-term contracts (151). In view of the continuing financial situation, the remaining posts were not filled or were frozen during the year.

Short-term employment decreased from 62,297.5 person/days in 1992 to 48,348.5 in 1993 due to the smaller conference programme and reached an even lower figure than in 1991. Nevertheless, there was a definite trend towards shorter contracts which represents the same level of workload for recruitment.

In 1993, the Personnel Department has continued to be actively involved in the implementation of the recommendations of the High Level Committee and was associated with the review of certain organizational structures both in the Sectors and the General Secretariat. It worked closely with the Consultative Group established in accordance with Council Resolution 1024 which met on several occasions at Headquarters and which would be reporting to the next session of Council.

In the field of job classification, there was a continued reduction in the existing backlog. Some increase in the workload was noted due to the restructuring of the Union and the implementation of the new Common General Service Job Classification Standard for Geneva.

5.1.3 Finance Department

The Finance Department was deeply involved in the implementation of the Recommendations of the High Level Committee concerning the financial management of the Union and the decisions of the Council thereon, as well as in the work of the Working Group on the revision of the Financial Regulations of the Union and the related financial rules for the day to day operations. A new biennial budget structure, cost centre structure and the chart of accounts were prepared in collaboration with the different departments and Sectors of the Union. The budget guidelines were issued for the decentralized preparation of the 1995 Budget The related training of the Union staff concerned was prepared and started.

The Finance Department also participated in the development and implementation of the new payroll system as well as in the necessary modifications to the software for the implementation of the new financial management system.

The staff of the Department participated also in the work related to RA-93 and WRC-93, WTDC-94, PP-94 and CCAQ(FB) and its working groups as well as in the preparations of a Regional Telecom Exhibitions and Telecom 95.

During 1993 the Department was reorganized into three divisions.

5.1.4 Conferences Department

Following the division of the Department of Conferences and Common Services into two Departments, the Conferences Department was set up on 1 February 1993. In accordance with the management by objectives, its terms of reference were defined as follows:

The Conferences Department is responsible for facilitating communication between all persons participating in the activities of the Union by providing the following services:

- translation and interpretation in the six working languages;
- publication of the Telecommunication Journal;
- practical organization of conferences;
- terminology and reference services;
- document composition;
- handling and conversion of electronic documents.

As one of the parties most concerned, the Department took an active part in preparing the implementation of Recommendation 75 of the HLC (transfer pricing). The procedures for applying this Recommendation have now been established and will be implemented for the Translation and Document Composition Services from the beginning of 1995.

The Department supervised and coordinated all aspects of the implementation of Resolution 59 (Nice, 1989) concerning the new working languages. The subcontracting agreements concluded with publishing houses for the publication of documents in Chinese and Russian have now taken effect. Special service contracts have been concluded with outside translators for Arabic and the Arabic Service is now revising and capturing texts for printing. ITU facilities have been used to print publications whenever the work schedule permitted and some composition and printing work was done outside.

Conference Service

In 1993, the Department participated in the organization of the conferences and meetings of the Union's Sectors. The following meetings were held:

Conference/Meeting	Days Geneva	Days outside Geneva	Total
ITU-T meetings	199	8	207
WTSC, Helsinki		10	10
ITU-R meetings	433	73	506
WRC-93	5		5
RA-93	7		7
RRB	5		5
BR/BDT Regional Seminars, Caracas, St. Petersburg, Islamabad		15	15
Voluntary Group of Experts/RR and related meetings	31		31
Council - C93	10		10
Council Working Groups	4	3	7
World Telecommunication Advisory Council	1	1	2
Regional Telecommunication Development Conference, Singapore, and related meetings		9	9
Telecommunication Development Advisory Board	4		4
Various meetings relating to Telecommunication Development	10	90	100
Asia Telecom		6	6
Meetings relating to Telecoms and Forum	10		10

For these meetings the **Interpretation Service** issued a total of 566 contracts to 120 interpreters who worked a total of 3 143 days.

The chart at the end of Section 5.1.5 depicts the volume of document-production services provided for ITU activities for the period 1983-1993, with details for the ITU-R and ITU-T.

In 1993, the English, French and Spanish **translation sections** translated a total of 41 500 pages[1] (compared with 55 000 pages in 1992); 43% of the translations were into French, 10% into English and 47% into Spanish. This total included approximately 3 400 pages which were contracted outside.

The services provided also included 315 days of interpretation, précis writing and missions.

The **Arabic, Chinese and Russian Translation Services** translated and revised some CCI volumes, manuals and Final Acts of Conferences. The production of the Chinese and Russian versions of some CCI volumes was contracted outside. A total of 2 900[1] pages of CCI volumes were printed in Arabic, 5 800[1] pages in Chinese and 4 800[1] in Russian. These services also translated and typed in Arabic, Chinese and Russian 43 trilingual issues of the Special Section on Space Services of the BR Weekly Circular, comprizing 8 900 final pages (compared with 5 400 in 1992).

The **Section for Terminology, References and Computer Aids to Translation (STRAIT)** continued with the upgrading of TERMITE. Approximately 4 100 additions, corrections and deletions were made to the database, which now contains nearly 56 500 entries. The section pursued the study of a computerized system for terminology management (Phase 1 of the TIMBER project) to replace the current Siemens-based system. It also held regular coordination meetings with the translation sections and with the BR and TSB editors, participated in inter-agency conferences with its UN counterparts, and continued to watch technological developments with a view to acquiring computer translation aids.

The work of the **Reference Service** resulted in savings corresponding to 4 100 pages[1]. The Service also considered new ways of improving its overall efficiency.

The **Document Composition Service (Pool)** produced 92 700[1] pages of documents in 1993. Of this total, 4 200[1] pages were done outside. ITU-R and ITU-T work amounted to 32 500 pages and 41 600 pages (35% and 45% of total output) respectively.

In addition, 11 100 pages of documents were produced by the Publication Composition Service. Accordingly, the total output of documents for the two Services amounted to 103 600 pages.

The **Electronic Document Management Group (EDMG)**, which was set up in 1991, is currently responsible for the conversion and formatting of documents in electronic form, optical reading of documents (scanner) and management of the REFTEXT storage space accessible to ITU users. In 1993, on behalf of outside administrations and ITU services, the EDMG Group:

- converted 115 000 pages;
- formatted 15 100 pages;
- produced 11 900 diskettes for outside, and
- scanned 2 300 pages of documents.

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[1] Pages are given to the nearest hundred.

Telecommunication Journal

The Section published 488 pages in the Journal as well as the Table of satellites launched in 1992. Furthermore, with a view to publishing a more modern Journal with a larger circulation from January 1994, a new layout has been prepared in line with ITU production standards and savings objectives.

5.1.5 Common Services Department

The Conferences and Common Services Department was split into two departments as of February 1993: the Conferences Department and the Common Services Department. The appointment of the new chief of Common Services Department became effective in August 1993.

The Common Services Department provides the following services to all sectors of the ITU: forecasting of resources for document production, publications and meeting services; publications, including marketing, sales, graphic design, electronic composition, printing and dispatching to customers worldwide; printing and distribution of documents to ITU meetings and conferences; library and archives; management of buildings and associated facilities, and of installations and associated services; logistics support, including purchasing and stock management; security of staff and capital.

The most important achievements of the Common Services Department in 1993 can be summarised as follows:

- to provide reliable and timely user services, particularly in connection with ITU meetings and conferences,
- to coordinate and prepare the basis for internal invoicing in collaboration with the Finance Department, and to contribute to the preparation of the draft budget for 1995 using the new financial structure.
- to contribute to the work of the ITU Publications Policy Committee to define a new structure for the Publications budget and to define the new Sales and Marketing Unit[2] within the department.

5.1.5.1 Library and Archives Service

The Library acquired 501 volumes (187 purchased and 314 donated). It also provided lending and reference services to Headquarters staff, delegates to ITU conferences and outside users. It issued various lists (e.g. the List of Recent Acquisitions, the List of Periodicals and Current Contents), and published 150 reviews in the Telecommunication Journal. Some 9,000 addresses were updated in the Address database.

The Film Library (some 600 films/videos) responded to 85 requests from Administrations, universities, professional and training institutes, etc. for the loan of films/videos.

The Archives and microfilm group responded to 90 requests for the consultation and research of printed documents, as well as 335 requests for files. Furthermore, some 130 linear metres of files were deposited by various services of the Union, and more than 54 rolls of film, microfiches and microfilms were used to archive documents.

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[2] The new structure became effective as of January 1994, with the exception of the Sales Service which will be integrated with the unit in April 1994.

The important studies relating to the computerisation of the Library continued with the objective of the new system being installed by end 1994.

5.1.5.2 Publication Composition Service

In 1993, the Publication Composition Service produced 67,460 pages, corresponding to 821 registered orders i.e. an increase of 101.2% in the number of orders. The increase is due to the separate publication of the TSB Recommendations, a total of 473 Recommendations having been handled during the year.

Computer tools (the Winword software package was used for all the texts handled) are used to produce professional quality publication work intended for offset printing. Formerly, this work was done by traditional printing houses.

Access to electronic files for publications facilitates group work and the rapid updating of information communicated by the administrations. At the publication stage, a digital file replaces the manuscript. The Publication Composition Service is responsible for formatting, pagination and producing the final proofs (with the inclusion of figures in the texts) for reproduction on paper or film. This file also meets electronic publication requirements: in 1993 this methodology enabled the number of publications produced to be increased by 52.3%.

5.1.5.3 Electronic Publishing and Marketing Service

The unit carried on the development of publications on optical discs media. In the radiocommunication subject area two more issues of the IFL on CD-ROM and one issue of the Plans on CD-ROM were made and an entirely new title, the Space Radiocommunication Stations on CD-ROM was published.

The most important undertaking was the specification, development and building of the Recommendations of the TSB on CD-ROM, using hyper-text technology. Through this publication, containing a comprehensive set of fully-searchable texts and diagrams, the ITU offers a cost-effective and convenient mode of dissemination of standards for the telecommunication industry in both the developed and the developing countries. A working prototype was developed and distributed at the WTSC in Helsinki for evaluation by the members of the standardisation study groups. Subsequently, the refinement of specifications, pricing and improved user interfaces are being developed and the large scale conversion of text files and diagrams will start.

The production of about 40 different publications on diskette was streamlined across various services of the ITU. These electronic publications (programs, files and databases) are now properly identified and described in the List of publications and in the Software catalogues.

The terms and conditions of copyrights and licensing are being reviewed and a new proposal will be submitted to cover the usage of electronic publications. At Singapore TELECOM exhibition the printed and electronic publications were promoted.

5.1.5.4 Outside Publications Service

In 1993, the Publications Service handled the production of 1,213 publications (total for all languages - F/E/S/A/C/R), representing 84,340 paper pages and 562 microfiches (containing 151,740 pages + three publications on CD-ROM (five disks) + 2 publications on diskette (4 diskettes). The total number of pages amounted to 234,316 for 982,860 copies printed.

Outside work accounted for a total of 3,033,159.70 Swiss francs.

Annex 3 gives details of the publications issued in 1993.

In addition to ITU publications, all the printed matter for Telecom 93 events was handled by the Publications Service, representing the following output:

- ASIA TELECOM: 66 publications and miscellaneous work (1,700 pages, 710,150 copies)

5.1.5.5 Reprography and Audiovisual Service

The Reprography Section processed 83,018,764 A4 pages (of which 1,447,622 were produced abroad), i.e. 24.8% less than in 1992 (see attached graphs).

The Conference Documents Section handled 4,937,225 documents (i.e. 14.8% less than in 1992), of which 1,093,980 were dispatched (31.9% less than in 1992) and 3,414,070 were distributed (10.1% less than in 1992). The remaining documents were kept in stock. Over 374,600 address labels were printed for dispatches.

The Dispatch and Transport Section sent out 124,453 kg of publications, documents and conference material (value: 4,290,599 Swiss francs) by freight at a cost of 253,870 Swiss francs. It dispatched, from headquarters, various printed matter (270,256 items) at a cost of 1,158,740 Swiss francs and 177,168 parcels of conference documents at a cost of 795,101 Swiss francs. It handled 16,164 registered items, i.e. 36% more than in 1992. Surface mail accounted for 64% of total traffic in comparison with 61% in 1992.

The Audiovisual Section produced a number of video programmes, handled graphics work and added to the computerized telecommunication photo library.

5.1.5.6 Planning and Computerization Service

Planning activities[3] included the preparation of meeting calendars and annual workload estimates for production of documents (translation, text capture and reprography) and for meeting-support services, for the 1994 workplan and for the draft 1995 budget. The service also participated actively in the preparations of the new financial system of the ITU to be introduced as of 1995.

Computerization activities during 1993 were closely coordinated with the IS Department and included the following achievements:

- The functionality of the Delegate Registration System [4] (DRS) was improved based on the user feedbacks.

- A new system for forecasting and budgeting of the supernumerary resources was designed and implemented to meet the requirements of the new financial system. The Excel-based system is used in connection with document production activities and with the conferences/meetings support services.

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[3] Some of the planning, budgeting and computerisation tasks for the Conferences and Common Services Departments are tightly coupled. For continuity and efficiency, these responsibilities are assured by the Common Services Department for both departments.

[4] The DRS is used at all meetings and conferences of the ITU.

- The Document Production System [5] (DPS) Project became more active in the second half of the year. The first simplified version of DPS will become operational in the third quarter of 1994. The project includes staffing from the IS Department.

- A new system for management of office-space allocation was designed and implemented. The system also interfaces with the new PABX.

5.1.5.7 Logistic Service

Regarding the construction of a new building extension for the ITU, referred to as the Montbrillant Project, an architectural jury reviewed the proposals received and selected a compact cost-effective concept. Following the Council's authorisation, work started on preparing a preliminary design and administrative procedures relating to building permit were initiated based on trial installations in 25 offices. The Council also gave the go-ahead to install an air-conditioning system in the Varembé building. In this respect the main technical preparations for a request for proposals were completed. Both projects fall within the purview of the ITU Buildings Committee.

The Service took part in various technical and administrative meetings of the Joint Purchasing Group of the United Nations Office at Geneva. Market studies were continued and calls for bids were launched with a view to obtaining the best quality/price levels for all purchases.

The draft budget for 1995 was established and presented in accordance with the decentralized structure of the ITU and the new finance system.

Expenditure on purchases of furniture and machines amounted to 3,000,052 Swiss francs; office supplies accounted for 2,973,000 Swiss francs, and building maintenance for 2,013,230 Swiss francs.

Renovation of premises: the reception area in the Tower building, the medical service, library and communal areas of the Varembé building as well as 52 offices in the Tower and Varembé buildings. Replacement of furniture: 28 workstations were provided with new furniture.

The service also reorganized the ITU storage system and installed shelving which enabled space to be used more rationally and consequently more economically. In addition to the regular programme of removals and physical arrangements for conferences at Geneva, office changes for 150 BR staff and the transfer of some 30 Telecom staff occupying rented office space at Vermont-Nations had to be organized.

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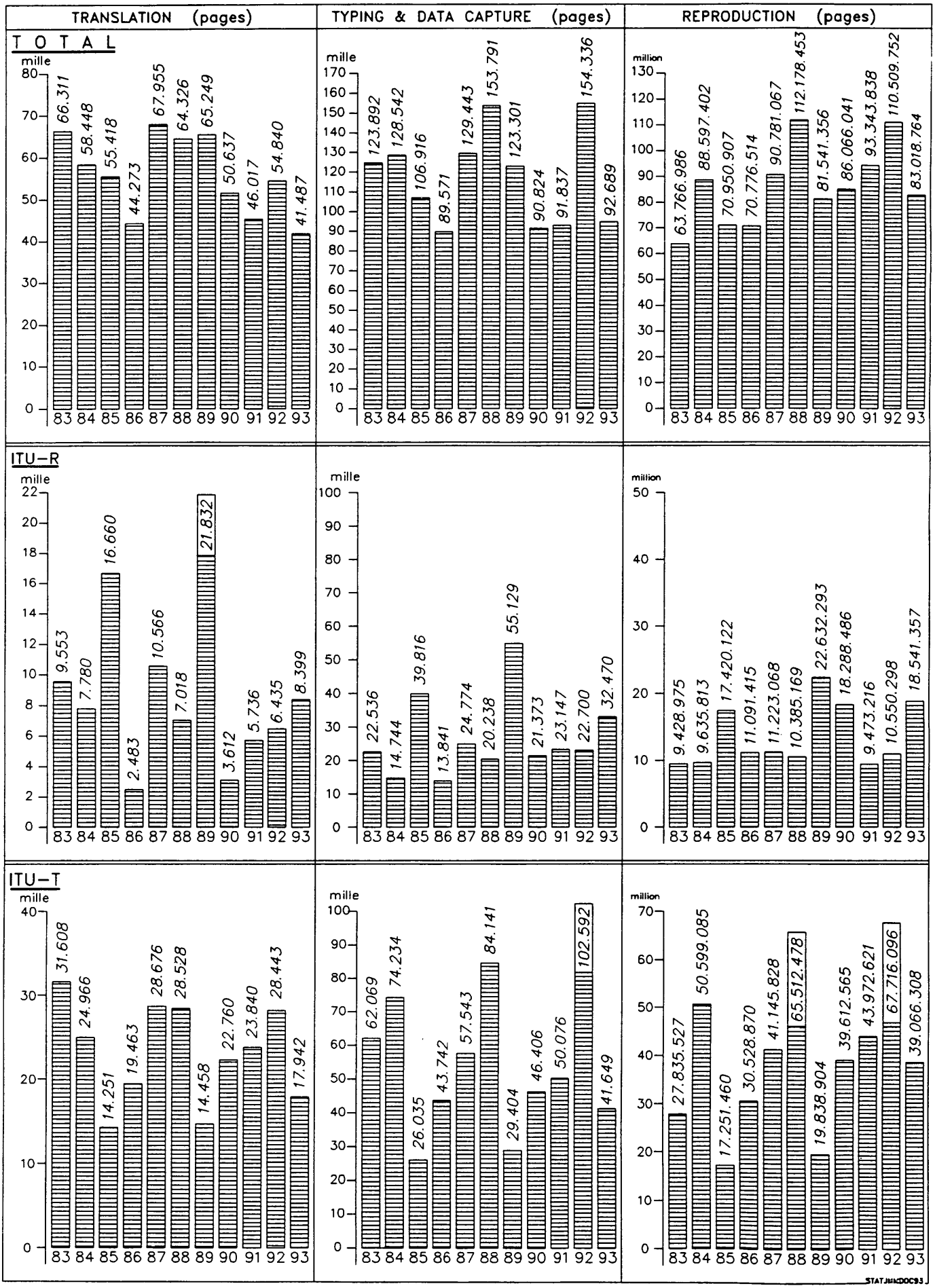
[5] The DPS is an integrated work-flow management system which will facilitate the *management* of document production and publication production activities in the Conferences department and in the Common Services Department, including translation, text capture, reprography and document distribution tasks. The DPS will also automate the orderly collection of internal invoicing data needed by the new financial system.

D O C U M E N T S E R V I C I N G A C T I V I T I E S



5.1.6 Information Services Department

Within the General Secretariat, the Information Services Department (IS Dept) is the focal point for the ITU information infrastructure which includes standards, user support and training, communication services (postal mail, voice, image, video, data), network services (file, print and computing), information exchange services (bulletin boards, messaging, document and database access), desktop services (office productivity tools), information systems development and software development environments. The IS Dept manages the physical, human and organizational resources needed to design, deploy, operate, maintain and support the ITU information infrastructure.

Information exchange services

The 1992 review of ITU's Telecom Information Exchange Services (TIES) by internal and external users had two main findings: users wanted more up-to-date information and an easier user interface. A revised version of TIES, offering major improvements in ease of use, information access and delivery, and world-wide connectivity was introduced in 1993 with very positive feedback from users. The new TIES uses the Internet "Gopher" technology and includes interactive access to the ITU Document Store (ITUDOC), complementing the easy-to-use electronic mail remote access to the same document store. The new services facilitate information posting and updating by the information providers in the Bureaux and Departments, in response to the main finding of the TIES review that the availability of key substantive and up-to-date information is what makes electronic access worthwhile.

Information exchange facilities were demonstrated to participants in ITU-R and ITU-T meetings and conferences, and in Singapore at the Asia Pacific Regional Telecommunication Development Conference and TELECOM exhibition, as well as to telecommunication bodies of some member states (e.g., Pakistan and US).

ITU's information/document exchange services are being accessed regularly by a large and growing number of interested users. In November, 1993 about 3750 interactive sessions, 2300 client/server sessions and 1000 e-mail requests were made from more than 40 countries.

Cooperation with other standardization organizations

The department participated in the electronic document handling studies in the context of the Global Standardization Conference (GSC), of the EC Retrieval and Exchange of Standards in Europe (RISE) project in collaboration with ETSI and in the STACO project in collaboration with ISO and other standardization organizations.

Cooperation with UN organizations

The department participated actively in the Advisory Committee for the Co-ordination of Information Systems (ACCIS). The ITU information exchange facilities were used to support UN-wide activities in the areas of electronic mail and database access (e.g., directory of e-mail addresses, UN Register of Development Activities). The department contributed to the work of the ACC Senior Level Task Force (chaired by an ITU elected official) which reviewed key elements of the UN information systems environment and recommended, *inter alia*, that UN organizations make their public information available electronically via systems with functionality similar to the new ITU TIES.

The department continued its participation in the activities related to the design, deployment and operation of the UN Network in accordance with the terms of Nice Resolution 50.

Some Geneva-based UN organizations (e.g., ILO and UN Library) became users of the ITU TIES/ITUDOC facilities or started to make their information available via these facilities

(e.g., UN ECE Transport Division). Advice or consulting were provided to other organizations (e.g., participation in the definition of FAO's and UNDHA's strategies in the area of networking and information exchange). Technical advice was also provided to some non-UN organizations (e.g., International Federation of Red Cross Societies).

Support of Member States

Staff members carried out information, training and advice for a number of countries including missions to Pakistan and Nepal. ITU was host, and provided instructors, to Electronic Information Access training sessions organized by UNITAR for personnel of the Geneva diplomatic missions. Several missions became users of TIES and received appropriate training and support. Support related to the grant of personal computers to LDCs continued in 1993.

Support of ITU Regional/Area Offices

Equipment installations continued in ITU Regional and Area Offices, with on-site missions to Brasilia and Kathmandou. Where Internet connectivity is available, ITU offices will be Internet nodes, facilitating communications between headquarters and office and providing access to ITU information and to other Internet resources for the telecommunications communities in those regions. In 1993 the Brasilia office was connected to the Internet and equipped to support local dial-up access.

Support to conferences

Support for Conference activities included Conference networks and Wide Area Networks for WTSC in Helsinki and the Asian Regional Development Conference in Singapore, and support for the RA and WRC as well as for regular meetings in Geneva. Preparatory meetings and on-site evaluations took place in preparation of the WTDC in Buenos Aires and the Kyoto Plenipotentiary.

Training and support

The Training and Support Centre provided an extensive schedule of training on office productivity tools, electronic mail, and access to information services with an emphasis on courses customised to staff work needs (about 100 courses were given on 13 subjects with 1075 participants). An overall Computer Training Needs Analysis project was approved by the Coordination Committee and started at the end of 1993. Professional training of the information technology specialists included courses both at ITU and elsewhere.

Extensive user support was provided by all services of the department in the following main areas: local area network services, information exchange services, PC systems and software, software distribution and control, virus protection, application development, database management, operating systems, and equipment maintenance and installation. First line support to internal and external end users was provided through help desks. Special PC workstation facilities and support were provided for visiting delegates at Headquarters.

Office productivity tools

The evolutionary improvement of office productivity tools continued, with the introduction of Microsoft ACCESS as the desktop database system and a front-end to the INGRES database system back-end. A new version of the Resourcer, the successful ITU software installation facility, was introduced. In order to provide additional functionality and

also keep pace with information technology developments, the PC system software (operating system, graphical user interface and networking component) was upgraded and new versions of the main software packages were introduced, including a major upgrade of the word processing software.

Application Development

The INGRES/UNIX development environment has been improved and a number of database applications have been defined and implemented on the INGRES/UNIX platform, including the Maritime Mobile Access & Retrieval System (MARS) which enables remote access to this operational database and the document database which underlies the ITUDOC service.

A personnel management system, including payroll functions, has been purchased, customized to ITU requirements, and prepared for operational use from January 1994. The development of a Staff Health Insurance Fund system was completed and put into operation. Substantial progress has been made in implementation of the new Financial Management System, in anticipation of the major changes planned for budget year 1995. Development has started on a new system for Document Production Management. Studies proceeded for a Library Management System. The development of a new version of an address management and dispatch system for Bureaux documents was started. An overall study on the ITU address systems was also started.

Information Technology Infrastructure

The information technology infrastructure comprises the desktop PCs, network, servers, printers, routers, modems, PABX, and other hardware as well as operating systems, database, communications and other software.

Continuing the transition to the UNIX operating system, powerful RISC-based servers with superior cost/performance ratio have been introduced for file, database and communications applications. The deployment of higher performance PCs and related equipment (e.g., networked printers and CD-ROM servers) was continued.

A digital PABX was placed in service on 1 March 1993. The new PABX is complemented by voice mail and software for outbound dialling call accounting.

CD-ROM mastering equipment was acquired to support the increased use of this medium for distribution of ITU information. Equipment for the production of high quality colour slides and transparencies for presentations was also acquired.

A gateway was placed in service enabling e-mail routing of telex messages. Fax transmission (outgoing messages) via e-mail was also introduced.

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5.2 Radiocommunication Sector (ITU-R) (from 1st March 1993)

- International Frequency Registration Board (up to 28 February 1993)
- International Radio Consultative Committee (up to 28 February 1993)
- Radio Regulations and Maritime Mobile Service (up to 1st January 1992)

5.2.1 Introduction

The year 1993 was marked by the ongoing rapid evolution of new digital broadcasting and mobile communication technology, and considerable growth of planning of fixed and mobile communication satellite services using geostationary and non-geostationary orbits. It was also marked by the coming into force of the *Radiocommunication Sector* on 1 March 1993. A chart showing its components and relationship to other Sectors is shown below.

The evolving technology and accelerated planning activity is reflected in the work of the *Radiocommunication Sector* reported below. Notification of space and terrestrial frequency assignments increased by roughly 20% in the year 1993. While the year with a Radiocommunication Assembly is normally not a year in which a large number of Recommendations are newly approved or modified, six new Recommendations of Study Groups have been approved and 25 have been modified in 1993.

The first *World Radiocommunication Conference (WRC),* held in November, 1993, proposed an agenda for WRC-95, largely building on the new frequency allocations set in 1992, and a preliminary agenda for WRC-97.

The *Radiocommunication Assembly (RA),* also held in November 1993, in association with the WRC, reviewed the work achieved by the *ITU-R Study Groups* which support the work of Conferences and issue Recommendations on technical and operational questions for radiocommunication systems and services. Study Groups represent the work of some 1 500 technical and regulatory experts, in some sixty Task Groups and Working Parties, from administrations and telecommunication organizations. Work programmes of the Study Groups were revised in conformity with their terms of reference in the new Convention; appropriate questions in standardization including 28 Recommendations were transferred to the Telecommunication Standardization Study Groups by mutual agreement.

The part-time *Radio Regulations Board (RRB)* reviewed and approved procedures for application of the Radio Regulations, and was consulted by the Bureau on issues of application of the radio regulations when required.

The *Radiocommunication Bureau* supported all Sector activities; it replaced the Specialized Secretariats of the CCIR, IFRB, and of the former General Secretariat staff engaged in radiocommunication matters. The Bureau provided services to administrations and users in application of the Radio Regulations, in coordination and registration of radio frequency assignments and satellite orbits. Together with the General Secretariat, it provided the Secretariat for the first World Radiocommunication Conference. It assigned call sign series and provided maritime mobile information services. It conducted seminars and training sessions for national frequency management requirements, in close cooperation with the Bureau for Telecommunication Development. The Bureau provided, on behalf of the Sector, liaison, coordination and assistance to the Telecommunication Development and Telecommunication Standardization Sectors and supported administratively the RRB, to which the Director serves as Executive Secretary.

The Plenipotentiary Conference, Geneva 1992, requested the new Sectors to do strategic planning. The Radiocommunication Bureau undertook from the outset to draft a strategic plan. A first draft was presented to the Council in 1993, and later to the Radiocommunication

Assembly. With further suggestions by the Assembly, the draft was presented to the Working Group of the Council in December, 1993. After further development in the Bureau, and taking account of ITU activities in "management by objectives", the text was reviewed by the Radiocommunication Advisory Group and submitted to the Council in a separate document.

5.2.1.1 End of former structures

5.2.1.1.1 IFRB

The Board was assisted in its work by the IFRB Specialized Secretariat. The functions of treatment of notices and other information in application of the provisions of the Radio Regulations and Regional Agreements were under the full responsibility of the Terrestrial Services Department and the Space Services Department for the radiocommunication services concerned and the computer support functions for the activities of the whole IFRB were concentrated under the Radiocommunication Information Systems Department.

5.2.1.1.2 CCIR

As mandated by Resolution 1 of the Additional Plenipotentiary Conference (APP, Geneva, 1992) the CCIR transferred its activities to the Radiocommunication Bureau on 1 March 1993. Between 1 January and 27 February 1993 the following activities were undertaken by the CCIR:

7.Jan.93	13.Jan.93	LOS ANGELES	WP 10-11S	Satellite broadcasting: Follow-up of relevant Resolutions of WARC-92
13.Jan.93	22.Jan.93	TOKYO	WP 8A	Land mobile service, excluding FPLMTS, amateur and amateur-satellite service
13.Jan.93	22.Jan.93	TOKYO	WP 8D	All mobile satellite services except the amateur-satellite service; radiodetermination satellite service
14.Jan.93	16.Jan.93	LOS ANGELES	WP 10B	Frequency modulation sound broadcasting (except in the Tropical Zone): Follow-up of relevant Resolutions of WARC-92
25.1.93	5.2.93	ADELAIDE	WP 5A	Radiometeorology
25.1.93	5.2.93	ADELAIDE	WP 5C	Fixed, fixed-satellite and broadcasting-satellite services
19 Jan 93	27 Jan 93	GENEVA	Res 106	CCIR Ad Hoc Advisory Group on Strategic Review and Planning
19 Jan 93	27 Jan 93	GENEVA	Res 107	Working Party of the CCIR Plenary Assembly on Restructuring of CCIR Study Groups
28 Jan 93	29 Jan 93	GENEVA	CVC	Meeting of Chairmen and Vice-Chairmen of CCIR Study Groups

The Chairmen and Vice-Chairmen of the CCIR Study Groups, during their meeting of January 1993, revised the schedule of meetings of Study Groups, Working Parties and Task Group meetings to take into account the decision of the 48th session of the ITU Council on the organization of a World Radiocommunication Conference (WRC) and associated Radiocommunication Assembly (RA) in November 1993.

The meeting of the CCIR Ad Hoc Advisory Group on Strategic Review and Planning (January 1993) oriented its work on the implementation of decisions of the APP and particularly priorities for the work of the new Radiocommunication Sector and preparation for the WRC-93. Also, the Working Party of the CCIR Plenary Assembly on Restructuring of CCIR Study Groups examined the implication of decisions of the APP for the future structure of the Radiocommunication Study Groups and prepared a report for the Radiocommunication Assembly, giving its recommendations.

5.2.1.2 Creation and structure of the Radiocommunication Sector

The Radiocommunication Sector was created on 1 March 1993 to implement the decisions of the Additional Plenipotentiary Conference (Geneva 1992). The Functions and Structure of this sector are defined in Article 12 of the Constitution.

As of 1 march 1993 the Radiocommunication Sector is working through:

The World and Regional Radiocommunication Conferences (WRC and RRC)
Constitution Article 13 and Convention Article 7

The Radio Regulations Board (RRB)
Constitution Article 14 and Convention Article 10

The Radiocommunication Assemblies (RA)
Constitution Article 13 and Convention Article 8

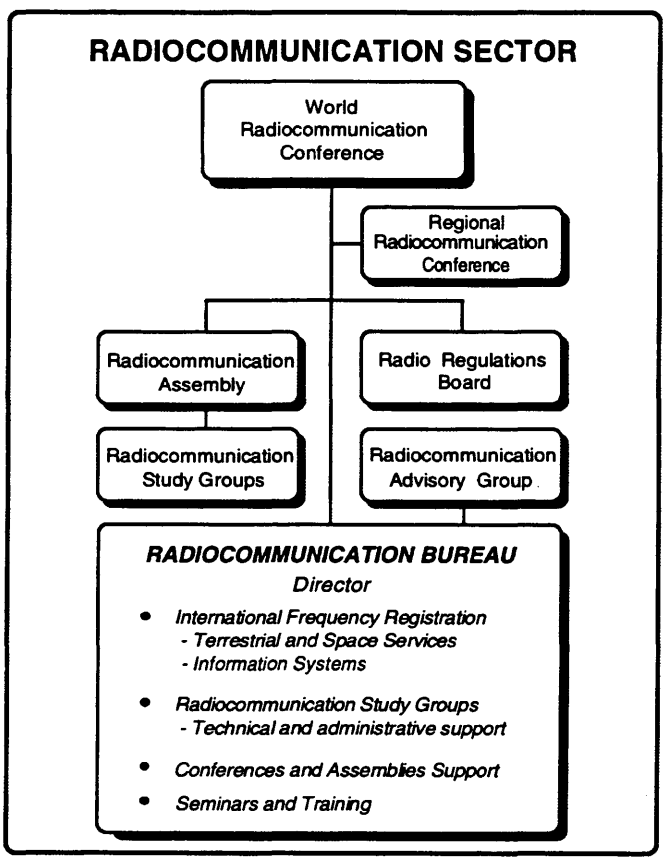
The Radiocommunication Study Groups
Constitution Article 15 and Convention Article 11

The Radiocommunication Bureau (BR)
Constitution Article 16 and Convention Article 12

Following the decisions of the 47th session of the ITU Council the First World Radiocommunication Conference was organized in Geneva from 15 to 19 November 1993 and the associated first Radiocommunication Assembly also in Geneva from 8 to 16 November 1993 (see § 5.2.2.1 and § 5.2.2.2).

The new Radiocommunication Study Group structure was finalized during the above mentioned Radiocommunication Assembly (Geneva, 1993).

The Radio Regulations Board and the Radiocommunication Bureau are functional since 1 March 1993.



5.2.2 WRC-93 and associated RA-93

5.2.2.1 World Radiocommunication Conference - Geneva, 1993 (See also section 4.3)

In 1992, the Additional Plenipotentiary Conference reviewed the structure and functioning of the Union by adapting its organizational structure to the challenges of the continuing changes in the global telecommunication environment. A major element of change was the regular sequence of radiocommunication conferences now to be convened every two years in association with the Radiocommunication Assembly.

To bridge the transitional period the first World Radiocommunication Conference (WRC) met for five days in Geneva and made a recommendation to the Council for the agenda of the second WRC in 1995 and proposed a preliminary agenda for the third WRC in 1997. The Conference was chaired by Mr. V. Timofeev from the Russian Federation. Mr. S. Pinheiro from Brazil chaired the substantial committee that prepared the agendas. 615 delegates from 123 countries attended the conference.

The recommended agenda for 1995 (Resolution COM4/1) includes items related to the Mobile Satellite service (MSS) , feeder links for the MSS and the review of the final report of the Voluntary Group of Experts. The recommended preliminary agenda for 1997 (Resolution COM4/2) includes a vast variety of items proposed for consideration.

The Final Acts of WRC 93 contain the agendas described. They also contain Recommendation PL/1 which recommends the Council to consider convening a regional conference to revise the modification procedure for the 1975 Plan on the basis of relevant standard procedures elaborated by the VGE and Recommendation PL/2 on the treatment of MSS satellite-networks published under Resolution 46 prior to the entry into force of the respective allocations around 2 GHz.

The Conference concluded its work having treated 19 contributions from Administrations and having noted 19 declarations and 7 additional declarations.

5.2.2.2 Radiocommunication Assembly - Geneva, 1993

The first Radiocommunication Assembly (RA-93) opened its session in Geneva on 8 November 1993. 548 delegates from 96 Administrations, 36 Recognized Operating Agencies, 9 Scientific and Industrial Organizations, 16 International Organizations and 2 United Nations Specialized Agencies attended the Assembly.

The Assembly was convened in response to the decision made by the 47th session of the Council (December, 1992) " *to convene a World Radiocommunication Conference and associated Radiocommunication Assembly from 8 to 19 November 1993 in Geneva, the Conference to open formally on 15 November; ...*".

Prof. L.W. Barclay (UK) was elected Chairman of the Assembly, and Messrs A.J. Gabrielli (Argentina), M.J. Mulla (Saudi Arabia), V.V. Timofeev (Russian Federation), E. Kamdem Kamga (Cameroon) et A. Motai (Japan) were elected Vice-Chairmen.

In accordance with its agenda, the Assembly considered the work programme, the structure and the working methods of the Radiocommunication Study Groups. Two Ad hoc Plenary Groups particularly considered the Intersector coordination, and coordination with other Organizations and the Strategic Planning for the Radiocommunication Sector. Finally, the structure of the Assembly was the following:

Committee 1 - Steering Committee

(Composed of the Chairman and Vice-Chairmen of the Assembly and the Chairmen and Vice-Chairmen of the Committees)

Committee 2 - Budget Control

Chairman:	Mr. A. Jakobsons (Latvia)
Vice-Chairman:	Mrs. A. Pileri (Italy)

Committee 3 - Work programme of the Radiocommunication Study Groups

Chairman:	Mr. I. Hutchings (New Zealand)
Vice-Chairman:	Mr. J. Karjalainen (Finland)

Committee 4 - Structure and Working Methods of the Radiocommunication Study Groups

Chairman:	Mr. H. Kimball (USA)
Vice-Chairman:	Mr. E. George (Germany)

Committee 5 - Editorial Committee

Chairman:	Mr. M. Thué (France)
Vice-Chairman:	Mr. M. Johnson (UK)
Vice-Chairman:	Mr. P. García Barquero (Spain)

Ad hoc Plenary Group (1) - Intersector coordination, and coordination with other Organizations

Chairman:	Mr. B.A. Gracie (Canada)
Vice-Chairman:	Mr. A. Amir (Indonesia)

Ad hoc Plenary Group (2) - Strategic planning for the Radiocommunication Sector

Chairman:	Mr. R.N. Smith (Australia)

In accordance with its agenda, the Assembly approved 36 Resolutions among which 17 are new (ITU-R 1 to 17) and the 19 others are revised (see Annex 1).

The Assembly completed its work on Tuesday, 16 November, 1993.

5.2.3 Radio Regulations Board

In accordance with the provisions of Resolution 1 of the Additional Plenipotentiary Conference (APP-92) (Geneva, 1992), the Radio Regulations Board (RRB) comprising the five members of the former IFRB took up its duties on 1 March 1993 with the following membership:

- Mr. M. Miura, Chairman
- Mr. M. Harbi, Vice-Chairman (Chairman in 1994)
- Mr. W.H. Bellchambers, member (Vice-Chairman in 1994)
- Mr. G.C. Brooks, member
- Mr. V.V. Kozlov, member

The Board adopted provisional working methods and then turned its attention to the consolidation of the Rules of Procedure to be used by the Radiocommunication Bureau (BR). The Board held four official meetings in 1993 to deal with matters submitted by the BR.

In addition, the members of the RRB took on various tasks at the request of the Secretary-General in accordance with Resolution 1 which, in its operative part headed "instructs the members...", provides for Board members to carry out any special task that the Secretary-General may entrust to them. The tasks in question are enumerated in the Secretary-General's report to the Council on the application of Resolution 1.

5.2.4 Voluntary Group of Experts

During the reporting period, secretariat support was provided for the 6th Meeting of the VGE, four VGE Steering Group meetings and the Editorial Group. 105 documents (of more than 600 pages) were treated. Lists of characteristics, both of a basic and optional nature, relating to requests for frequency assignments, were prepared on request of the VGE. Preliminary study was undertaken with regard to VGE proposed transfer of some regulatory provisions to supporting documentation of the simplified RR to ITU-R Recommendations and Rules of Procedures for frequency assignments treatment).

5.2.5 Study Group Activities

5.2.5.1 Study Group 1 (Spectrum management techniques) (M. Hunt (Canada))

Following the decisions of the XVIIth Plenary Assembly Study Group 1 - Spectrum Management Techniques did emphasis on practices and techniques of the spectrum management. Forty five Questions have been assigned to Study Group 1. The Questions have served as a basis for the work of the Working Parties and Task Groups and have resulted in the preparation of new and revised Recommendations.

Working Parties 1A, 1B, 1C and 1D at its meetings in September 1993 prepared a number of draft new or revised ITU-R Recommendations for consideration by Study Group 1 at its meeting in March 1994. They cover the engineering principles and techniques for effective spectrum management (Documents 1/43 - 1/47), for spectrum planning and sharing (Documents 1/51 - 1/54) and for spectrum monitoring (Documents 1/56 - 1/61). Task Group 1/2 has completed its studies on the limitation of radiation from ISM equipment and prepared a draft new Recommendation on this subject (Document 1/64).

Three new Handbooks are now being developed according to Decisions 118, 119 and 120. WP 1A Group on Handbooks completed preparation of draft Handbook on National spectrum management (Decision 118). For development of a Handbook on Computer aided techniques for spectrum management (Decision 119) a special Group has been established. The draft texts for this Handbook will be completed in March 1994. WP 1C is preparing a Handbook on Spectrum monitoring (Decision 120) and developed a detailed outline of the Handbook and the first draft texts. It is expected that the work will be finished in June 1994.

Study Group and its Working Parties have recognized the necessity to revise certain of the Questions. As a result, fifteen new and revised Questions together with fourteen maintained Questions were approved by the 1993 Radiocommunication Assembly as Study Group 1 work programme for 1993 -1995. The Radiocommunication Assembly has also approved a modified terms of reference of Study Group 1 and new title "Spectrum management".

5.2.5.2 Study Group 4 (Fixed-satellite service) (Mr. E. Hauck (Switzerland))

Working Party 4A on Efficient orbit/spectrum utilization prepared 4 new and 6 revised Recommendations. The new Recommendations dealt with the pointing accuracy for earthward satellite antenna beams, criteria for sharing between BSS feeder links and FSS networks and the ways of reducing interference from the BSS. Substantial progress was achieved in studies on interference between GSO FSS networks and non-GSO MSS feeder links (in response to Resolution 46, WARC-92), frequency sharing between the FSS and MSS in the 20/30 GHz bands (in response to Recommendation No. 719, WARC-92), interference between non-GSO MSS

feeder links, interference criteria for digital carriers above 15 GHz and the impact of using ultra-small dishes on the efficient use of the GSO.

Working Party 4B on system, performance, availability and maintenance prepared 6 draft new and revised Recommendations mainly on fade countermeasures strategies and techniques, allowable error performance for HRDP operating at or above the primary rate which corresponds to Recommendation ITU-T G.826 and a more stringent error performance was also developed for certain services. Progress was made in drafting new Recommendations concerning digital satellite systems in SDH transport networks.

Working Party 4-9S on frequency sharing and coordination between systems in the FSS and radio-relay systems revised the draft new Recommendation concerning inclined orbit operation of satellites in the FSS. Discussion was made jointly with Working Party 9A on the determination of harmful interference.

Task Group 4/3 on interconnection of VSAT systems with public switched networks prepared a draft new Recommendation on interconnection of VSAT systems with PSPDN based on Recommendation ITU-T X.25. Progress was made on the discussion of the connection of VSAT systems with the ISDN. Interconnection of VSAT systems with public switched telephone network (PSTN) was also considered.

Task Group 4/4 completed the report to the conference preparatory meeting (CPM) for WRC-95 and associated draft new Recommendation on frequency sharing between the FSS and Radiolocation/Radionavigation services in the band 13.75 - 14 GHz in response to resolves 1 of Resolution No. 112 (WARC-92). A draft new Recommendation was also prepared concerning the compatibility between the FSS and the space science services using 13.75 - 14 GHz band.

The Handbook Group on satellite communications (fixed-satellite service) finalized the work on Supplement No. 3 (VSAT systems and earth stations) to the Handbook which will be published in 1994. The Group started its work on Supplement No. 4 (Satellite communications in ISDN) to the Handbook.

5.2.5.3 Study Group 5 (Radiowave propagation in non-ionized media) (A. Kalinin (Russian Federation))

Concurrent meetings of Working Parties 5A and 5C (Adelaide, January/February 1993) allowed discussion on areas of common interest, notably digitized world-wide mapping of radiometeorological parameters and the preparation of handbooks which cover the topics of radiometeorology (WP 5A), propagation information for terrestrial path communications, for Earth-space path communications and for interference signal evaluation (WP 5C). Also, Working Party 5C responded to Resolutions of WARC-92 on issues concerning coordination distances and propagation effects associated with wide-band HDTV at 12 GHz.

At the block meeting of all three Working Parties (5A, 5B, 5C; Geneva, October,1993), 3 draft new Recommendations were prepared concerning probability distributions relevant to propagation modelling, digital topographic databases and the prediction of field strength for land mobile and terrestrial broadcasting services at 1-3 GHz. Additionally, 17 existing Recommendations were revised, notable of which was Rec.ITU-R PN.581 on propagation data for land mobile-satellite systems. New data were accepted for the data banks, some from low latitude, tropical regions. The Working Parties also prepared 3 new and 6 revised Questions for the Radiocommunication Assembly. Considerable advances were made on the four handbooks currently under preparation. Liaison statements were prepared to other Study Groups, providing propagation information on mobile-satellite services, wide-band digital broadcasting, short-range personal communications, terrain scatter, sharing at 1 - 3 GHz and the determination of Earth-station coordination distances.

In November, 1993, the Radiocommunication Assembly approved the new and revised Questions, 1 new Opinion and, in turn, the proposed status of texts for the Study Group.

5.2.5.4 Study Group 6 (Radiowave propagation in ionized media) (L. W. Barclay (UK))

At the block meeting of all five Working Parties (6A, 6B, 6C, 6D, 6E; Geneva, September 1993), 2 draft new Recommendations were prepared concerning the prediction of field strength in the frequency range 1605-1705 kHz and propagation factors affecting frequency sharing in HF terrestrial systems. In addition, revisions were prepared to 7 existing Recommendations, notable of which was Rec.ITU-R PI.372 on Radio Noise, resulting from joint studies involving Study Groups 1, 5, 6 and 8. Modifications to the HF propagation prediction method (Rec.ITU-R PI.533) resulted in improved clarity, whilst Rec.ITU-R PI.842 now allows the computation of overall, as well as basic, reliabilities of HF systems, and a procedure for compatibility calculation. Following modification, Rec.ITU-R PI.684 represents a self-contained method for the prediction of field strength at frequencies below about 500 kHz. The Working Parties also prepared 1 draft new and 6 draft revised Questions for the Radiocommunication Assembly.

The status of the world-wide HF measurement campaign was reviewed and appreciation was expressed for the provision of transmitters in Australia and Norway. A rapporteur group was established with the aim of coordinating activities and encouraging further participation. As regards data banks, initial steps were taken towards a new data bank expressed in terms of available receiver power and a procedure for converting existing values of field strength to received power was developed.

All Working Parties made contributions towards a handbook on ionospheric properties and propagation and the measurement of ionospheric parameters, this being one of several handbooks planned by the Study Group.

In November 1993, the Radiocommunication Assembly approved the new and revised Questions, 2 revised Resolutions, 1 revised Opinion and, in turn, the proposed status of texts for the Study Group.

5.2.5.5 Study Group 7 (Science services) (H. Kimball (USA))

At the October meeting Study Group 7 considered thirty two draft new or revised ITU-R Recommendations prepared by WP 7A (five), WP 7B (seven), WP 7C (fifteen), WP 7D (one) and WP 7E (four).

WP 7A has prepared two draft new Recommendations on relativistic effects in coordinate time system in the vicinity of Earth and on systems, techniques and services for time and frequency transfer. Revisions of Recommendations ITU-R TF.538-2, TF.583-1 and TF.768 have been drafted. Seven draft new Recommendations on the different aspects of manned and unmanned deep-space research service have been prepared by WP 7B. Fifteen new or revised Recommendations have been drafted by WP 7C. They cover the technical requirements for Earth exploration-satellite and meteorological-satellite services including satellite passive and active sensing systems and systems for geodesy and geodynamics. WP 7D has prepared a draft new Recommendation on protection of radio astronomy service in frequency bands shared with other services. Three new Recommendations on data relay satellite systems and revision of Recommendation ITU-R SA.363-4 on space operation systems have been drafted by WP 7E.

The procedure of Resolution ITU-R 1 shall be applied for approval by correspondence of thirty above-mentioned Recommendations.

Draft New Recommendation "Protection Criteria for Deep-Space Research" (Doc. 7/61) has been sent back to WP-7B due to questions regarding text and references to figures in the Tables. Due to the comments expressed by the Chairman of WP 9D, Draft New Recommendation "Protection Criteria Related to the Operation of Data Relay Satellite Systems" (Doc. 7/99) has been considered at the Study Group 7 meeting in March, 1994.

Task Group 7/1 on frequency sharing between the space research satellites and terrestrial systems in the 2 025 - 2 110 MHz and 2 200 - 2 290 MHz bands completed its work and associated draft new Recommendation in response to Resolution No. 112 (WARC-92).

Task Group 7/3 on compatibility between the space science services and the fixed satellite service in the band 13.75 - 14 GHz completed the report to the Radiocommunication Assembly and associated draft new Recommendation on use of the 13.75 - 14 GHz band by the space science services and the fixed satellite service in response to resolves 2 of Resolution No. 112 (WARC-92).

WP 7D developed a draft Handbook dealing with radio astronomy. The Handbook of eight Chapters which deal of the different aspects of radio and radar astronomy. One Chapter concerns searches for extra-terrestrial intelligence. Work began on a Handbooks on time signals and frequency standards and on the use of satellite time and frequency dissemination.

The first 1993 Radiocommunication Assembly approved the work programme (47 ITU-R Questions) for Study Group 7 for 1993 - 1995 Study Period.

5.2.5.6 Study Group 8 (Mobile, radiodetermination, amateur and related satellite services (E. George (Germany))

Working Parties 8A and 8D met in Tokyo, Japan, in January 1993 and agreed on 11 draft new and one draft revised Recommendations which included draft Recommendations on cordless telecommunication systems, future amateur radio systems, frequency sharing of non-geostationary satellites below 1 GHz, public mobile telecommunication service with aircraft, etc. Task Group 8/1 on Future Public Land Mobile Telecommunication Systems (FPLMTS) met in Montpellier, France, in June, 1993 and prepared 3 draft new Recommendations on radio interfaces and frequency spectrum considerations and one draft new Opinion concerning harmonization of activities for future mobile communications. A special one day meeting of Study Group 8 was held in Geneva in October, 1993 and it considered the above draft texts and adopted 13 draft new Recommendations for approval by consultation. It also adopted the draft Opinion, which was approved by the Radiocommunication Assembly held in November, 1993.

In addition, Task Group 8/2 on wind profiler radar met in Boulder, USA, in April, 1993 and in Geneva in October, 1993 in order to carry out studies requested by WARC-92 Recommendation 621. It produced a draft report to the future Radiocommunication Conference and a draft new Recommendation on wind profiler radars. Task Group 8/1 on FPLMTS had its fifth meeting in Geneva in October, 1993 and agreed on two draft new Recommendations on security principles and performance requirements for FPLMTS and two draft revised Recommendations. Working parties 8A, 8B, 8C and 8D also met in Geneva in October/November 1993 and prepared 20 draft new and 11 draft revised Recommendations. They include Recommendations on digital cellular systems, international radio-paging, automation of maritime communications, search and rescue radar transponders, frequency sharing within the mobile-satellite service and between the mobile-satellite service and other services, reference radiation patterns for earth-station antennas, etc. The draft Recommendations prepared in autumn 1993 were submitted to Study Group 8 for its adoption in March, 1994.

After the WRC-93, a new group, Task Group 8/3, was established by Study Group 8 and it will carry out Study Group 8 preparation for WRC-95.

5.2.5.7 Study Group 9 (Fixed service) (M. Murotani (Japan))

Working Parties 9A, 9B, 9C, 9D and 9E met in parallel in Geneva in September, 1993. A total of 23 draft new Recommendations were prepared and 22 existing ones were also amended. Main topics are the following:

- Performance objectives to make fixed radio systems compatible with the future public network requirements, propagation effects in the design and operation of systems, interference assessment (i.e. maximum degradation due to interference from other sources, interference contribution from terrain scattering and interference mitigation options to enhance compatibility with radar systems) and determination of coordination area between different radio-relay systems.

- RF channel arrangements (refinement of some existing Recommendations, e.g. in the 1 900 - 2 300 MHz band to make efficient use of the band and increase compatibility with new services allocated in 1 - 3 GHz range by WARC-92, and new Recommendations, especially to extend the use of the spectrum), characteristics of digital systems, bandwidths and unwanted emissions definitions, interconnection with other transmission systems and maintenance. Trans-horizon systems (e.g. guidance on propagation aspects and preferred frequency bands to be used according to the length of the link), rural communications and point-to-multipoint applications.

- Sharing with other services[6] (in particular with geostationary and non-geostationary satellites of broadcasting-satellite (sound) and mobile-satellite services) and HF communications (that is improved Lincompex and adaptive systems, digital speech transmissions, and burst data transmissions employing meteor burst operation).

A handbook on digital radio-relay communications, now under preparation by a handbook group, is well advanced and expected to be completed by the end of 1994 or earlier 1995. The handbook will provide tutorial material and guidance to assist engineers of administrations and organizations, especially in the developing countries, in planning, designing, operation and maintenance of radio systems.

5.2.5.8 Study Group 10 (Broadcasting service (sound)) (C. Terzani (Italy))

Studies in the sound broadcasting field are mainly focused on applications of digital techniques. Four draft new or revised Recommendations have been prepared defining the parameters of the recommended system to be used for terrestrial and satellite emission. Practical implementations have already been reported and their result analyzed in two Reports. In addition, parallel work has been carried out on low bit-rate baseband audio coding to be used for terrestrial and satellite systems and a new Recommendation was issued. The recommended coding scheme was selected after an extensive evaluation of proposed algorithms and is based on the widely accepted ISO/MPEG standard, thus allowing for a harmonized broadcast and non-broadcast set of standards. Progress is also under way in subjective assessment of sound quality: a new Recommendation was prepared defining suitable methods to be applied to evaluate quality in audio systems (including multi-channel audio systems) with small impairments like the systems based on digital technology.

Progress in other areas include the preparation of a new comprehensive Recommendation on VHF and UHF broadcasting antennas, likely to be finalized in the current study period, and the update of current Recommendations on VHF sound broadcasting planning.

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6 Sharing studies with fixed satellite systems are included under 5.2.5.3.

Studies on HF broadcasting matters are still continuing to improve existing Recommendations on HF receiving and transmitting antennas, single-sideband (SSB) system characteristics and planning parameters.

In the field of audio recording for international exchange the relevant Recommendation on digital audio was updated.

Extensive work was done by Working Parties 10-11S and 10B in special overlapping meetings in Los Angeles in January, 1993 and again in Geneva in October to respond to WARC-92 resolutions concerning satellite and terrestrial digital sound broadcasting. System Recommendations have been prepared and submitted to the 1994 meeting of Study Group 10.

5.2.5.9 Study Group 11 (Broadcasting service (television)) (M. Krivocheev (Russian Federation))

Studies in television broadcasting are currently focused on enhanced television, digital terrestrial television broadcasting and application of digital techniques to satellite and terrestrial broadcasting. A number of Recommendations were prepared on enhanced 16:9 television system parameters and related quality requirements and subjective assessment procedures. The broadcasting user requirements for various applications in the digital domain such as satellite news gathering, emission and secondary distribution systems for conventional and high definition television were also included in Recommendations. Close liaison is maintained with the ISO/IEC in order to continue the ongoing harmonized TV standard setting activity, especially with MPEG2.

A draft new Recommendation on HDTV interfaces has been set up. It relates to the 1125//60 and 1250/50 systems described in Annex II of Recommendation ITU-R BT. 709. It is in full agreement with already existing specifications and, in particular those issued by the SMPTE.

Two Recommendations have been prepared concerning digital terrestrial television broadcasting although studies are still progressing toward the standardization of a system. Excellent results were achieved in the field of quality assessment: an integrated set of Recommendations now covers the methodology of assessment, the assessment procedures and the reference test material for various applications, i.e digital, analogue, standard, enhanced and high definition television. Also, in the terrestrial emission field, an important Recommendation on the reference signals for ghost image cancelling and a new Recommendation on planning procedures and constraints for analogue TV systems were prepared. A new Recommendation was approved on data broadcasting systems using a data channel of satellite-television broadcasting.

All the existing Recommendations on television recording for broadcasting were updated to include the necessary material allowing for the implementation of 16:9 format in the transfer from tape to telecine and vice-versa.

The joint Working Party with Study Group 10 that deals with satellite broadcasting made significant progress in responding to the Resolutions of WARC-92 concerning the satellite broadcasting of high-definition television and revamping of the WARC-BS-77 Plans in a special meeting in Los Angeles in January 1993. Work was started on multi-programme digital satellite television broadcasting.

5.2.5.10 Study Group 12 (Inter-service sharing and compatibility) (J. Karjalainen (Finland))

Task Group 12/2 *(Sharing between the broadcasting service and the fixed and/or mobile services in the VHF and UHF bands)* met for the last time in Geneva from 26 to 28 April 1993 and prepared a new annex on protection of the fixed service from the broadcasting service to be added to Rec. 851 and revised Annexes 1 and 2 of the same Recommendation.

With the unanimous approval, at its meeting in Geneva from 7 to 9 September 1993, of the new Recommendation *Compatibility between the sound broadcasting service in the band of about 87 - 108 MHz and the aeronautical services in the band 108 - 137 MHz*, prepared by Task Group 12/1, Study Group 12 reached the culmination of more than 10 years of work in Study Groups 8, 10 and 12 on this important issue. This Recommendation and revisions to four other Recommendations previously approved were submitted to and approved by the Radiocommunication Assembly in November 1993, which also extended the mandate of the Study Group into the 1994-95 study period and renumbered it as Study Group 2.

Study Group 12 reviewed the status of its four Task Groups and decided to disband Task Group 12/2 (see above) and Task Group 12/3 on *Technical elements of coordination of earth stations with terrestrial services sharing the same frequency bands*, as they had completed their principal tasks. Task Group 12/1 will continue its studies as Task Group 2/1. Task Group 12/4 (now Task Group 2/2) on *Frequency sharing criteria within the range 1 - 3 GHz* will continue its work on Question 202/2, which has just started.

Prof. Ryszard Struzak, Senior Counsellor, who supported the Study Group in the CCIR Secretariat from its inception, retired in mid-1993 and was replaced by Mr. Richard Nickelson, Senior Counsellor.

5.2.5.11 CMTT (Joint CCIR/CCITT Study Group on Television and Sound Transmission)

The final meeting CMTT was held in Geneva on 19 and 20 April 1993. Two Recommendations on Satellite News Gathering (SNG) were adopted and the two existing Recommendations on television transmission codec standards were adopted in revised form. All four of these draft new and revised Recommendations were approved by the Members by correspondence (Resolution 97). Following the 1993 Radiocommunication Assembly, CMTT was transformed into Telecommunication Standardization Study Group 9, in accordance with the decisions of the 1992 Additional Plenipotentiary Conference and the World Telecommunication Standardization Conference (Helsinki, March 1993). All of the outstanding work of the CMTT was transferred, with the exception of Questions dealing with Satellite News Gathering and Outside Broadcasting via satellite, which were reassigned to Radiocommunication Study Group 4 (Fixed-satellite service). The Chairman of CMTT, Mr.Geoff Simpson, was given special recognition on the occasion of his retirement by the Chairman of the Radiocommunication Assembly.

The final meeting restructured CMTT to fit into the structure of Telecommunication Standardization Study Groups. Two Working Parties were formed: Working Party ITU-T 1/9 on Transmission for Television Broadcasting, chaired by Dr. Richard Green (Cable Labs, USA) and Working Party ITU-T 2/9 on Transmission for Sound Broadcasting chaired by Mr. Gunter Zedler (Germany). Appropriate Rapporteurs were appointed by the Working Parties during their meetings in October 1993. The Radiocommunication Assembly elected Mr. Jose Luis Tejerina (Spain) as Chairman and Mr. Gunter Zedler (Germany) and Dr. Richard Green (USA) as Vice-chairmen of Study Group ITU-T 9.

The third and fourth meetings of Task Group CMTT/1 *(Conditional access)* were held in Geneva in April and October, 1993. The draft Recommendation on the characteristics of the conditional access control system for long-distance international transmission of digital TV according to Recommendation 723 was completed and will be submitted to the first meeting of ITU-T Study Group 9 in March, 1994 for approval by correspondence. The Task Group was disbanded.

The fourth and fifth meetings of Task Group CMTT/2 *(Digital transmission of component-coded TV and HDTV signals, secondary TV transmission)* were held in Geneva in April and October, 1993. Revisions to Recommendations 721-1 and 723 were forwarded to the meeting of CMTT that followed on 19 and 20 April, where they were adopted for submission to approval by correspondence (see above).

The final meeting of Task Group CMTT/2 continued work on the studies concerning standards for digital contribution and primary distribution systems. Work in both of these areas will continue in ITU-T Working Party 1/9. Task Group CMTT/3 also held two meetings in 1993. Its work will likewise continue in Working Party ITU-T 1/9.

5.2.5.12 Coordination Committee for Vocabulary (CCV)

In 1993, terminology activities were not very abundant, which would appear to indicate that the current vocabulary is relatively stable. Attention will, however, need to be given to terminology work in areas where technology is evolving, such as Future Public Land Mobile Systems (FPLMTS) within Task Group 8/1, or Very Small Aperture Terminals (VSAT) within Task Group 4/3.

Within the framework of Resolution ITU-R 113, experts from the Radiocommunication Sector participate din the drafting of Class 7 Chapters (on Telecommunications) of the International Electrotechnical Vocabulary (IEV), published by the International Electrotechnical Commission (IEC), in liaison with the IEC-ITU Joint Coordinating Group for Vocabulary (JCG).

Several experts, mainly in the field of space radiocommunications but also in that of mobile communications, have proposed that indication be given for the designation of frequency bands (above 1 GHz) by capital letters. A revision of Recommendation ITU-R V.431-5 has been approved by RA 93.

The use of abbreviations in ITU Recommendations was discussed with the linguistic sections of the General Secretariat, the editorial services of the Sectors and Study Group experts, mainly members of Editorial Groups and Rapporteurs or associate Rapporteurs for Vocabulary. A revision of Recommendation ITU-R V.661-1 has been approved by RA 93.

Modifications of an editorial nature have been added to the Resolutions taking particular account of the new ITU structure (Resolutions ITU-R 113, ITU-R 114, ITU-R 89, ITU-R 78 and ITU-R 23).

In addition, references to external publications have been updated to 1993: present status of "Telecommunications" Chapters of the IEV (Appendix I to Recommendation ITU-R V.662) and IEC publications relating to graphical symbols and documentation (Recommendation ITU-R V.461) as well as letter symbols (Recommendation ITU-R V.608).

5.2.5.13 Ad-Hoc Advisory Group on CCIR Strategic Review and Planning and Working Party of the Plenary Assembly (Resolutions 106 and 107)

The Ad-Hoc Advisory Group on CCIR Strategic Review and Planning established in accordance with Resolution 106 of the XVIIth Plenary Assembly met in Geneva five times (5-8 February 1991, 10-12 June 1991, 22-25 June 1992, 19-27 January 1993, 3-10 June 1993). The first and second meetings were chaired by Mr. H. Willenberg (Germany) and Mr.C. Oliver (Australia) accordingly. All others were held under the Chairmanship of Prof.L.W. Barclay (United Kingdom). Three of the meetings were held in conjunction with meetings of the Working Party of the Plenary Assembly on the Re-structuring of Study Groups convened under Resolution 107.

The Working Party of the Plenary Assembly under the chairmanship of Mr. C. Oliver, Australia was established in accordance with Resolution 107 of the XVIIth Plenary Assembly (Dusseldorf, 1990) to examine the structure of the CCIR Study Groups adopted at this Assembly.

The Working Party met three times (10-12 June 1991, 20-21 January 1993 and 3-10 June 1993), including an initial consolidated meeting with the *Ad Hoc* Advisory Group on Strategic Review and Planning (Resolution 106). The second and the third meetings were held

concurrently with the meetings of the Group on Resolution 106. Mr. B.A. Gracie (Canada) was designated to chair the second meeting (20-21 January 1993), in the absence of Mr. A. Oliver (Australia).

There were up to 70 participants from 26 administrations and organizations at the above-mentiond meetings. Summary Reports were circulated 28 February 1991 (Res. 106 only), 9 August 1991, 8 September 1992 (Res. 106 only), 8 March 1993 and 16 July 1993.

The texts of basic ITU-R Resolutions which drafted by the Group on Resolution 106 have been used by the 1993 Assembly in preparation of 16 new ITU-R Resolutions relating to the work of the Radiocommunication Assembly and the Radiocommunication Study Groups.

Resolution ITU R-4 "Structure of Radiocommunication Study Groups" approved by the Assembly is based on the text prepared by the Group on Resolution 107.

5.2.6 Radiocommunication Bureau

5.2.6.1 Introduction

The Radiocommunication Bureau is responsible for technical and administrative support of ITU World and Regional Radiocommunication Conferences, Radio Regulations, Radiocommunication Assemblies and Study Groups.

The Bureau carries out the international regulatory processes for registration of frequency assignments and satellite orbits, and assists to resolve cases of harmful interference. The Director serves as Executive Secretary of the Radio Regulations Board.

It provides the specialized technical secretariat for the work of the Radiocommunication Study Groups and Assembly in development of Recommendations for spectrum utilization and radio system characteristics.

The Bureau provides technical information and seminars for national frequency management and radiocommunications, working closely with the Telecommunication Development Bureau in matters for developing countries.

5.2.6.2 Treatment of frequency assignment notices

a) Maintenance of the Master International Frequency Register

Examination of frequency assignment notices

All notices received by the Radiocommunication Bureau pursuant to the relevant provisions of the Radio Regulations, Appendices thereto and decisions of world or regional administrative radio conferences are examined:

- conformity with the relevant provisions of the Convention and the Radio Regulations; this examination essentially consists of verification that the assigned frequency and other characteristics of the notified station are in conformity with the Table of Frequency Allocations and other provisions which prescribe certain restrictions on other characteristics;

- conformity of the frequency assignment notice with the procedures of coordination prescribed in the Radio Regulations or with a world-wide or regional service plan where such conformity is obligatory;

- probability of harmful interference from the notified assignment to assignments already recorded in the Master Register, particularly in frequency bands below 28 MHz and in frequency bands above 1 GHz where such examination is required to be carried out.

- advance publication of information pertaining to satellite networks (Article 11, Resolutions 33 and 46; Section I)

- publication of coordination requests pertaining to satellite networks (Article 11, Resolutions 33 and 46; Section II)

- processing of coordination requests pertaining to earth stations (Article 11, Section III)

- publication of modifications to frequency assignment Plans (Article 4, Appendices 30 and 30A)

- conversion of allotments into assignments (Appendix 30B)

- notification for recording in the Master Register (Article 13; Article 5 of Appendices 30 and 30A; Article 8 of Appendix 30B)

In cases where, due to non-conformity of the assignment with a provision of the Radio Regulations, or due to non-conformity with a world-wide or regional service plan, if applicable, or due to the level of interference being considered as harmful, the Radiocommunication Bureau reaches an unfavourable Finding, the notice is returned to the notifying administration. It can only be recorded in the Master Register if the notifying administration certifies that the frequency assignment shall not cause harmful interference to any assignments operating in accordance with the provisions of the Convention and the Radio Regulations.

The following table shows the number of notices treated in 1993 in accordance with the procedures described above.

Number of:	Art.12 (S.Sec IIA, IIB, IIC and Sec.V)	Art. 12 (S.Sec.IIE)	Art.13	Art. 17	Total
Assignments notified in 1993 and requiring examination	29,805 (22,487)[7]	1,455 (1,122)	8,606 (5,535)	35,252 (35,800)	75,118 (64,934)
Cancellations notified in 1993	6,202 (2,702)	327 (288)	4,300 (1,336)	3,736 (4,489)	14,569 (8,810)
TOTAL	36,011 (25,289)	1,782 (1,400)	12,906 (6,871)	38,988 (40,284)	89,687 (73,744)

Registration

The Master International Frequency Register (Master Register) is composed of all communications between the Radio Communication Bureau and administrations concerning the application of the provisions of the Convention, the Radio Regulations and Agreements to frequency assignments including, where appropriate, positions on the geostationary-satellite orbit.

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7 Throughout this paragraph, relevant corresponding figures for 1992 are given in parenthesis besides those for 1993 for information.

In accordance with the relevant provisions of the Convention and the Radio Regulations, the Radiocommunication Bureau deals with the frequency assignment notices submitted by administrations with a view to recording them in the Master Register. The Findings issued by the Radiocommunication Bureau in connection with these notices are also recorded in the Master Register. They provide administrations with information on the occupancy of the radio frequency spectrum and the geostationary-satellite orbit and constitute a useful basis for the resolution of problems of harmful interference. At the end of 1993 the Master Register contained particulars of 1,185,776 assignments representing 5,564,593 line entries which are published in the International Frequency List at periodic intervals not exceeding six months. This publication is now available exclusively on microfiche and on CD-ROM.

Reformatting of the Space Related Database

To implement the data structure defined by WARC-ORB-88 for space networks and stations to be used for coordination and notification purposes (Appendix 3 of the Radio Regulations - network structure), a new Space Network System (SNS) has been established. Through this development another objective has also been achieved, i.e. to provide the ITU Headquarters and the Administrations with a frequency management system for space related data having comparable facilities with those of the FMS (Frequency Management System) for terrestrial services.

The newly developed SNS is composed of a database containing all space related data available in the ITU (i.e. coordination data (RR1060 and RR1113) and notification data (RR1488)) and the necessary software to capture, publish and validate data, to interface data with technical examination software and to maintain the Headquarters' databases (Master Register and coordination files).

For the establishment of the new IFRB data base, parallel to the implementation of the SNS, all the information available in the structure prior to the WARC ORB-88 needed restructuring (reformatting). This implied the regrouping and restructuring of the assignments to space and earth stations of given networks and the addition of the new data decided by the WARC ORB-88 (e.g. strapping). As a results of a major effort the reformatting of the whole space related data base has been completed. This exercise was carried out in cooperation with the administrations having entries in the Master Register in order to enter all missing data element into the newly restructured data base of the Space Network System.

b) Frequency assignments to Terrestrial stations in the Terrestrial Radiocommunication Services

Examination of frequency assignments to terrestrial stations in the bands below 28 MHz (Article 12 of the Radio Regulations)

The Bureau carried out, in accordance with RR1240 and RR1241 or RR1242 of Article 12 of the Radio Regulations, the examination of 7,421 notices relating to new frequency assignments or to changes in assignments already recorded in the Master Register.

868 frequency assignments to aeronautical stations in the HF bands allocated exclusively to the aeronautical mobile (R) and (OR) services between 2 850 kHz and 22 000 kHz were examined in accordance with the provisions of RR1333 - RR1349.

1,955 frequency assignments to coast stations in the HF bands between 4 000 kHz and 27 500 kHz allocated exclusively to the maritime mobile service were examined in accordance with the provisions of RR1240 and RR1242 or RR1315 - RR1332, as applicable.

Examination of frequency assignments to terrestrial stations in the bands above 28 MHz (Article 12 of the Radio Regulations)

In the bands other than those shared with space radiocommunication services, 15,386 assignment notices were received. The number of assignments examined was 14,511.

High Frequency Broadcasting Schedules (Article 17 of the Radio Regulations)

In application of Article 17 of the Radio Regulations, the Bureau prepared and published the Tentative High Frequency Broadcasting Schedules in frequency bands between 5 950 kHz and 26 100 kHz allocated exclusively to the broadcasting service for four seasons (June 1993 through March 1994). These schedules have been issued within the regulatory time frames. The 8,045 (6,371) modifications to the Tentative Schedules have been examined and published in Part IV of the Weekly Circular and in the Final Schedules M92, J92, S92, D92 and M93.

After carrying out a consultation with administrations and subscribers, it was decided that, as from March 1994 seasonal period, the Schedules would be published on diskettes only. Extracts on paper may however be sent to administrations at their request.

Application of the procedure of Resolution No. 300

On the basis of requests from 7 (11) administrations, the Bureau applied the procedure of coordination laid down in Resolution No. 300 for 429 (3,429) frequency assignment notices for narrow-band direct-printing telegraph and data-transmission systems (paired frequencies).

Worldwide frequencies in the aeronautical mobile (R) service (Recommendation No. 402)

The Bureau applied the frequency selection and coordination procedure of Recommendation No. 402 of WARC-79 described in Bureau Circular-letter No. 533 for 2 (12) administrations concerning 11 (12) channels in close collaboration with the International Civil Aviation Organization (ICAO).

c) Frequency assignment to Space stations in the Space Radiocommunication Services

In 1993 the number of cases to be treated as well as their complexity continued to increase due to the technological, operational and regulatory developments in the satellite communication environment. This increasing workload has had an important impact on the work of the Bureau with the introduction of more automated treatment to allow increased efficiency of processing of frequency assignment notices.

The number of Special Sections concerning satellite networks processed under the procedures of Articles 11, 14 and Resolutions 33 and 46 (advance publication, coordination) was 859.

The number of satellite network and earth station frequency assignment notices notified under Article 13 during the year 1993 appears in the following table:

Number of:	Satellite networks	Earth Stations
Networks and stations notified in 1993 and requiring examination	68(8606)	279(3551)
Cancellations notified in 1993	17(795)	191(3538)
Total	85(9401)	470(7089)

(The figures given in parenthesis to the right are the number of individual frequency assignments concerned.)

The treatment of the space frequency assignment notices during 1993 is given below:

Number of:	Satellite networks	Earth Stations
Notices subjected to examination in 1993	68(7166)	325(2407)

(The figures given in parenthesis are the number of individual frequency assignments concerned.)

Examination of the notices concerning the FSS Allotment plan submitted by administrations in application of Article 6 of Appendix 30B continued. Earlier developed MSPACE software was used for this purpose. From the date of publication of the First Edition of the Appendix 30B List, 132 records had been entered in the List as result of the successful application of Article 6 procedures.

Results of examination of BSS and Feeder-link Plan submissions by Administrations in application of Articles 4 and 5 of Appendixes 30 and 30A were published in 11 Special Sections. Special assistance was rendered to Administrations in application of different procedures of these Appendices.

In 1993, substantial progress has been accomplished in the reduction of the delay in the publication and examination of notices. The Bureau is very near to the elimination of a more than 2 year backlog accumulated during the last years because of the change-over of the data-base and notice processing system (Space Network System - SNS). It is expected that by mid 1994 the publication (WIC Part I) and examination (WIC II or III) of Article 13 notices will be made in a timely manner. The use of the SNS was extended to the processing of RR1060 satellite Network coordination requests.

5.2.6.3 Special assistance to Administrations in frequency management

Special assistance to Administrations

The IFRB and, after 1 March 1993, the Radiocommunication Bureau, studied under the relevant provisions of the Radio Regulations, regional and world-wide agreements 48 cases of request for assistance received from administrations for both Terrestrial and Space Radiocommunication Service Departments.

In addition to assistance cases requested under specific Radio Regulatory provisions, different other types of assistance matters were also handled. The Bureau has rendered assistance to bilateral space systems coordination meetings, as well as assistance in space matters in the form of meetings/ training missions to the Administrations.

Several training sessions were organised at ITU Headquarters and, in some limited number of cases, seminars on specific issues (space or earth station coordination, maritime radiocommunications, etc.) took place outside ITU Headquarters.

5.2.6.4 Cases of harmful interference; Monitoring

a) Cases of harmful interference

All reports of harmful interference are treated by the Bureau as matters of urgency, particularly where safety services are involved. The Bureau promptly communicates with all administrations concerned to seek an early solution to the problem in the cases where the assistance of the Bureau is sought or when interference to a safety service is involved, even when the reports are sent to the Bureau for information purposes only. Where identification of the source of interference is uncertain, the Bureau requests administrations with appropriate monitoring facilities to assist in identifying the source of interference.

Some cases are communicated to the Bureau for information only, while others request the assistance of the Bureau or where interference to safety services are involved. The following table summarizes the interference cases treated during the year:

	Existing at the beginning of 1993	New cases	Closed	Remaining cases
Assistance (including safety services affected)	32 (24)	63 (35)	39 (27)	56 (32)
Information	18 (10)	10 (18)	18 (10)	10 (18)
Total	50 (34)	73 (53)	57 (37)	66 (50)

It should be noted that any one case may involve an interference complaint for several different frequencies/stations.

b) Monitoring

Pursuant to RR1885 and IFRB Circular-letter No. 646, the following summaries of monitoring information, which are regularly received by the Board, were issued:

- summary 252 (1 October to 31 December 1991)
- summary 253 (1 January to 31 March 1992)
- summary 254 (1 April to 30 June 1992)
- summary 255 (1 July to 30 September 1992)
- summary 256 (1 October to 31 December 1992)

Summaries 257 (1 January to 31 March 1993) and 258 (1 April to 30 June 1993) have been captured and will be published during the first quarter of 1994.

5.2.6.5 Follow-up activities on decisions of World and Regional Conferences

Implementation of the WARC MOB-87 decisions

Pursuant to Resolutions Nos. 325(Mob-87), and in accordance with the provisions of No. 1720 of the Radio Regulations, the Allotment Plan contained in Appendix 25 to the Radio Regulations was consequentially amended, i.e. 464 allotments from 29 administrations, which were not covered by appropriate assignments in the Master Register, were deleted from the Plan. An updated version of the Plan was published in October 1993.

Special Monitoring Programme in the band 406 - 406.1 MHz (Resolution 205 of WARC-MOB-83)

In its Resolution 205, WARC MOB-83 instructed the IFRB "*to organize monitoring programmes in the band 406 - 406.1 MHz in order to identify the source of any unauthorized emissions in that band*". Pursuant to these instructions the Board, as a first step, requested administrations of the countries participating in the COSPAS/SARSAT system to collect information on a regular basis on sources of unauthorized emissions that could be identified. Upon receipt of the information from these administrations the Bureau immediately approaches the administrations responsible for stations which have been clearly identified as being the source of unauthorized emissions, requesting them to take corrective action without delay. So far, the results obtained show very good cooperation from most of the administrations involved; during the year 1993, the observations communicated by two administrations of the COSPAS/SARSAT system concerned 114 (80) unauthorized emissions involving 20 (24) administrations. 96 (54) emissions ceased their operations by the end of 1993.

Review of the Master Register and Review of Findings

In accordance with Sections V and VI of Article 12 of the Radio Regulations, the Bureau carried out several reviews of selected bands of assignments recorded in the Master Register and effected necessary modifications to their Findings and/or the associated remarks in the different columns. This action was in response to certain decisions of administrative conferences such as RARC Geneva-85, WARC MOB-87, and WARC-92. Additionally, the Bureau on its own initiative undertook a number of reviews to correct certain inconsistencies in the remarks contained in some columns of the Master Register.

During the year the Bureau modified the symbols in columns 12A and 12B of the Master Register in response to requests from several administrations.

Consequent to the creation of new symbols to represent the geographical areas of ex-URSS (GEO, KAZ and TKM) and ex-Tchekoslovakia (CZE and SVK), the Bureau reviewed all the assignments in these areas and effected such changes as necessary in the relevant columns of the Master Register. Similarly, relevant changes in appropriate columns were effected in respect of new member administrations (ERI and NMB).

In application of RR1312, RR1313, RR1550, RR1554 and RR1555, the Bureau regularly consulted the administrations to confirm the date of putting into service of their assignments notified in advance.

Treatment of resubmitted notices - RR1255

The number of resubmitted assignments treated under the RR1255 procedure during the year was 515, whereas the number of such assignments subjected to this treatment since the initial application (in June 1985) was 5,491. In 4,407 cases, administrations were consulted. This corresponds to 12,362 assignments recorded in the Master Register, which had been the cause of unfavourable findings. No reply was received in 58% of these assignments for the year which shows an improvement of the number of response received for this year.

WARC ORB-88 (Use of the Geostationary-satellite orbit and the planning of Space Services)

The following activities were performed:

Review of all the space network not yet brought into use with a view to deleting those networks which went beyond the deadline of nine years after their advance publication.

Implementation of the "network concept" in the coordination and notification procedures (Articles 11 and 13), which provides for the coordination and notification of satellite networks as a whole, and revision of the information to be supplied for that purpose (Appendix 3). Further to the Conference's decisions as contained in Section V of Appendix 3, the IFRB developed a new notice form which is the basis of the information exchanged between the administrations and the Bureau (ex-IFRB) or between the administrations, under relevant provisions of the Radio Regulations concerning the space radiocommunication services.

Implementation both by administrations and the IFRB (continued by the BR) of a new coordination mechanism: the Multilateral Planning Meeting (MPM).

RARC-RJ88 (Establish a plan for the Broadcasting Service in the band 1 605-1 705 kHz, Region 2)

Immediately after the Conference, the necessary steps have been taken to review the Final Acts, establish Technical Standards and Rules of Procedure, and prepare the necessary software for the application of the Agreement. This work leads to the extension of the IFRB World Digitized Map to include the allotment zones defined in the Agreement. Existing assignments in the Fixed and Mobile services have been examined with regard to their compatibility with the allotment Plan. These results have been communicated to the concerned administrations.

RARC-GE89 (Planning of VHF/UHF Television Broadcasting in the African Broadcasting Area and Neighbouring Countries)

The preparation of the Conference included the establishment of large software to be used before, during and after the Conference by IFRB staff and by planning groups and delegates. This software allowed data capture and validation of assignments and modifications, reading of Plan and proposed modifications, calculation analysis, search of best suitable frequencies and overall calculations on the Plan. This software has been extensively used in the planning exercises before and during the Conference. Participation in numerous coordination and information meetings was ensured. During the conference, the IFRB ensured that the interest of non-participating countries were taken into account, and provided technical secretariat and assistance. After the Conference, a coordination meeting for countries of Western Africa was organized, allowing resolution of all the incompatibilities which remained in the Plan after the Conference within these countries.

Follow-up actions on the decisions of the WARC-92

a) The Bureau completed all activities as requested by Resolution No. 410 (WARC-92). The new allotment arrangement for the aeronautical mobile (OR) service in the exclusive HF bands was finalized and published as Appendix 26(Rev.) to the Radio Regulations in October 1993. Also, in accordance with Resolution No. 412, the Bureau initiated the necessary activities concerning the required changeover to the new frequencies in the bands governed by the Appendix 26. To this end, the Bureau prepared and sent to all administrations appropriate national extracts with the indication of the replacement frequencies, together with the necessary guidelines concerning their notification.

b) The Bureau undertook all necessary measures (review of the Validation rules, etc.) and on 12 October 1993 (date of entry into force of the partial revision of the Radio Regulations) it commenced with the application of the revised procedures (AR12-SS.IIC, etc.) as decided by the WARC-92. Appropriate Circular-letter (CR/10) was also prepared and sent to the administrations in this connection.

c) The main activity of the Bureau since WARC-92 consisted in the application of the "Interim Procedures for the Coordination and Notification of frequency assignments of non-geostationary satellite networks in certain space services as well as other services to which the bands are allocated" as defined by Resolution 46. According to a decision taken by the Conference, this procedure became applicable from 4 March 1992. IFRB Circular Letters Nos. 905 of 10 July 1992 and 921 of 11 December 1992 were published; conveying the interpretation of the procedures contained in Resolution 46. In application of the Resolution and at the request of Administrations, the Bureau has up to now published 48 Special Sections in RES.46/A series and 54 in the RES.46/C series.

5.2.6.6 Activities preparatory to the RA-93 and WRC-93

a) Preparation of the Radiocommunication Assembly (RA-93)

Following the decision of the 47th session of the Council (December 1992) to organize a World Radiocommunication Conference associated with the first Radiocommunication Assembly from 8 to 19 November 1993 in Geneva, the first task of the Radiocommunication Bureau was to proceed with the official announcement for both events. This dual announcement was made in coordination with the General Secretariat to ensure that all Administrations of Members of the ITU, as well as all the Members of the Radiocommunication Sector, as defined by the Constitution and the Convention (Geneva 1992), were informed (Administrative Circular CACE/1).

The other principal tasks of the Radiocommunication Bureau included: collection and processing of contributions and meeting documents, preparation of texts prepared by the Radiocommunication Bureau, organization and dissemination of documents, registration of delegates.

Before the Assembly, 161 documents, including 54 Plenary ones, were processed and dispatched and 69 others during the Assembly.

b) Preparation of the World Radiocommunication Conference (WRC-93)

Preparatory work within the Radiocommunication Bureau for WRC93 was limited to the consideration of all Resolutions and Recommendations in the Radio Regulations which refer either to a "competent conference" or to action to be undertaken either by the former IFRB or CCIR together with a short indication on the action taken and/or the status of studies.

5.2.6.7 Support of Study Group Activities

The Radiocommunication Bureau has provided a bulletin board service in TIES, on a pilot basis, in order to support FPLMTS study of Task Group 8/1. About 40 TIES users of Task Group 8/1 members, covering 17 countries and 1 international organization, have actively used the bulletin board and/or TIES E-mail in order to facilitate the activities of the Task Group in the interval between formal meetings of the Task Group. The bulletin board was used to post editors' draft Recommendations for comments by all the members up to a certain date agreed in the previous meeting and the editors updated the draft Recommendation based on the comments. The updated draft Recommendations were posted in the bulletin board again for further comments or input to the next meeting for discussion by all the members. This procedure allowed a draft Recommendation to be updated in a period as short as 3 months for timely adoption. The bulletin board also provided a possibility for the TIES users to retrieve most of the contributions submitted to the Radiocommunication Bureau after the final dispatch of documents, six weeks before the

meeting, since most of the contributions to this Task Group were submitted electronically, by diskette or by E-mail. Information about the experts meetings agreed in the previous meeting of the Task Group was also distributed by this TIES bulletin board or E-mail.

An improved software version of the HF propagation prediction method contained in Rec.ITU-R PI.533 (REC533) was made available to BR. *Inter alia*, the new version contains a comprehensive antenna package in accordance with that given in Recommendation ITU-R BS.705. Also available from BR, is a digitized version of the rainfall climatic maps contained in Rec.ITU-R PN.837.

The Study Group Counsellors and Senior Counsellors, in particular, assisted the chairmen in organizing and managing the technical work of the Study Groups and assure coordination between and among the Study Groups and external activities such as ISO, IEC, ETSI, EBU, ABU, etc., as well as with Telecommunication Standardization Study Groups. Computer programs dealing with propagation, spectrum and orbit management and broadcasting are also coordinated by the responsible Counsellors as are electronic bulletin boards for certain study group activities. In addition to the bulletin board that supports the FPLMTS study of Task Group 8/1, a new bulletin board was set up late in 1993 to support the work of the Task Groups of Study Group 2 (formerly Study Group 12).

5.2.6.8 Software development and implementation; data bases for frequency management

The computerized Frequency Management System (FMS) and the Space Network System (SNS), used in the Radiocommunication Bureau for the orderly processing of notices, represent very large application systems reflecting the complexities inherent to the Radio Regulations. The FMS occupies over 1 000 separate programs, more than 400 screens and almost 1.3 million lines of code. Approximately 2 000 elements are used to describe about 250 record types and 800 data elements in the various data bases. The SNS, although not quite as large yet and more modern, but comparatively complex, and still in development in the current environment in accordance with the HLC recommendations, will also be a large application system. Existing software is maintained and updated in accordance with conference decisions and operational requirements.

At present, the Magnetic Reference File (MRF), which is the electronic version of the Master International Frequency Register contains about 1.2 Mio assignments with about 5.6 Mio records. Data bases for terrestrial plans presently contain 150 000 assignments with about 1 Mio records.

The use of microcomputers has expanded and is expected to expand further in order to off-load some of the work from the mainframe computer and to automate other work which has been done manually.

Large volumes of data are now published regularly on CD-ROM. This concerns the International Frequency List, the terrestrial frequency assignment Plans, to which the Space Network List with all specific data including graphical data for the latter have been added. In addition the Weekly Circular and its Special Sections are made available on a weekly basis and can be used together with the data on CD-ROM through a software package for local frequency management. The HF Broadcasting Schedules are now published regularly on diskette. Also now accessible through TIES is the List of Ship Stations with possible queries on relevant data (MARS). Further software packages are in preparation which will allow remote users to capture, validate and submit electronically their notification data to the BR, which will simplify the notification process.

To further promote computer-assisted spectrum management and to improve access to available software, an ITU Software Data Base has been established which is also accessible through TIES. It contains detailed descriptions of available relevant software. It is intended to include in the catalogue software for "what-if" studies in particular within the framework of existing

Regional Agreements. Software from this catalogue is available for all interested parties. The present "best-seller" is a package to determine the co-ordination requirements for space networks in Appendices 30/30A/30B of the RR.

5.2.6.9 Publications

a) Radio Regulatory matters

Weekly Circular

The Weekly Circular is despatched, on paper and microfiche, to the administrations of all Members of the Union every week by airmail; it contains in Part I all complete frequency assignment notices received by the Bureau, in Part II the favourable Findings by the Bureau resulting in entry of the assignment in the Master Register and, in Part III, the unfavourable Findings resulting in the return of the notice to the notifying administration. Part IV contains notified changes to the current tentative HFBC Schedules. Annexed to the Weekly Circular is an appendix which contains additions and changes to the explanation of symbols and remarks adopted since the publication of the last edition of the Preface to the International Frequency List. Also annexed, as and when required, are Special Sections forming part of the procedures involving advance publication and coordination procedures for stations in space Radiocommunication services and coordination procedures for stations in space Radiocommunication services and those for bringing up-to-date the Frequency Allotment Plan (Appendix 25 - HF broadcasting and television). Thus, between 51 and 52 Weekly Circulars are despatched every year.

The data contained in the Weekly Circular is also available on diskettes (WIC-on-Diskette) to facilitate the treatment of this data. It provides a more flexible and easier method of access than the microfiche version.

International Frequency List (List 1)

The International Frequency List (IFL) is a service document published by the Radiocommunication Bureau (BR) of the ITU, which, in response to the provisions of the Radio Regulations, contains information extracted from the Master International Frequency Register. This list is published twice a year, on microfiche and on CD-ROM.

List of stations in the Space Radiocommunication Services and in the Radio Astronomy Service (List VIIIA)

List VIIIA contained particulars of earth stations, space stations and radio astronomy stations. This list has been discontinued and is replaced by an important publication, the Space Radiocommunications Stations on CD-ROM, the first issue of which was published in October 1993. This publication contains coordination requests for satellite networks and earth stations received by the bureau in accordance with RR1060 and RR1113, respectively, as well as the notifications for satellite networks and earth stations received under Article 13 that have been recorded in the Master Register. This publication will be published twice per year at the same time as the IFL publication. In addition, List A/B, a quarterly publication of the Space Network List has been extended to cover BSS, GSO and all non-GSO space stations. This latter list is available through TIES/ITUDOC, where it is updated weekly.

Service documents

		LIST IV	LIST V	LIST VI	LIST VII A	LIST VII B	LIST VIII	TOTAL
1993	Supplements	1	3	2	2			8
	Edition( )	1 (14th)	1 (33rd)		1 (16th)	1 (13th)		4

High Frequency Broadcasting Schedules

The HF Tentative and Final Schedules have been regularly published within the regulatory time frames. After carrying out a consultation with administrations and subscribers, it was decided that, as from March 94 seasonal period, the Schedules would be published on diskettes only. Extracts on paper are however sent to administrations at their request.

Radio Regulations

In accordance with HLC recommendations all activities previously performed by the General Secretariat in relation to the Radio Regulations (RR) and associated matters were transferred first to the CCIR and then, from 1 March 1993, to the BR, TSD Department.

b) Radiocommunication Study Group Recommendations, Handbooks and others.

In 1993, the following publications have been issued or were in preparation:

Fascicle of Recs	SG	Title	Number of Recs. (number of pages/ language)	Year of approval (type of approval)	Status as of 31/12/93
RIS	2 (ex 12)	RIS Series - Inter-service sharing and compatibility	5 (87)	1992 (corresp.)	Published
IS	2 (ex 12)	ITU-R IS Series - Inter-service sharing and compatibility	4 (111)	1993 (RA)	In preparation
Rec ITU-R IS.1009	2 (ex 12)	Rec. ITU-R IS.1009 - Compatibility between the sound broadcasting service in the band of about 87-108 MHz and the aeronautical services in the band 108-137 MHz	1 (57)	1993 (RA)	In preparation
S	4	ITU-R S Series - Fixed satellite service	13 (127)	1993 (corresp.)	Published
SF	4-9	SF Series - Frequency sharing and coordination between the Fixed satellite service and the fixed service	6 (48)	1993 (corresp.)	Published
SF	4-9	ITU-R SF Series - Frequency sharing and coordination between the fixed satellite service and the fixed service	1 (29)	1993 (RA)	In preparation
RPN	5	RPN Series - Propagation in non-ionized media	28 (340)	1992 (corresp.)	Published
RPI	6	RPI Series - Propagation in ionized media	11 (143)	1992 (corresp.)	Published
RBT	11	RBT Series - Broadcasting service (television)	29 (229)	1992 (corresp.)	Published

Fascicle of Recs	SG	Title	Number of Recs. (number of pages/ language)	Year of approval (type of approval)	Status as of 31/12/93
BT	11	BT Series - Broadcasting service (television)	3 (96)	1993 (RA)	In preparation
SNG	CMTT	SNG Series - Satellite news gathering	4 (26)	1993 (corresp.)	Being printed
V	CCV	V Series - Vocabulary and related subjects	5 (28)	1993 (RA)	In preparation
Total (Recs)	-	-	110 (1321/ language)	-	-
Manual	4	Supplement Nº 2 to Handbook on satellite communications	1 fascicle (31/ language)	1993	Published
Addenda to Volume XV	All	New or modified Questions	104 Questions (160/ language)	1992, 1993	Published
Radiocom Assembly Administr. Books (5)	-	Nº 1 ITU-R Resolutions and Opinions Nº 2 Minutes of Plenary Session - Activities Nº 3 List of ITU-R Recommendations - Index of technical topics Nº 4 Resolution ITU-R 5 - Texts of Questions Nº 5 Resolution ITU-R 18	5 books (860/ language)	1993 (RA)	In preparation

5.2.6.10 Seminars

a) Regional seminars

Owing to the reduced duration of the regular seminars, resultant savings were used to organise the following regional seminars on Spectrum Management:

Caracas, Venezuela	March, 1993
Cairo, Egypt	April, 1993
St. Petersburg, Russia	September, 1993
Islamabad, Pakistan	October, 1993
Suva, Fiji	October, 1993

b) Training sessions

The Bureau welcomes every year a number of trainees at the Headquarters who desire to become familiar with its structure and working methods.

However, with the increased workload and reduced staff, a solution had to be implemented to limit the impact of these visits on the normal work of the Bureau. Starting in 1993, training sessions are organised twice a year, the first one during the spring and the second one in the autumn. Potential trainees are invited to schedule their visits during these two periods.

c) Other seminars and meetings

A Senior Counsellor and Counsellor from the Radiocommunication Bureau participated as lecturers at the "Third ICTP-URSI College on Theoretical and Experimental Radio Propagation Physics", Trieste, Italy, in February 1993. The lectures, which were on spectrum engineering, electromagnetic compatibility and radiowave propagation, were addressed to an audience entirely from developing countries.

A seminar on New Technologies in Sound and Television Broadcasting (Singapore, May 1993) organized by the ITU/BDT, ABU and FES (Friedrich Ebert Stiftung Foundation) was attended by more than 50 participants from the public and private broadcasting sector. A Radiocommunication Bureau Counsellor gave lectures on a number of topics.

The EBU/ITU Seminar on the State of the art in Radio Data System (RDS) technology (Sofia, Bulgaria, June 1993) was mainly addressed to the eastern European operators in the field of Radio Data Systems and was attended by more than 100 participants. A Radiocommunication Bureau Counsellor gave a lecture on "world-wide evolution and application of the RDS Standard".

In order to assist understanding of the ongoing work in developing systems for enhanced TV, a Workshop on Enhanced Television Systems, sponsored by the ITU Radiocommunication Bureau, ABU, EBU and BCL was organized in New Zealand in October 1993.

An ITU Radiocommunication Bureau Workshop on Digital Terrestrial Television Broadcasting (Los Angeles, USA , October-November 1993) was held in conjunction with the 1993 SMPTE National Conference. Papers were presented in all major aspects of digital television broadcasting prepared by experts invited from the international community. Demonstrations of the results were also included.

The Radiocommunication Bureau actively participated in the Seminar on Mobile Satellite Communications for Latin America organised jointly by ICE (CTR), INMARSAT and the ITU in Costa Rica (S. Jose), on 16-18 September 1993.

5.2.6.11 Collaboration with international organizations and other sectors of the ITU; participation in the activities of the BDT

Close cooperation is maintained with the International Maritime Organization (IMO), International Civil Aviation Organization (ICAO), and the International Maritime Satellite Organization (INMARSAT) as well as other international and regional satellite operating organizations such as INTELSAT, EUTELSAT and Arabsat, Comité international radiomaritime (CIRM), Comité international de la Croix-Rouge (CICR), International Association of Lighthouse Authorities (IALA), International Hydrographical Organization (IHO), COSPAS-SARSAT and International Amateur Radio Union (IARU), all of which participate actively in the work of the Study Groups.

The Radiocommunication Bureau took an active part in the work of the Legal Sub-Committee of the United Nations' Committee on the Peaceful Uses of Outer Space (UN-COPUOS). The Legal Sub-Committee of the COPUOS had on its agenda questions on the character and utilisation of the geostationary orbit and the definition and delimitation of outer space. The common understanding of the UN Committee members was that the GSO, because of its specific characteristics and features and its nature of being a limited natural resource, requires scientific, technical, political, and strategic considerations by the United Nations but these considerations should not lead to controversial regulations in the different forums of the UN family. The role of the ITU in the domain of regulating space activities and the use of the GSO has been, in particular, recognised and it is admitted that the treaty making activities of the UN should be complementary to the activities of the ITU and without prejudice to the role of the ITU. In 1993, the ITU hosted the UN Inter Agency Meeting intended to coordinate the space related activities of the

different Specialised Agencies of the UN family. A report of the Meeting will be submitted to the forthcoming meetings of the COPUOS and its sub-committees. ITU officials and experts also participated in several regional seminars and symposia organised by the Outer Space Office of the UN.

A number of Questions for studies in Radiocommunication Study Groups have elements of common interest of Telecommunication Standardization Study Groups and such studies have been carried out in close cooperation and coordination with each other. In order to facilitate the cooperation and coordination, taking into account the reform of the ITU decided by the Additional Plenipotentiary Conference, Geneva, 1992, the concept of Intersector Coordination Groups (ICGs) was first adopted by the World Telecommunication Standardisation Conference (WTSC), Helsinki, March 1993, and then was approved by the Radiocommunication Assembly held in Geneva in November 1993. Endorsement of the Radiocommunication Assembly was given to two ICGs on satellite matters and FPLMTS. The ICG on satellite matters met first in Geneva from 21 to 23 June 1993 in order to coordinate the review of Recommendations being developed in both Sectors in order to assure a continuing and full integration of the satellite transmission medium in public digital networks, including the ISDN, taking account of the emerging technologies, applications and services. The second meeting was planned to be held in Baltimore, Maryland from 10 to 12 January 1994. The first meeting of the ICG on FPLMTS was scheduled to be held on 3 and 4 February 1994 to discuss such topics as the identification of dependencies among Study Groups and Task Groups for work progression, the identification and elimination of duplication of tasks and the creation of harmonised FPLMTS work plans.

BR has continued to collaborate with BDT in the area of radiowave propagation, particularly with regard to the establishment of measurement experiments and the analysis of data from low latitude, tropical regions. For Africa, almost one year of VHF measurements have been obtained on a long-distance over-land path in Senegal. The data, which indicate a high occurrence of super-refractive behaviour, are being analysed in detail at the International Centre for Theoretical Physics (ICTP) at Trieste (Italy), under the supervision of BR. An investigation of fading characteristics on line-of-sight paths in Ghana also continued through 1993. These data, as well as those submitted to ITU-R Study Group 5 from experiments in other tropical regions, are of considerable value to the current development of related prediction methods.

A BR counsellor was invited to lecture at a Seminar on "Radiowave propagation in tropical regions (with special reference to ITU measurements in Africa)", organized by BDT and hosted by ICTP (Italy) in November/December 1993. Some fifteen developing countries participated. In addition to some tutorial presentations, the Seminar provided a valuable opportunity to expose the results of recently acquired measurements (mainly from Africa), and to formulate plans for further experiments.

BR has discussed with BDT a potential programme of propagation measurements in the Asia-Pacific region, with emphasis on terrestrial VHF/UHF paths. Additionally, with the help of BDT, BR hopes to install some sets of measurement equipment for HF field strength as part of the world-wide campaign proposed by ITU-R Study Group 6.

BR has established strong connections with the International Centre for Theoretical Physics (ICTP) at Trieste (Italy) which has, as a principal objective, the advancement of science and engineering in developing countries. BR staff have been involved in lectures, seminars and workshops at ICTP, particularly relating to aspects of spectrum management and propagation in developing countries, as well as providing expertize on specialized projects and propagation experiments under development in these countries. Resident engineers at ICTP are also helping with the analysis of propagation data acquired from ITU sponsored experiments. The liaison with ICTP has recently led to the signing of an MOU supporting continuing collaboration between ITU, ICTP and URSI.

The Director participated at the XXIV General Assembly of URSI held in Kyoto, August 1993. In addition, certain BR counsellors continue to follow the activities of the URSI Scientific

Committee for Telecommunications (SCT), established to identify and to stimulate studies in radio science of common interest both to URSI scientists and to engineers involved with the work of ITU-R.

Substantial portions of the frequency spectrum are allocated to broadcasting, which entails extensive cooperation with regional broadcasting organizations such as the EBU, ABU, ASBU, NANBA, URTNA and with some regional telecommunication organizations that deal with broadcasting (e.g., CITEL). The broadcasting Unions and their collective representation through the World Broadcasting Unions participate actively in the Steering Committee of ITU-R Study Groups 10 and 11, which also includes coordination with ITU-T Study Group 9 on Television and Sound Transmission in the public telecommunication network.

Cooperation has been enhanced considerably with CEPT units dealing with radiocommunication matters and the BR has commented on CEPT's first phase of the Detailed Spectrum Investigation covering the frequency bands 3.5 - 105 GHz.

The Radiocommunication Bureau also maintains traditionally close relations with standardization organizations such as the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and the International Special Committee on Radio Interference (CISPR). The work of the joint IEC/ISO Motion Picture Experts Group (MPEG) on defining video and audio compression algorithms has been closely coordinated with the work of ITU-R Study Groups 10 and 11 and ITU-T Study Group 9 (former CMTT).

Regular contacts and exchange of information take place with international scientific organizations involved in radiocommunication research such as the International Union of Radio Science (URSI), whose work is closely coordinated with several Radiocommunication Study Groups.

Other organizations with which contact is maintained are the Bureau International des Poids et Mesures (BIPM), International Council of Scientific Unions (ICSU), Inter-Union Commission on Frequency Allocations for Radio Astronomy and Space Sciences (IUCAF), International Astronomical Union (IAU) and the World Meteorological Organization (WMO).

Close cooperation continued between the Directors and Secretariats of the Radiocommunication Bureau, the Telecommunication Standardization Bureau (TSB) and the Telecommunication Development Bureau (BDT) in 1993, particularly with respect to the transfer of work from the former CCIR to the Telecommunication Standardization Study Groups. The Director and a Senior Counsellor participated in the first World Telecommunication Development Conference (Helsinki, March 1993). Subsequent meetings of the advisory groups dealing with the Study Group work of the two Sectors confirmed the transfer of work and transition arrangements developed during the WTSC. The Radiocommunication Assembly (Geneva, November 1993) endorsed and formalized these arrangements and completed the transfer of work carried out in the former joint Study Group on sound and television transmission (CMTT), which was replaced by new Telecommunication Standardization Study Group 9.

The Radiocommunication Bureau provides ongoing support to the Telecommunication Development Bureau (BDT) by reviewing project documents and project reports, in identifying equipment and evaluating equipment specifications, by participating in the identification and selection of experts for telecommunication development projects, and in collaborating in sponsoring and arranging the technical programme for ITU seminars related to radiocommunication development.

Radiocommunication Bureau Counsellors continue to follow the activities of the URSI Scientific Committee for Telecommunications (SCT), established to identify and to stimulate studies in radio science of common interest both to URSI scientists and to engineers involved with the work of ITU-R.

The Recommendations, Reports, Handbooks and Special Publications of the radiocommunication study groups are intended to support planning, specification, operation and maintenance of radiocommunication (including broadcasting) systems in all countries. The study groups carry out substantial additional studies to facilitate applications in developing countries, and Handbooks are written with the special interests of developing countries in mind. Information seminars are specifically designed to benefit developing countries in preparing for conferences and to help them in applying the Radio Regulations.

Specific topics of interest to developing countries covered by various study group activities include:

- technical information for radio-frequency management, monitoring and planning, including radiowave propagation information;
- technical criteria for efficient utilization and sharing of the frequency spectrum and communication satellite orbits;
- standards of performance and interworking for international radiocommunication facilities, including those on aircraft and ships, and satellite communications;
- safety-of-life and distress communications;
- emission systems and sharing criteria for television and sound broadcasting, including satellite broadcasting.

It has been an important part of the studies on FPLMTS by Study Group 8 to defined the FPLMTS so as to provide cost effective and flexible access to the global telecommunication network in developing countries.

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5.3 ITU Telecommunication Standardization Sector (ITU-T)
International Telegraph and Telephone Consultative Committee (CCITT)

5.3.1 Introduction

Between the Plenipotentiary Conferences of Nice (1989) and Kyoto (1994), it was planned to hold the Xth Plenary Assembly of the CCITT. Following the decisions of the Additional Plenipotentiary Conference (Geneva, 1992), the activities of the Plenary Assembly were incorporated in the work of the World Telecommunication Standardization Conference. This Conference was held for the first time from 1 to 12 March 1993 in Helsinki, at the kind invitation of the Government and the Telecommunication Administration of Finland. It was chaired by Mr. S.J. Halme (Finland), assisted by the following Vice-Chairmen: Mr. J.J. Silva (Brazil), Mr. E.S. Barbely (United States), Mr. Y.A. Tolmachev (Russia), Mr. S. Mbaye (Senegal) and Mr. Wang Zhanning (China).

5.3.1.1 The Conference completed its work in the seven Conference Committees. It approved the results of the work of the ad hoc Group - Resolution 18, established following the IXth Plenary Assembly, open to all administrations, all recognized operating agencies and scientific or industrial organizations participating in the work of the CCITT for the purpose of continuing studies related to the working methods and structure of the CCITT and to the CCITT's relations with other relevant bodies inside and outside the ITU. The results of the work of the ad hoc Group - Resolution 18 are the present structure of the Study Groups, which is reproduced in Annex 1 to Section 5.3, and the working methods of the Telecommunication Standardization Sector, which are contained in Resolutions 1 and 2 of this Conference.

5.3.1.2 The World Telecommunication Standardization Conference also appointed the Chairmen and Vice-Chairmen of the Study Groups and approved the budget estimates for the period 1993-1997, which were submitted to the 1993 Council session in Document C93/29.

5.3.1.3 The World Telecommunication Standardization Conference (Helsinki, 1993) set up the Telecommunication Standardization Advisory Group (TSAG) in the light, firstly, of the proposals made by the ad hoc Group - Resolution 18 and, secondly, of Resolution 3 of the Additional Plenipotentiary Conference (Geneva, 1992).

Since the Helsinki Conference, the Group has held two meetings and has made substantial progress with the planning and harmonization of studies and preliminary proposals with regard to the priorities for the drafting of Recommendations, in accordance with the needs of users and of the market. The Telecommunication Standardization Advisory Group has just started work. The next report will be able to give much more detailed information on the subject.

The EDH Group (Electronic Document Handling Group) has also been set up within the TSAG in accordance with Resolution 10 of the WTSC-93.

5.3.1.4 This report covers the activities of the International Telegraph and Telephone Consultative Committee (CCITT) for January and February 1993 and the activities of the Telecommunication Standardization Sector from March to December 1993.

5.3.2 Activity in 1993

In 1993, the Telecommunication Standardization Bureau's main activities were organizing the work of the Study Groups and their Working Parties and completing Recommendations. In all 36 meetings totalling 207 days were held in 1993, excluding the Telecommunication Standardization Conference (see Table I - List of meetings held in 1993).

In accordance with the provisions of Resolution 1 of the WTSC-93, Section 8 "Approval of new or revised Recommendations", 24 new Recommendations and 21 revised Recommendations have been approved by Members since the WTSC-93. For its part the World Telecommunication Standardization Conference has approved 177 new Recommendations and 281 revised Recommendations. In total, 201 new Recommendations and 302 revised Recommendations were approved in 1993.

Details of Study Group meetings may be found in the meeting reports, which are distributed to the members of the Telecommunication Standardization Sector.

Tables II and III give information on participation in ITU-T meetings and on contributions received in 1993.

5.3.3 New organizations admitted to participate in the work of the Telecommunication Standardization Sector

In 1993, 13 recognized operating agencies and 8 scientific or industrial organizations were admitted to participate in the work of the ITU-T. By the end of 1993, the number of organizations participating in the ITU-T's work stood at:

- Recognized operating agencies: 89
- Scientific or industrial organizations: 142
- International organizations: 38

The new admissions are:

a) Recognized operating agencies

Germany	Mannesmann Mobilfunk GmbH, Düsseldorf (1/2 unit)
Ecuador	Empresa Estatal de Telecomunicaciones, Quito (1/2 unit)
Spain	Organismo Autónomo Correos y Telégrafos, Madrid (1/2 unit)
United States	GE Information Services, Rockville (MD) (1/2 unit)
Italy	IRITEL S.p.A., Roma (1/2 unit)
Japan	Tokyo Telecommunication Network Co., Inc., Tokyo (1/2 unit)
Mexico	Telecomunicaciones de México - TELECOMM, Mexico D.F. (1/2 unit)
Norway	Norwegian Telecom, Oslo (1 unit)
Philippines	Globe Telecom (GMCR, Inc.), Manila (1 unit)
Slovak Republic	Slovak Telecommunications, Bratislava (1/2 unit)
Czech Republic	SPT Telecom s.p., Prague (1/2 unit)
Sweden	Fonetel Global Communications AB, Malmö (1/2 unit) Telia AB, Farsta (1 unit)

b) Scientific or industrial organizations

Germany	Bosch Telecom Öffentliche Vermittlungstechnik GmbH, Eschborn (1/2 unit)
United States	Hewlett-Packard Company, Palo Alto (CA) (1/2 unit) Polycom, Inc., San Jose (CA) (1/2 unit) Silicon General, Inc., San Jose (CA) (1/2 unit)
Finland	Martis Oy, Espoo (1/2 unit)
France	Canon Research Center France, Cesson-Sévigné (1/2 unit) Verilog S.A., Toulouse (1/2 unit)
Japan	The new ITU Association of Japan, Inc., Tokyo (1/2 unit)

5.3.4 Telecommunication Standardization Sector publications

5.3.4.1 Recommendations approved pursuant to CCITT Resolution No. 2

D.90, D.95, D.140, D.150, D.155, D.188, D.300 R, E.105, E.116, E.118, E.140, E.151, E.166, E.170, E.172, E.202, E.220, E.230, E.410, E.411, E.412, E.424, E.425, E.426, E.428, E.508, E.700, E.701, E.710, E.711, E.712, E.713, E.730, E.731, E.810, E.820, E.830, E.850, F.1, F.60, F.200, F.400, F.401, F.410, F.420, F.423, F.440, F.500, F.720, F.721, F.730, F.811, F.812, G.712, G.765, G.766, G.774, I.312/Q.1201, I.328/Q.1202, I.329/Q.1203, M.10, M.20, M.21, M.75,

M.85, M.1130, M.1140, M.1150, M.1160, M.1300, M.1400, M.1510, M.1520, M.1530, M.1550, M.1560, M.2100, M.2110, M.2120, M.2130, M.3010, M.3020, M.3100, M.3180, M.3200, M.3300, M.3400, M.3600, M.3602, M.3603, M.3604, M.3605, M.3620, M.3640, M.3660, M.4010, M.4030, M.4110, O.3, O.11, O.22, O.150, O.151, O.152, O.153, O.162, O.171, T.50, T.51, T.80, T.417 Add., T.431, T.432, T.433, T.434, T.521, T.522, T.571, T.611, V.110, V.120, X.21, X.121, X.122, X.134, X.135, X.136, X.137, X.138, X.139, X.140, X.213, X.217, X.227, X.237, X.248, X.249, X.292, X.402, X.411, X.413, X.419, X.420, X.440, X.480, X.481, X.482, X.483, X.484, X.485, X.581, X.582, X.610, X.613, X.614, X.660, X.665, X.700, X.712, X.720, X.722, X.730, X.731, X.732, X.734, X.735, X.740, X.860, X.861.

5.3.4.2 Recommendations approved by WTSC-93

B.18, C.2, C.3, E.113, E.134, E.161, E.168, E.451, F.30, F.63, F.140, F.160, F.180, F.182, F.184, F.220, F.551, F.600, F.850, F.901, G.654, G.707, G.708, G.709, G.803, G.825, G.831, G.960, G.962, G.963, H.200, I.112, I.114, I.120, I.122, I.150, I.210, I.211, I.221, I.310, I.311, I.325, I.327, I.350, I.351, I.352, I.353, I.354, I.355, I.361, I.362, I.364, I.371, I.372, I.373, I.374, I.411, I.413, I.414, I.500, I.501, I.510, I.520, I.525, I.530, I.570, I.580, Q.921bis, Q.1200, Q.1205, Q.1208, Q.1211, Q.1215, Q.1290, V.13, X.1, X.2, X.3, X.6, X.7, X.10, X.25, X.28, X.29, X.30, X.31, X.32, X.75, X.96, X.218, X.220, X.301, X.340.

5.3.4.3 Handbooks

- Introduction to CHILL
- Handbook on quality of service and network performance
- Guide for ITU-T and ISO/IEC JTC 1 cooperation
- Book No. 1, Helsinki, 1993
- Book No. 2, Helsinki, 1993

5.3.5 Activities under WTSC-93 Resolution 17 "The importance of telecommunication standardization for the developing countries"

In this field, the Telecommunication Standardization Bureau contributed to seminars and the consideration of reports by the Telecommunication Development Bureau.

The TSB participated in meetings concerning the recruitment of experts and gave advice on the choice of equipment.

The Director of the TSB also took part in various regional telecommunication development meetings.

5.3.6 Cooperation with the Radiocommunication Sector

As in the past, very active cooperation has been maintained with the Radiocommunication Sector, in particular with respect to:

- satellite matters, and
- activities relating to the Future Public Land Mobile Telecommunication Systems

for which two Intersector Coordination Groups were established by the World Telecommunication Standardization Conference, Helsinki, 1993, and confirmed by the Radiocommunication Assembly (November, 1993).

Furthermore, in addition to the transfer of the Study Group responsible for television and sound transmission (formerly CMTT of the CCIR) to the Telecommunication Standardization Sector (Study Group 9 of the ITU-T), Questions or parts of Questions of the former CCIR which were to be transferred to the Telecommunication Standardization Sector were carefully examined at the TSAG meeting in October 1993. The WTSC prepared a detailed report which was made available to the Radiocommunication Assembly (November 1993). Thus, the proposals made in the documents of the Directors of the two Sectors led to these Questions being distributed among the Study Groups of the Telecommunication Standardization Sector. Work is under way on the distribution of the remaining studies between the Radiocommunication Sector and the

Telecommunication Standardization Sector, in particular in joint meetings of the Telecommunication Standardization Advisory Group (TSAG) and the Radiocommunication Advisory Group (RAG). A joint TSAG/RAG meeting has already been held in 1993.

5.3.7 Cooperation with other international organizations

Close cooperation is maintained with organizations interested in the Telecommunication Standardization Sector's studies.

The Director and the TSB have participated in a number of meetings held by such organizations, in particular UPU, IEC and ISO, with a view to coordinating the respective activities as far as possible.

The Resolutions adopted by the World Telecommunication Standardization Conference, Helsinki 1993, on the subject of collaboration with the UPU, IEC and ISO have strengthened relations between those organizations and the ITU-T.

Furthermore, the Director of the TSB participated in the Assemblies of ETSI and close cooperation may be noted in areas of common interest.

TABLE I

List of meetings held in 1993

Date	Meeting
12 - 15 January	Working Parties of Study Group XVII (Data Transmission over the Telephone Network)
19 - 26 January	Ad hoc Group - Resolution 18 (CCITT working methods and structure)
19 - 29 January	Working Parties of Study Group XVIII (ISDN)
21 - 29 January	Working Parties of Study Group IV (Maintenance)
2 - 4 February	TAF Group (Tariffs (Africa)) (Study Group III)
1 - 12 March	World Telecommunication Standardization Conference - WTSC-93
13 - 20 April	Study Group 9 (ex-CMTT) (Television and sound transmission) and its working parties
20 - 30 April	Study Group 1 (Service definition)
27 April - 6 May	Study Group 8 (Terminals for telematic services)
3 - 7 May	Quality of Service Development Group (QSDG) of Study Group 2
3 - 19 May	Study Group 11 (Switching and signalling)
10 - 19 May	Study Group 12 (End-to-end transmission performance of networks and terminals) and its working parties
17 - 18 May	Study Groups 4 and 11 Experts Joint Meeting on TMN
19 - 21 May	TMN Joint Coordination Group
1 - 3 June	TSAG - Telecommunication Standardization Advisory Group
4 June	Joint meeting of the Telecommunication Standardization Advisory Group (TSAG) and the ad hoc Group for Resolution 106 (CCIR)
1 - 11 June	Study Group 2 (Network operation)
14 - 18 June	Study Group 3 (Tariff and accounting principles)
15 - 18 June	Study Group 5 (Protection against electromagnetic environment effects)
21 - 23 June	Intersector coordination group to deal with satellite matters
21 - 24 June	Study Group 6 (Outside plant)
22 June - 2 July	Study Group 7 (Data networks and open system communications)
28 June - 2 July	TEUREM Group (Tariff Group for Europe and the Mediterranean Basin)
5 - 16 July	Study Group 13 (General network aspects)
30 August - 3 Sep.	Study Group 14 (Modems and transmission techniques for data, telegraph and telematic services)
7 - 17 September	Study Group 15 (Transmission systems and equipment)

4 - 15 October	Study Group 4 (Network maintenance) and its working parties
11 October	Working Party EDH (Electronic Document Handling) of the Telecommunication Standardization Advisory Group
12 - 15 October	Telecommunication Standardization Advisory Group
14 - 26 October	Working Parties of Study Group 9 (ex-CMTT) (Television and sound transmission)
18 - 19 October	Joint meeting of the IN Group and the Joint coordination group on TMN
19 - 28 October	Study Group 10 (Languages for telecommunication applications)
27 - 29 October	TAS Group (Tariff Group for Asia and Oceania) (Study Group 3)
1 - 5 November	Working Parties of Study Group 3 (Tariff and accounting principles)
16 - 25 November	Study Group 8 (Terminals for telematic services) and its working parties
29 Nov. - 17 Dec.	Study Group 11 (Switching and signalling) and its working parties
7 - 9 December	Joint coordination group on B-ISDN

Appendix to Table I

In addition to the meetings listed in Table I, a number of meetings with limited participation were convened by Chairmen of Rapporteurs in 1993, either in or away from Geneva. The main meetings in this category, as notified to the TSB, are listed below.

Date	**Meeting**
12 - 14 May	Group of experts on Question 1/14
13 - 15 September	Group of experts on Questions 5/8 and 13/8
1 - 3 December	Rapporteur's group for Question 21/13

TABLE II

Member countries represented (by Administrations and/or ROAs) at meetings of the Telecommunication Standardization Sector in 1993

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties *)														ICG	Regional Tariff Groups			Ad hoc Group	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM	Res. 18			
Albania																					X	1
Germany	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	18
Saudi Arabia			X														X				X	3
Argentina		X	X		X	X				X		X		X							X	8
Australia	X	X	X	X			X	X		X		X		X			X		X	X	X	13
Austria	X	X		X		X	X	X		X	X	X	X	X							X	12
Bahamas			X		X																X	3
Bahrain			X														X				X	3
Belgium	X	X	X	X		X	X			X		X		X				X		X	X	12
Benin																X					X	2
Bolivia			X																			1
Botswana																X						1
Brazil	X	X	X	X	X		X	X	X	X	X	X	X	X					X	X	X	16
Bulgaria																					X	1
Burkina Faso																X					X	2

*) Study Group 9 (formerly CMTT), transferred to the ITU-T as a result of the decisions taken by the APP-92, was administered by the ITU-R until the end of November 1993.

TABLE II (continued)

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties														ICG	Regional Tariff Groups			Ad hoc Group	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM	Res. 18			
Cameroon		X	X				X			X						X					X	6
Canada	X	X	X	X	X		X	X	X	X	X	X		X					X	X	X	15
Cape Verde																X						1
Central African Rep.																X						1
Chile			X							X											X	3
China	X	X	X	X	X	X	X	X	X	X	X	X	X	X					X	X	X	17
Cyprus		X																X			X	3
Colombia			X																		X	2
Congo																X						1
Korea (Rep. of)	X	X	X	X			X	X	X	X	X	X	X	X					X	X	X	15
Côte d'Ivoire																X						1
Cuba		X	X																		X	3
Denmark	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	18
Djibouti																X						1
Egypt																					X	1
United Arab Emirates			X														X				X	3
Ecuador			X																			1
Spain	X	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X	17
Estonia			X					X		X				X								4

TABLE II (continued)

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties														ICG	Regional Tariff Groups			Ad hoc Group Res. 18	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM				
United States	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	18
Ethiopia			X													X					X	3
Fiji		X	X																			2
Finland	X	X	X		X	X				X		X		X				X	X	X	X	12
France	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	20
Gabon																					X	1
Ghana																X						1
Greece	X	X	X	X	X	X	X	X			X	X		X				X	X	X	X	15
Guatemala			X																			1
Guinea		X														X						2
Honduras			X																			1
Hungary	X	X	X	X	X		X			X	X	X		X				X	X	X	X	14
India								X	X			X		X			X				X	6
Indonesia		X	X					X		X		X		X			X		X		X	9
Iran (Islamic Rep. of)			X	X								X	X	X					X	X		7
Ireland	X	X		X									X							X	X	6
Iceland																					X	1
Israel	X		X					X				X		X							X	6

TABLE II (continued)

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties														ICG	Regional Tariff Groups			Ad hoc Group Res. 18	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM				
Italy	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	18
Japan	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X		X	X	X	18
Jordan																					X	1
Kenya		X	X													X				X	X	5
Kuwait			X					X									X				X	4
Lesotho																X						1
Lebanon			X															X			X	3
Luxembourg																					X	1
Madagascar																X						1
Malaysia			X									X					X				X	4
Malawi																X						1
Mali																X					X	2
Morocco																					X	1
Mexico																			X		X	2
Monaco																					X	1
Mozambique																X						1
Namibia																X						1
Nicaragua			X																			1

TABLE II (continued)

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties														ICG	Regional Tariff Groups			Ad hoc Group	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM	Res. 18			
Nigeria																X						1
Norway	X	X	X	X	X		X	X	X	X	X	X	X	X				X	X	X	X	17
New Zealand	X	X	X	X				X		X	X	X					X		X	X	X	12
Oman		X	X				X					X		X			X					6
Uganda			X																			1
Panama			X																			1
Papua New Guinea																					X	1
Paraguay		X																				1
Netherlands	X	X	X	X		X		X	X	X	X	X	X	X			X	X	X	X	X	17
Peru			X																			1
Philippines		X	X																		X	3
Poland			X															X			X	3
Portugal	X	X	X					X		X		X		X				X		X	X	10
Qatar			X											X								2
Syria			X										X					X		X		4
Slovakia		X	X						X	X		X								X	X	7
Czech Republic	X	X	X										X					X			X	6
Romania			X															X			X	3
United Kingdom	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	20

TABLE II (continued)

COUNTRY (Administrations or recognized operating agency)	Study Groups and their Working Parties														ICG	Regional Tariff Groups			Ad hoc Group	TSAG	WTSC-93	Total
	1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM	Res. 18			
Russia			X	X	X	X	X	X		X	X	X	X	X					X	X	X	14
Rwanda																X						1
Senegal			X								X	X		X							X	5
Sierra Leone																X						1
Singapore		X		X					X	X											X	5
Slovenia			X	X																		2
Sweden	X	X	X	X	X		X		X	X	X	X	X	X				X	X	X	X	16
Switzerland	X	X	X	X	X	X	X	X	X	X		X		X	X				X	X	X	16
Suriname			X																			1
Tanzania																X						1
Chad																X						1
Thailand	X	X	X	X	X	X	X	X		X		X	X	X			X			X	X	15
Togo																					X	1
Tunisia								X														1
Turkey			X																			1
Ukraine				X						X			X									3
Venezuela		X	X																		X	3
Zimbabwe																X						1
Total	28	41	65	29	21	18	24	28	18	33	21	35	22	34	5	25	15	19	25	30	68	

TABLE III

Participation in ITU-T meetings and contributions received in 1993

		Study Groups and their Working Parties *)														ICG	Regional Tariff Groups			Ad hoc Group Res. 18	TSAG	WTSC-93
		1	2	3	4	5	6	7	8	10	11	12	13	14	15	SAT	TAF	TAS	TEUREM			
Administrations		23	32	60	22	18	11	23	24	12	28	15	30	18	28	1	25	13	15	25	29	65
Recognized operating agencies		25	37	35	26	8	9	15	17	11	33	15	26	9	26	4	-	4	16	16	22	19
Scientific or industrial organizations		15	7	-	27	12	10	16	27	8	43	13	47	27	48	3	-	-	-	4	16	-
International organizations		5	3	8	3	1	-	3	3	-	4	2	2	-	3	4	1	-	1	-	8	8
Contributions	normal	24	15	20	8	3	6	93	43	5	4	27	15	6	49	-	-	1	1	-	2	
	delayed	86	31	18	23	13	2	30	25	9	42	14	00	91	51	-	2	2	5	23	24	
Reports		9	6	4	15	1	1	15	26	1	26	6	17	4	12	1	1	1	1	2	3	

*) Study Group 9 (formerly CMTT), transferred to the ITU-T as a result of the decisions taken by the APP-92, was administered by the ITU-R until the end of November 1993.

Annex 1
to Section 5.3

Structure of the ITU Telecommunication Standardization Bureau

Study Groups

Study Group 1 – Service definition

Chairman: M. ISRAEL (CAN)

Vice-Chairmen: A.K. CABRERA (AUS)
J. MARTORY (F)
R. SMITH (USA)

Study Group 2 – Network operation

Chairman: G. GOSZTONY (HNG)

Vice-Chairman: T. OHTA (J)

Study Group 3 – Tariff and accounting principles

Chairman: B. ROUXEVILLE (F)

Vice-Chairmen: T. MATSUDAIRA (J)
J.F.H. PAYMANS (HOL)

Study Group 4 – Network maintenance

Chairman: J. SHRIMPTON (USA)

Vice-Chairmen: M. MATSUSHITA (J)
A. ROJDESTVENSKY (RUS)

Study Group 5 – Protection against electromagnetic environment effects

Chairman: G. MEINERI (I)

Vice-Chairman: G. VARJU (HNG)

Study Group 6 – Outside plant

Chairman: K. NIKOLSKY (RUS)

Vice-Chairman: L. MOLLEDA S. (E)

Study Group 7 – Data networks and open system communications

Chairman: H.V. BERTINE (USA)

Vice-Chairmen: S. TOMITA (J)
CHU HWAN YIM (KOR)
V. QSSIPOV (RUS)

Study Group 8 – Terminals for telematic services

Chairman: W. STAUDINGER (D)

Vice-Chairmen: A. PUGH (G)
A. MACCHIONI (I)

Study Group 9 (former CMTT) – Television and sound transmission

Chairman: J.L. TEJERINA GARCIA (E)

Vice-Chairmen: G. ZEDLER (D)
R. GREEN (USA)

Study Group 10 – Languages for telecommunication applications

Chairman: O.F. FAERGEMAND (DNK)

Vice-Chairman: K. SCHULZ (D)

Study Group 11 – Switching and signalling

Chairman: S. KANO (J)

Vice-Chairmen: H. APPENZELLER (CAN)
E.A. MATARAZZO (B)
R. DAVID (BEL)

Study Group 12 – End-to-end transmission performance of networks and terminals

Chairman: P. LORAND (F)

Vice-Chairmen: N. GLEISS (S)
J. ROSENBERGER (USA)

Study Group 13 – General network aspects

Chairman: B.W. MOORE (G)

Vice-Chairmen: G. PELLEGRINI (I)
J.C. LUETCHFORD (CAN)
K. ASATANI (J)

Study Group 14 – Modems and transmission techniques for data, telegraph and telematic services

Chairman: K. KERN (D)

Vice-Chairman: R.P. BRANDT (USA)

Study Group 15 – Transmission systems and equipment

Chairman: P.A. PROBST (SUI)

Vice-Chairmen: M. YAMASHITA (J)
G.K. HELDER (USA)

Telecommunication Standardization Advisory Group

Chairman: B. HORTON (AUS)

Vice-Chairmen: K. ONO (J)
G. FISHMAN (USA)
J.M. FANJUL CAUDEVILLA (E)
R.F. BRETT (CAN)

Assistants to the Vice-Chairman: EUN-JU KIM (Ms) (KOR)
S.K. CHEMAI (KEN)

Regional Tariff Groups of Study Group 3

TAF Group – Tariff Group for Africa

Chairman: MESFIN HAILE (ETH)

Vice-Chairmen:[8]

TAL Group – Tariff Group for Latin America

Chairman: J. CORTAZAR GARCIA (CLM)

Vice-Chairmen:[8]

TAS Group – Tariff Group for Asia and Oceania

Chairman: P. WATT (NZL)

Vice-Chairmen: A. SHAHEED AL SATEEH (BHR)
S.P. PURWAR (IND)

TEUREM Group – Tariff Group for Europe and the Mediterranean Basin

Chairman: G. REPICI (I)

Vice-Chairmen: U. SELWET (Mrs.) (POL)
J. LECLOUX (BEL)
J. VAN BOLHUIS (HOL)
P. NAMMOUR (LBN)

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[8] The Vice-Chairmen are to be confirmed by the Groups themselves at their first meeting.

5.4 Telecommunication Development Sector (ITU-D)

Telecommunication Development Bureau (BDT)

The trend in telecommunications development which had become evident in 1992 continued to manifest itself 1993. 1992 saw a sharp decrease in UNDP-financed project implementation accompanied by an increase in demands from developing countries for ITU support to be funded from ITU's own resources. The BDT took account of this situation and assigned staff previously more involved in project implementation to direct support for developing countries funded from the BDT budget.

It is now better understood than in 1992 which factors contributed to the decrease in ITU project implementation. These are a mixture of policy changes by the UNDP and the effect of the increased decentralization of the BDT's activities. Experience with the BDT's Regional Presence has shown that some improvements can be made in this area. However, the greatest influence on the sharp decrease in ITU's project implementation seems to come from the increase in national execution of projects. Under this scheme, governments of developing countries decide themselves whether UNDP-funded projects are to be implemented by specialized agencies of the UN system, another international organization or by a private consultant of their choice. Private consultants enjoy a flexibility in their financial regulations which is unthinkable in the UN system and this financial flexibility seems to make a lot of difference when decisions are made on who should implement a project.

Regional development conferences created a large number of follow-up activities and show that there is a large unmet demand for assistance with telecommunications issues. The BDT tries to optimize its limited resources and assigns them in such a way as to obtain the best possible results through a catalytic approach. There are indeed many examples when even a small BDT involvement has saved an administration a considerable amount of money or significantly improved the quality of some installations.

The new Director of the BDT took office on 1 February 1993 and has established new procedures which both improve the BDT's efficiency and keep it in tune with the changing requirements of the telecommunications sector.

5.4.1 Field Operations Department (FOP)

In 1993, the FOP Department and the Regional Offices started working under the new structure which had been approved by the Council (Document CA46/7107). Today, there are 12 field offices in operation with a total of 43 staff members, of which 28 are at the Professional level. In headquarters, the FOP Department today has only nine Professional staff members.

The distribution of tasks between headquarters and Regional Offices has been done on the basis of decentralization and regionalization of the BDT. To better utilize available resources, the FOP Department together with Regional Offices has developed mission plans. The missions were undertaken to satisfy the requests received from Administrations for advice, consultations and assistance in telecommunication development, carry out pre-project activities to identify future potential projects, projects and resource mobilization activities and follow-up to the development conferences. The FOP and PSP Departments also developed plans to assist developing countries, especially LDCs, by means of sending specialists from headquarters and outside experts, fellowships, TCDC missions, organization of workshops and study groups, seminars, etc. Experience shows that programming BDT activities is very useful as it enables the BDT to devote its limited resources to priority areas. Programming of activities will be continued for 1994.

In 1993, the FOP handled 139 projects; compared to 1992, this is a decrease of 38 projects. Total delivery for 1993 was approximately US$ 17 million - delivery for 1992 was approximately US$ 20 million. In 1994 it is foreseen that approximately 110 projects will be handled with an expected delivery of US$ 15 million. 827 missions were undertaken in 1993, of which 260 were to LDC countries (the lion's share). The HRD and SSB Units carried out 92 missions to provide direct assistance to developing countries, 65 TCDC missions and 410 fellowships. Field offices personnel undertook 99 missions. As can be seen from the above, the first priority was given to LDCs (and the biggest contributions came from headquarters).

UNDP financial support has drastically decreased. In the last Inter-Agency Consultative Meeting (8-9 December 1993), the UNDP stated that from June 1994 to 1996, contributions from donor countries will decrease by 33%. UNDP is implementing the new regime for all specialized Agencies by means of national execution, programme approach, which will automatically lead to a decrease in UNDP activities for all small agencies, including ITU.

Furthermore, as telecommunications are not the first priority in countries' programming, the real decrease of financial contributions in the telecommunications field will in reality be larger. In some countries only a small percentage will be given to the telecommunication sector.

For these reasons, the situation is that the number of projects is decreasing in all Regions, with a consequent decline in the delivery of each Region year after year, especially in the Africa Region. Funds-in-Trust is the only financing source that has maintained a similar level throughout the period.

This explains why other sources to finance the necessary projects in developing countries have to be found (sources from private organizations, funds-in-trust provided by the projects' beneficiaries, etc.).

Resource mobilization activities are the first priority of ITU and BDT in order to increase project activities in the Regions.

Under such circumstances, the BDT tries to provide some assistance to the Administrations through its own regular budget. For this purpose, the BDT prepares a programme of activities on yearly bases, which strengthens its role as executing agency.

Experience in 1993, the latest developments in telecommunication and activities of the ITU, show that somehow the functions and tasks of the BDT should be adjusted. This will require some changes in the structure of the BDT. It has now been seen that dismantling the regional divisions in headquarters, leaving only one coordinator while increasing the functions and tasks of the FOP Department, believing that all would hence be done by the Regional Offices, does not work satisfactorily neither now nor in the future. Furthermore, harmonization and strengthening of the allocation of resources to the BDT should be envisaged in the near future.

Taking into account Resolution 17 (Nice, 1989) which asks "to evaluate the efficiency of the regional presence as part of its annual review of Union activities" and discussions during the Council '93, the BDT has launched a study of the regional presence by its internal evaluator, the Joint Information Unit and three Member Administrations of the ITU.

5.4.1.1 Africa

a) Status of the telecommunications network in Africa

The Africa Region, with its 600 million inhabitants, had, in 1991, a teledensity of 1.42 Main Telephone Lines (MTL) per 100 inhabitants and only 2% of the world main telephone lines in service in 1992. Sub-Saharan Africa, with more than 75% of the African population, in 48 countries, had the lowest teledensity in the world, with 0.39 MTL per 100 inhabitants. The telephone average growth rate between 1982 and 1991 was 7% in Sub-Saharan Africa compared with 13% in the North African countries.

The situation is alarming. Should this trend continue, the gap between Africa and the rest of the world will become wider and the African economies will hardly benefit from the positive impact of reliable telecommunications services. It is time to develop a vigorous and global action, supported by all the partners and led by the ITU, to reverse this situation and increase the telephone density in Sub-Saharan Africa before the next century.

The traditional technical cooperation assistance scheme has shown its limits, especially in the new post-cold war environment, whereby the priorities of the traditional donors like the UNDP, have evolved in other sectors and regions of the world. An innovative approach to assistance to telecommunications development in Africa is required.

The huge investments required by the year 2000 to bring the telephone density of Sub-Saharan Africa to a very modest 1.3 MTL per 100 inhabitants would amount to US$ 13.5 billion which far exceeds the financial capabilities of the countries concerned who already face a drastic financial limitation and have other priorities in more vital sectors to ensure the survival of their populations (i.e. food, health, education, etc.).

The particular situation of this Region calls on ITU/BDT to draw up a specific plan of action for Sub-Saharan Africa, with a comprehensive implementation strategy and adequate human and financial resources to meet the objectives by the beginning of the next century. BDT assistance in Africa, both in terms of strategy and financial commitment of the Union, could not be the same as in other Regions where the countries can afford to allocate the funds required for their telecommunications development from their own resources.

b) Strengthening of national technical and administrative telecommunication services

i) Implementation of technical assistance projects

In 1993, 20 technical assistance projects were under implementation by the BDT field staff in the Region. The total allocation for the projects are US$ 3.7 million. An implementation level of 61% (US$ 2.3 million) is expected at the end of 1993.

ii) UNTACDA II projects

In the framework of the Second United Nations Transport and Communications Decade (UNTACDA II) (1991-2000), ITU has presented five regional technical assistance projects amounting to US$ 17.8 million. The Resource Mobilization Committee of the Decade (RMC) is actively searching for financing for those projects. The new environment, however, makes it difficult to obtain support from the traditional funding partners of technical assistance projects.

During the last meeting of the RMC held in November 1993 in Abidjan, its Chairman, the African Development Bank (ADB) proposed to introduce to its Board in April 1994, a request for funding, through the ADB Technical Assistance Fund for those eligible regional projects (i.e. leading to future investment projects after feasibility studies).

The following new regional projects, amounting to US$ 4.6 million, have been identified and submitted to the ADB:

- Study of the establishment of African Telecommunications Management Information flows and Systems (ATEMIS).

- Study of the Harmonization of Mobile Telephone Systems in Eastern, Southern, Central and Western Africa.

- Study of the establishment of Network Management Centres in Eastern, Southern, Central and Western Africa.

iii) Projects in the pipeline

A total of 25 projects have been identified in the Region with ITU's estimated implementation share being US$ 25 million. It has been difficult to secure financing for these projects. Further action will be taken in 1994 in coordination with the countries concerned and subregional organizations in order to mobilize the sources required.

iv) Activities for the improvement of network operation and management in the Region

In addition to the publication of a guide on the indicators of quality of service for telecommunications network aimed at improving the network efficiency, assistance has been provided to several countries through the TCDC programme for the implementation of a national Network Management Information System.

v) Seminars and sub-regional conferences

Two sub-regional meetings have been organized, with the participation of the Regional Office and the staff in the Region:

- "Restructuring and Liberalization of Telecommunications" for the SADCC countries in Windhoek (Namibia) in February 1993.

- "Coordination of Telecommunications Development in Central Africa" in Libreville (Gabon) in March 1993.

The African Green Paper prepared by the AITPSG, following a mandate of the ARDC 90, was approved during a meeting in December 1993 in Cotonou.

The preparation of a seminar for all African countries sponsored by the ITU, ADB and the World Bank on "Telecommunications and Economic Prosperity: a strategy for Africa" has been completed. The seminar, previously scheduled for January 1994, will now be held in February 1994 (Abidjan, Côte d'Ivoire).

c) Development of human resources for telecommunications

The following human resources development activities have been conducted in 1993:

- Two joint ITU/INTELSAT practical courses on Digital Satellite Communications Technology, Lusaka (September 1993, English) and Abidjan (November 1993, French).

- Study of the administrative, managerial and operational aspects of the Staff Training College in Ndola (Zambia, January 1993).

- Training development workshop in the Staff Training College (STC) of Zambia Posts and Telecommunications Corporation (July-July 1993).

- Telecommunication Training Managers Meeting (TTMM-4) in Maputo, October 1993.

- ITU High Level Management seminar for English speaking LDCs in Africa (Maputo, October 1993).

- Training development workshop in Dakar for French and Lusophone speaking countries (Dakar, April 1993).

- Seminar on Human Resources Management and Training for French speaking countries (Dakar, November 1993).

- Preparation of a document entitled "Implementation of an Information System for Human Resources Management" for French speaking countries.

5.4.1.2 Americas

a) Development of regional telecommunication networks

A subregional project has been developed with countries of the Andean Pact (ASETA) to prepare a master regional telecommunications plan. A second phase of the project has been planned.

Acapulco's Americas Regional Telecommunication Development Conference (AM-RDC) asked the BDT to develop a Regional Programme on rural and low-income strata telecommunication (Resolution 2), in order to improve the quality of life and standard of living of the less-favoured people of the Americas. A comprehensive study on the subject has been carried out in close coordination with governments and regional organizations and a manual has been issued. This manual includes the diagnostics of the situation of rural and low-income strata telecommunications in the region (based on the country's reply to a previously distributed questionnaire), as well as the proposal of a 1994 Work Programme for the BDT on that area. This programme aims at giving support to the countries in the standardization and specification of technical solutions on a regional basis, as well as in the negotiation of credits with financing institutions.

Resolutions 1 and 6 of Acapulco's AM-RDC are related to the Development of a Regional Mechanism for Telecommunication Policy and the Creation of a Favourable Investment Climate. In order to contribute to the fulfilment of those resolutions, BDT appointed an expert who, in coordination with administrations and regional organizations, developed the 'Blue Book on Telecommunication Policies' for the Americas Region.

In the framework of Acapulco's AM-RDC Resolution 10, the BDT has carried out several missions and assistance activities in order to support the development of the Telecommunications Training Centres existing in the region. Additionally, two regional project documents were drafted, aimed at the development of Human Resources Management and Development models at a regional level covering areas such as manpower planning, performance indicators, organizational development and career planning. The first version of a "White Book on Training" for the Americas Region, to be used as a reference manual by Regulatory Bodies and Telecommunication Services Operators was completed in close collaboration with CITEL and AHCIET.

Following the Acapulco AM-RDC mandate contained in Resolution 3, the BDT working group on Telecommunication Development Indicators held a meeting in Brasilia, Brazil, in order to agree on the information and the definition of the indicators to be used for the elaboration of the "Americas Telecommunications Indicators" to be published by ITU.

Resolution 5 of the Acapulco AM-RDC dealt with activities to be undertaken in the Caribbean subregion. In this context, several activities have been carried out by the BDT: drafting of a project for the establishment of a satellite network catering to new and disaster communications; provision of assistance to the Caribbean Disaster Emergency Response Agency (CDERA) to develop technical and administrative plans; provision of assistance in upgrading telecommunication legislation in the subregion; granting of fellowships to officials from Caribbean countries to attend various meetings, seminars and training courses.

b) Strengthening of national technical and administrative telecommunication services

The main projects undertaken in the Region, mostly financed by trust funds, were as follows:

Brazil	Research and development for the design of telecommunication equipment. Modernization of the Brazilian telecommunication system.
Colombia	Implementation of the advanced training program under ITEC/Telecom. Software PLANITU transfer to ETB.
Costa Rica	Tariff structure for the National Telephone Network ICE. Modernization and tariff structure of the Telegraph system and introduction of new services.
Chile	Training (ENTEL)
Ecuador	Information systems for EMETEL
El Salvador	Strengthening of organizations
Honduras	Improvement of institutional management. Institutional strengthening. Establishment of the Spectrum Management Bureau and furnishing of the related equipment. Acquisition of Telephone Exchange Plant and support for the Outside Plant Maintenance.
Neth. Antilles	Tender evaluation (SETEL). Analysis of optical fibre systems (Landsradio).
Nicaragua	Technical strengthening of the Nicaraguan Post and Telecommunications Institute. Tariff structure for the telephone service.
Panama	Tariff structures for the Telephone Service.
Paraguay	Telecommunication Integrated Quinquenal Plan.
Peru	Technologic strengthening (ENTEL). Training program.
Suriname	Advisory mission.
Dominican Republic	Regulatory aspects.

c) Development of human resources for telecommunications

A continuous effort has been made in order to strengthen and develop, by all available means, the organization and management of entities in charge of Telecommunication Training and Human Resources Development activities in the Region. Training Centres have been assisted by carrying out training activities for the national staff, encouraging the development of computerized distance training tools, organizing national and regional seminars/meetings on training and human resources management and development, promoting horizontal cooperation between telecommunication entities as well as between them and other related institutions (e.g. universities).

Interested countries have also benefited from assistance in the fields of Human Resources Management and Organizational Development, and specific action plans for the development of those areas have been prepared for CPTSA-Perú, TELECOM-Colombia, ANTEL-El Salvador, TELCOR-Nicaragua and HONDUTEL-Honduras.

d) Activities of field offices

In 1993 ITU/BDT staff in the field were as follows:

- One Head of ITU's Americas Regional Office in Brasilia.
- Two Area Representatives in Tegucigalpa and Barbados.
- One Regional Officer for Human Resources Management and Development in Brasilia.
- Two Area Officers for Network Management, Operation and Maintenance in Santiago and Tegucigalpa.

In close coordination with the Field Operation Department, the Officers in the region carried out 45 missions, prepared some 14 new projects and supervised 21 projects, 90% of which received financing from public funds.

Additional to the above mentioned project implementation activities, the following technical cooperation activities have been carried out:

- Twenty-five TCDC/short missions to Bolivia, Peru, Nicaragua, Costa Rica, Paraguay, Brazil, Cuba, Mexico, Colombia, Guatemala, Ecuador, Chile, Netherlands Antilles, St. Vincent and the Grenadines and Suriname for assistance in the fields of Cellular Telephony, Data Transmission, Network Management, PLANITU software, ISDN, Total Quality Management, Organizational Development, Software Specification, Telecommunications Training, Human Resources Management/Development, Broadcasting, Tariffs, Telecommunications Services Marketing, Outside Plant, Financial evaluation and Privatization Impact evaluation.
- Nine Regional Seminars/Meetings (in collaboration with local administrations and/or regional organizations) in Bolivia, Lima, Caracas, Bogota, Brasilia, San Jose, Bridgetown and Belmopan, in the fields of Spectrum Management, Regulatory Bodies, Marketing of Telecommunication Services, Telecommunication Legislation, Technology Based Telecommunications Training, Human Resources Management and Development, Promotion of Private Investment in the Telecommunication Sector and Use of the PLANITU software.
- Sixty-seven Fellowships granted to representatives from the countries of the region to attend ITU's Frequency Management Seminar, ITU's Central American Seminar on Telecommunication Regulation, ITU's Interregional Human Resources and Training Meeting, ITU's 2nd Regional Seminar on Technology Based Training, a workshop on Terrestrial Transmission of Digital Television, INMARSAT's Seminar on Mobile Satellite Services, as well as various USTTI courses on Disaster Preparedness.

5.4.1.3 Asia and the Pacific

a) Development of regional telecommunication networks

The following projects and activities were undertaken to "impart knowledge on application of new technologies, use of computer-aided management techniques to enhance the efficiency and the cost effectiveness of the services and to follow-up AS-RDC Resolutions".

RAS/86/165 Telecommunications Computer Software Training and Development, courses in telecommunications software application and maintenance, computer networking and office automation. The project closed in October 1993 with recommendations from the participating countries reflecting their intense desire to continue with the programme and strong assurance by the hosting administration, China, to support completion of the project. Accordingly, funding has been provided for 1994 to complete some of the unfinished portions.

RAS/89/054 Telecommunications Management Development and Training, arranging and conducting seminars/workshops on telecommunication management topics. The project was successfully completed on schedule in May 1993 and received praise from the participating countries and UNDP.

Follow-up of Resolutions of AS-RDC/93; provided assistance to ITU Geneva in organizing the first Working Group Meeting on Telecommunication Development Indicators for Asia and the Pacific.

b) Strengthening of national telecommunication technical and administrative services

Afghanistan	A rehabilitation strategy for the telecommunication sector was prepared for the UNORSA, incorporating proposals for quick impact and long-term projects.
Bangladesh	Providing experts for examination of tender documents for a new earth station, examination of a specification for switching systems, preparation of a specification for PSPDN, preparation of specification for digital multi-access radio, installation of a computer-aided system for acquisition and analysis of traffic data.
Bhutan	Assistance in the implementation of the Telecommunication Development Plan. Providing expertise and fellowship training in various telecommunication subjects.
Cambodia	Telecommunication Development Support. Monitoring the UNTAC communications network being handed over to the new Government of Cambodia. Telecommunication Advisor post to support the Ministry on transitional arrangements from the UNTAC structure and provision of experts to assist in training for operations and maintenance of the UNTAC network.
China	Implementation of the Programme for Modernization of Telecommunications in China involving provision of services of experts for the transfer of technology and training of national experts in modern telecom techniques.
India	Upgrading of All India Radio Sound Archives. Refurbishing of stored material and the introduction of optical disc storage facilities.

Iran	Establishing a Rural Telecommunication Network as a Pilot Project. Training of local engineers in rural telecommunications.
Lao PDR	State Enterprise for Posts and Telecommunications. Preparation of a proposal for financing the expansion of telecommunication facilities under Telecom III. A proposal was subsequently solicited from a joint venture partner and ITU provided assistance in tender negotiations. Study tours to ASEAN countries.
Maldives	Provision of services of Group Engineers to examine tender specifications, followed by provision of services of experts for evaluation of bids received.
Mongolia	Provision of an expert to assist in acceptance testing of E 10 switch.
Nepal	Quality Assurance. Establishment of quality control management for telecom products and the setting up of a repair centre for printed circuit boards and a material testing laboratory.
	Radio Frequency Management and Monitoring. Strengthening of frequency management and monitoring capabilities of the Administration.
Sri Lanka	Telecommunication Management Development. Developing management skills and institutions within the Sri Lanka Telecommunication Corporation.
	Strengthening the Telecommunications Authority. Developing national capability to carry out regulatory functions under the new Sri Lanka Telecommunications Act.
Tuvalu	Assistance in the conversion of the telecom billing system to the new Ericsson AXE switch under TCDC from Tonga.
Vietnam	Master Plan for development of telecommunications to the year 2000 and beyond was prepared by consultants to ITU (Detecon) and study tours were organized to developed countries to support technological, marketing and institutional changes required. Detecon consultants also arranged seminars/lectures and job transfer skills. The project was completed in 1993.

c) Development of human resources for telecommunications

India	Upgrading of telecommunication training centres and manpower development, training expertise in transmission, signalling, satellite transmission.
	Modernization of in-house training facilities in radio monitoring and spectrum management, upgrading and training capabilities in radio monitoring and spectrum management using computer-aided techniques.
	Upgrading of the training institute for new and emerging technologies in broadcasting, enhancing and strengthening the institute's capabilities for systematic training of broadcasting engineers in operation and maintenance of modern broadcasting equipment.
Indonesia	Telecommunication Human Resource Development. Strengthening the staff structure of PT Telkom by upgrading the existing training facilities and introduction of computerized management. The project was reformulated to bring it into line with current PT Telkom needs.

Lao PDR	Ten fellowships to EPTL staff to attend Khon Kaon University were given and three lecturers from the Telephone Organization of Thailand assisted in course development at the EPTL training school.
Pakistan	Strengthening the training capabilities of Pakistan telecommunication corporation, establishing training courses in new technologies, setting up new computer and course development laboratories and developing training courses.
Regional	Collaboration with the Pacific Islands Forum Secretariat on Human Resource Development activities.

d) Activities of field offices

The aim of the Area Office for the South Pacific during 1993 was to rebuild a South Pacific telecommunication support programme. In particular, the activities were oriented towards:

- initiation of the regional project RAS/92/232, Regional Telecommunication Training and Development, being implemented in collaboration with the South Pacific Forum Secretariat;

- initiation of the TA project TOK/92/002 covering the pre-investment and implementation phase of a Tokelau capital project to be funded by the New Zealand government and UNDP;

- negotiation of a project proposal on Maritime Radiocommunication Services in the region with the relevant authorities of Fiji, Kiribati, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu and Western Samoa, as well as with the Commission of the European Communities;

- support of the South Pacific Forum Secretariat in conducting a regional workshop on GMDSS; and

- identifying the needs of the LDC countries in the region for support under LDC and TCDC programmes.

The main activities undertaken by the Area Office for West and South Asia included monitoring and support for on-going projects and sectoral support to identify areas for assistance in the context of national planning objectives and formulation and follow-up on project proposals.

The Area Office staff carried out 24 missions, supervised 12 projects, prepared 14 new project proposals, undertook one sectoral study and prepared one.

The Area Office for South-East Asia benefited from the posting of the Associate Expert and also the Network Management Officer in 1993. The Associate Expert completed his assignment and departed on 24 September 1993, and the Network Management Officer was transferred to the Regional Office in Bangkok on 18 December 1993.

The main activities of the Area Officer for South-East Asia included a major human resource development project with PT Telkom in Indonesia, continuation of a 2-year collaboration in establishing a network planning capacity in PT Telkom using PLANITU, collaboration with the South Pacific Forum and support activities associated with projects in Laos, Cambodia and Vietnam.

Missions: 11

Project proposals: 3

e) Follow-up on AS-RDC/93

All activities in the ASP region are directly or indirectly associated with the implementation of the AS-RDC/93 Resolutions and Recommendations. However, the main activities related to the individual AS-RDC/93 Resolutions are given below:

i) The Asia and Pacific Regional Telecommunication Coordination Meeting, Bali, 1-2 December 1993 (Resolution 1)

This was the first AS-RDC Coordination meeting implemented in compliance with AS-RDC Resolution 1. The meeting was organized by ITU and hosted by the Government of Indonesia. Twenty-nine member countries and seven organizations from the Asia and Pacific Region participated in the meeting. The member countries have agreed to the following:

- Inform the ITU on all on-going activities in the field of telecommunications and future plans of the development partners in the Asia-Pacific Region.
- The ITU and APT will act as an informal clearing house and will mutually exchange all information received, convey such information to all parties concerned, and collaborate to organize future coordination meetings with member countries and other concerned parties. The focus of future coordination meetings should be to formulate future plans and to eliminate wasteful duplication.
- Inform on the progress of follow-up activities pursuant to the AS-RDC Resolutions to be tabled at the coordination meeting which could be held once a year.

ii) Working Group on Telecommunication Policies and Strategies, Bali, 3 December 1993 (Resolution 2)

Twenty-seven member countries and three organizations from the Asia-Pacific Region participated in this meeting. The meeting was held to discuss the policies and strategies of telecommunications in compliance with the AS-RDC Resolution 2. The spirit of the Resolution was to offer countries a range of policy options in order to choose the most suitable considering the national legal and economic context. During the meeting, a Drafting Group was formed. The Drafting Group will work toward a draft policy paper which should be ready and forwarded to ITU Geneva by mid-July 1994. The policy paper will cover issues on:

- Separation of the regulatory function from operators
- Introducing competition
- Role of the private sector
- Access to basic services by all users.

iii) Meeting of the Working Group on Telecommunication Indicators (Resolution 9)

iv) Access to all users (Resolution 4) and Special assistance to LDCs in the Asia and Pacific Region (Resolution 12)

A project proposal for telecommunication penetration in remote and isolated areas of developing and least developed countries has been prepared. UNCDF has been approached for funding. Efforts are being made to obtain funding from other funding and aid agencies.

In addition, a number of activities for implementation of the remaining Resolutions and Recommendations have been initiated and are in progress.

5.4.1.4 Arab States

a) Development of regional telecommunication networks

Support in this field was provided by one regional project financed by UNDP, "MODARABTEL" (Modern Arab Telecommunication Development).

The Fourth Steering Committee Meeting (Rabat, October 1993) assessed and approved all implemented activities, together with the work plan, for the remaining period of the project, i.e. until the end of June 1994. The following is an account of the activities related to the project networks.

Network on Data Communication (Lead country: Egypt)

- Trials of interconnection between existing Arab data communication networks have been set up.
- Defining of additional equipment and their specifications for direct Arab PSPDNs. Connection is underway.
- Assistance was provided to Mauritania and the basic survey to set up their own PSPDN has been elaborated.

Network on MIS in Training (Lead country: Morocco)

- The MIS application has been achieved and adopted.
- The user manual has been elaborated.
- The implementation in Arab Training Centres is under way.

Network on Applied Research in Telecommunications (Lead country: Tunisia)

- A data base on ongoing applied research activities has been set up and a reference manual has been elaborated and disseminated to all Member Administrations.
- Regional cooperation in this field has been promoted.

Sub-Network on Digital Cellular Mobile Radio Systems (Lead country: Saudi Arabia)

- A questionnaire has been elaborated and circulated to all Member Administrations. Useful information has been collected.

- A survey on a Pan Arab Digital Mobile Telecommunication System has been conducted.
- A workshop type seminar has been successfully set up (Amman, 22-25 November 1993).
- Assistance has been provided to Syria and Libya at their request.

Sub-Network 2 on Telematic Services

- A summary report on main telematic services has been elaborated.
- According to the priorities given by Administrations, the following services have been considered = G4 Facsimile, Electronic Directory, Audiotex, MHS, EDI, Paging, VSAT and A/L Videotex. Preparation of reports on these services is under way.

Network for Statistical Data Base in Telecommunications (Lead country: Syria)

- A new DBMS has been set up under ACCESS software.
- Useful reports (statistical information per country, and telecommunication indicators) have been prepared and tested.
- Training on ACCESS and the newly DBM System has been provided to the Syrian Computer Staff (17-30 December 1993).

b) Strengthening of national telecommunication services

In association with UNDP, support to individual Arab countries to develop national telecommunication services technically and/or administratively, was provided through a number of country projects as follows:

LIBYA/88/007
Master Plan for Telecommunication Development
Preparation of the Master Plan is progressing satisfactorily.

SAUDI ARABIA/89/003
Advisory Services to the Ministry of PTT
Assistance in frequency management and international relations. The project is progressing satisfactorily. The contract was extended for a new period of three years (1993 - 1996).

TUNISIA/91/18
Research and Study Centre
Assistance in the establishment of a Research and Study Centre. The project is progressing satisfactorily.

SUDAN/88/041
Development of Telecommunications Planning and Project Coordination
The telecommunication development Master Plan was prepared and delivered.

YEMEN/92/025
Telecommunications Development
The activities of the project continued and assistance was provided in the installation of a radio frequency monitoring station and in inspection services.

c) **Development of human resources for telecommunications**

In addition to the fellowship component for training in the above regional and national projects, the following national projects were primarily intended for the development of human resources:

ALGERIA/81/023
New Telecommunication Techniques (Oran Telecommunication Institute)
The project progressed regularly and nearly all project activities terminated in 1993.

DJIBOUTI
Telecommunication Training
Practically all project activities were terminated in 1993.

LEBANON/87/001
Telecommunication Training
The project was closed early 1993 upon the request of UNDP, Beirut, responding to the wish of the Lebanese Administration.

MOROCCO/89/001
Strengthening of Training Capacities and Implementation of New Techniques
The project progressed regularly and nearly all project activities were terminated in 1993.

d) **Arab Regional Development Conference (AR-RDC/92)**

The Conference Resolutions implementation were as follows:

- **Regional Mechanism for Coordination and Monitoring of the implementation of the Resolutions (Resolution 1)**
  The Coordination Committee (AR-RDC-CC) held its first meeting in Rabat (26-28 October 1993). The Committee reviewed and approved the activities undertaken since the Conference and approved the work plan for 1994.

- **Telecommunication Policies and Strategies (Resolutions 2 and 4)**
  The Working Group on Policies and Strategies held its first meeting in Tunis, 10-12 June 1993. Two ad hoc teams of experts were formed to support the WG. Also an expert was recruited to assist in the preparation of the Arab Book on Policies and Strategies.

- **Cooperation in higher education, R&D and Local Manufacture of Telecommunication Equipment (Resolution 6)**
  An expert was recruited. A questionnaire was prepared and dispatched to Arab Administrations. In the light of responses to the questionnaire, the expert will prepare a comprehensive feasibility study on the subject which would help to formulate cooperation projects and programmes.

- **Improvement of National Frequency Management (Resolution 7)**
  The implementation of the "Plan of Action" is progressing satisfactorily. A meeting of the Arab specialists on Frequency Management was held in Cairo on 26-29 April 1993; a second meeting is scheduled for April/May 1994, during which the Group of Experts envisaged by the Resolution will be created.

- **Regional Telecommunication Project for Rural Areas and Special Assistance Programme for the LDCs (Resolutions 8 and 12)**
  i) An expert was recruited. Two questionnaires were prepared and dispatched to Arab Administrations. In the light of the responses to the questionnaires, the expert will:
     - formulate regional telecommunication projects for rural areas and low-income strata.
     - review the status of telecommunications in the Arab LDCs with a view to adopting strategies designed to improve telecommunication services.

  ii) An expert was recruited and the Regional Project Document for Modern Telecommunication Training in Arab LDCs "TRAINTEL" was finalized.

  iii) The Regional project for the Development of Maritime Telecommunication Services in the Arab LDCs, bordering the Red Sea and the Horn of Africa "DEVMARTEL", was finalized internally.

  iv) Workshop on Outside Plant Maintenance for the Arab LDCs was held in Sana'a, 22-30 November 1993.

- **Inter-regional Project of the Arab and European Governments bordering the Mediterranean Sea "INMARTEL" (Resolution 9)**
  An expert was recruited and the project document finalized.

- **Regional Project for Modern Arab Telecommunication Development "MODARABTEL Phase II" (Resolution 10)**
  The basic Networks for Phase II of the project were identified and approved by the AR-RDC-CC in its first meeting in Rabat, 26-28 October 1993, and a draft project document was prepared accordingly.

- **Regional Cooperation for Improvement of Management of Telecommunication Enterprises, including HRM/HRD (Resolution 11)**
  The following Regional Workshops were conducted:
  - Organizational Development, Cairo 24-30 April 1993
  - Manpower Planning, Cairo 26 June - 1 July 1993
  - HRM/HRD Strategies, Oman 18-22 September 1993
  - Training Courses Development, Parts I and II, Damascus, 11-30 December 1993.

  Also preparations were made to hold the first meeting of the Network organisational development and HRM/HRD in March 1994.

- **The ITU Glossary of Telecommunication Terms in Arabic (Resolution 13)**
  An expert was recruited and a project document "GLOSSARABTEL" formulated.

e) Cooperation with Regional Organizations

The ITU maintained special and close collaboration with the Arab Permanent Telecommunication Committee of the League of Arab States by attending all its meetings and coordinating common activities to avoid duplication or repetition. It also maintained close collaboration with the other Regional Organizations such as the Arab States Broadcasting Union (ASBU), the Arab Satellite Organization (ARABSAT), the Economic and Social Commission for Western Asia (ESCWA), the Organization of Islamic Conference (OIC), the Islamic Development Bank (IDB), and the Arab Fund for Economic and Social Development (AFESD) with a view to promoting the development of telecommunications in the region.

f) The Status of the Regional Office

The Regional Office, during the first year of becoming fully staffed with its five professionals, endeavoured during 1993 to carry out its activities for project development and implementation, promotion of telecommunication development in the Arab Region through sectoral studies and organization of seminars and workshops in line with the outcome of the Arab Regional Development Conference, and to reinforce its creditability with the Arab Administrations through direct contacts during meetings and official missions - doing its utmost to fulfil their needs and promoting the cooperation and coordination of activities among them - and active coordination with the Arab League and the relevant regional and international organizations.

5.4.1.5 Focal point for Europe and CIS

The issues of the Region were handled and coordinated from Headquarters by the Adviser as the ITU has no regional offices in this Region. The countries are implementing very large and rapid organizational reforms and, at the same time, rebuilding and strengthening the existing networks. The main funding is available in most cases as loans from the World Bank and the European Bank for Reconstruction and Development, but also joint ventures play an increasing role. The ITU, as an international objective body, is seen to have an important role in advising on regulatory and administrative issues as well as being an implementing agency, mainly in human resources development and planning activities.

a) Development of regional telecommunication networks

There were no regional projects.

b) Strengthening of national technical and administrative telecommunication services

Czechoslovakia	All project activities were terminated.
Slovakia	A new UNDP-funded project commenced with PLANITU and HRD training.
Bosnia and Herzegovina	Preparatory assistance was held in abeyance due to the security situation in the country.
Poland	The project was revised to meet the changing situation in the country.
Belarus	Sectoral review mission.
Kazakhstan	The sectoral review mission identified an urgent need to organize national telecommunication training.
Uzbekistan	Sectoral review mission. The country has an infrastructure for telecommunication training from the time of the former USSR, but there is an urgent need to modernize training.

c) Development of human resources for telecommunications

Hungary	Activities of the first phase of a World Bank-financed project in Human Resources Management and Development have been completed. The second phase is under preparation.

5.4.1.6 Human Resources Management and Development (HRM/HRD)

The division was guided by the Recommendations of the Nice Plenipotentiary Conference and the Regional Development Conferences, and to meet the direct requests for assistance formulated by the countries.

In 1993, the staff situation was difficult for the following reasons:

- the post of HRD Regional Officer in ASP was frozen after Mr. Calvano's nomination as ITU Area Representative, and nobody replaced him;

- the HRD Regional Officer in Americas region dedicates only 50% of his time to HRD activities as he now assists the Chief of the Regional Office in Brasilia with administrative matters;

- the HRD Officer (TBT - Technology-Based Training specialist) at headquarters has been on special leave since the last months of the year.

a) Development of human resources for telecommunications

The main HRD activities of the headquarters staff and of the four Regional Officers in the field were carried out to fulfil the three following mandates:

Mandate/ Objective No 1:
- "to participate in the preparation of, and to implement the HRM/HRD and training-related Resolutions/Recommendations adopted by the Regional Telecommunication Development Conferences".

Mandate/ Objective No 2:
- "to implement Resolution 32 of Nice Plenipotentiary Conference: Standards for Human Resource Management and Development".

Mandate/ Objective No. 3:
- "to give assistance in the HRM/HRD and Training areas, as requested by Member countries of the Union".

Activities consisted of:
- Defining/updating HRM/HRD standards (two management models were finalized and validated: the Organization Development model and the model to establish a HRM/HRD strategy. These models were published in English, French and Spanish, in a manual entitled "Strategic Planning: Organizational Development and Human Resource Management and Development Strategy Models - A guideline for managers and consultants". In addition, the new (updated) English version of the TDG (Training Development Guidelines) was finalized and validated, as well as the workshop's complementary training materials.

- Introducing/disseminating all standards, and training of the local staff in some telecommunication organizations to use them.

- Continuing/enhancing the new Technology-Based Training inter-regional project (TeleProject) and the definition of TBT standards (the major activities were the Latin American and Caribbean Regional Workshop implemented in Colombia and the preparation of a similar workshop for Arab Countries, to take place in January 1994 in Riyadh).

- Continuing negotiations and organization of a new inter-regional project entitled "Management Development for Telecommunications" (MANDEVTEL) with the aim of producing manuals and TBT courses to train managers in modern management techniques. This project is to be carried out in joint-ventures with different private and governmental telecommunication organizations. Negotiations took place with several partners and all of them are ready to start the implementation at the beginning of 1994. The project meets the requests made in almost all Regional Development Conferences, to help training senior managers in modern management.

- More generally, management improvement activities for ITU Member organizations (for example, several workshops were developed and implemented, such as Organization Development, Management for Senior Executives, New Approaches for Success, etc., the latter in joint-venture with the Netherlands PTT).

In 1993, 59 missions were carried out, 24 workshops were conducted and 474 persons were trained (52 instructors, 103 course developers and 319 managers). Five data bases managing information for the International Sharing System were improved and updated. One of them (TBT courseware available) was included in TIES and can be consulted at distance. The other five data bases are planned to be available through TIES in the course of 1994.

b) Headquarters activities

i) TeleProject and TBT activities

Assistance to participating organizations was continued. Direct assistance was provided at distance, using TIES facilities. The main facilities used to provide assistance are E-mail, computer conferences, use of the ITUDOC and file transfer. It is important to mention that, in addition to asynchronous computer conferences, it was possible to establish synchronous computer conferences with three Latin American countries as a working routine (Uruguay, Colombia, Costa Rica and ITU-Geneva).

The Latin American and Caribbean Regional TBT workshop was coordinated and implemented (Colombia, November 1993). As a result, five more organizations joined the TeleProject (17 organizations of the region are now members, with a well detailed working plan to be implemented in 1994). Several products were presented to the participants (courses to be validated regionally in 1994, and tools for development), and a plan for assistance using TCDC was produced to complement ITU's assistance at a distance. AHCIET's support must be mentioned (providing regional organization, supporting some fellowships both for this meeting and on other occasions to send staff to the most advanced countries in the Region, to work at developing TBT products).

The TBT Regional workshop for Arab states was coordinated and organized. It will be implemented in January 1994, with the help of two instructors. One was recruited from Ericsson Expertise, Ireland, and the other one is to be seconded by Uruguay, using TCDC budget.

There are now 17 organizations from Latin America and Caribbean, five organizations from Arab countries and six organizations from Asia and Pacific Region participating in the TeleProject. The TeleProject joined two DELTA projects of the European Community as a sponsoring partner, which means sharing of information and experiences with European industrialized countries. ITU is spreading some of this information through the ITUDOC.

ii) Management Development for Telecommunication (MANDEVTEL)

A round table with interested organizations was organized. As a result, several possibilities were defined with private and governmental telecommunication organizations, to work in joint-ventures with ITU at developing manuals in different modern management techniques applied to telecommunication organizations in developing countries.

Concrete offers were received from the Government of Switzerland and PTT-Suisse, Swedtel Academy (Sweden), GTE (USA), PTT Telecom Training Center & NITTC (the Netherlands), the Centre Universitaire et de Recherche of Geneva Archamps, the University of Reading (United Kingdom), and AHCIET (Hispanic America and Spain). Working plans for each participant were produced with the aim to start the implementation at the beginning of 1994.

The aim of the project is to produce six to eight manuals about different aspects of modern telecommunication management techniques, with very practical examples and case studies, and the complementary TBT courses to train about 1,000 managers during the three years of the project implementation.

iii) Other headquarters activities

The Inter-Regional Human Resources and Training Meeting was organized and implemented in Brasilia (June 1993). This meeting is organized every 3-4 years. The Brasilia meeting was attended by 192 participants from 76 telecommunication organizations from all regions. It provided the opportunity to validate the new manual (Strategic Planning), and especially to see the needs and expectations of telecommunication organizations in the HRD area for the next years.

The Regional Human Resources and Training Meeting for English-speaking countries of Africa was organized and implemented in Maputo, Mozambique (October 1993). Furthermore, the implementation of the next regional meeting for French-speaking countries of Africa was negotiated with Cameroun, to be implemented in 1994.

Using the training materials developed for the new workshops, two major events took place:

- a workshop entitled "Management for Senior Executives" was organized for English-speaking LDCs of Africa, with the participation of General Directors and/or Vice-General Directors (Maputo, October 1993);
- the validation of the workshop "New Approaches for Success" and the production of a draft business plan, as a result of the discussions during the workshop, implemented in Lithuania.

The development of a new workshop on elaboration of job description started in 1993, and draft materials in English were produced.

Assistance to the Regional Offices was provided in such areas as project documents, manpower planning, studies, revision of reports and field vacancy notices, recruitment and debriefing of experts, etc.

c) Activities of Area Officers for Human Resources Development

The main activities were performed in the following areas:

- preparing and participating in the inter-regional Human Resource and Training Meeting, in regional meetings and conferences;
- organizing and conducting training workshops;

- participating in regional telecommunication conferences and tripartite review meetings;
- providing assistance to various projects and training centres, including evaluation of the same;
- setting up computer hardware/software;
- providing assistance in manpower planning activities;
- providing assistance in the definition of HRM/HRD strategies;
- providing assistance in organization development (introduction of changes, privatization, separation from postal services, decentralization, etc.) and in general management;
- preparing project documents;
- carrying out sectorial studies in Human Resources.

It is important to mention that the use of the TCDC program to recruit experts from the regions to carry out the routine or "basic" missions, including the delivery of ITU workshops, increased a lot in 1993, especially in the Americas Region. This is one of the working strategies agreed upon to cope with the reduction of HRD staff.

5.4.2 Policies, Strategies and Programming Department (PSP)

5.4.2.1 Special Studies and Backstopping (SSB)

In 1993, the SSB continued to act as an ITU internal authority for technology, giving advice to the administrations or organizations of developing countries, reviewing reports, master plans, articles, etc., organizing seminars and giving lectures.

The SSB also accomplished 86 missions, 38 by the headquarters specialists and 48 by external experts.

The breakdown in specialities is:

Economics and regulations	7.0%
Maritime communications	5.8%
Network planning	27.9%
Radio propagation, frequency management and monitoring	7.0%
Rural telephony	4.7%
Satellite and microwave transmission	10.5%
Sound and television broadcasting	26.7%
Switching and signalling	7.0%
Transmission and external plant	3.5%

Nine missions were financed by other sources than the regular SSB budget. Twenty-nine missions involved lecturing at seminars or workshops, nine of which were organized by SSB.

While most of the missions or other activities were short-term and unique duties, two were more extensive: introduction and training of computer applications for telecommunication planning and management in various developing countries (PLANITU) as well as the elaboration of master plans for maritime communications in 33 African countries.

5.4.2.2 Resource Mobilization (RMOB)

Considering Resource Mobilization for telecommunications development within the BDT and, in particular, the implementation of Resolution 24 of the Nice Plenipotentiary Conference concerning the Special Voluntary Programme for technical cooperation, it should be noted that in this respect very few significant contributions were made in 1993.

The following activities were undertaken:

- establishment and updating of requirements and priorities with regard to technical cooperation for telecommunication development, in particular, the follow-up programmes for regional development conferences;
- participation in the Singapore development conference with respect to financial and RMOB strategies.

The following contributions were received in cash:

Donor	Cash (SFr.)
Netherlands	31,579
FINNIDA	40,000
TELSTRA (Australia)	10,000
Total	**81,579**

5.4.2.3 Telecommunication Strategies and Programming (TSP)

The activities undertaken by TSP during 1993 may be summarized as follows:

a) Telecommunication Development Strategies of the BDT

The document *Telecommunication Development Strategies of the BDT* was completed. It includes the Resolutions of the five Regional Development Conferences, and takes into consideration the material from the ITU Constitution and Convention on the above-mentioned subject, the Recommendations of the High Level Committee and other ITU high level fora, and the report on the Changing Telecommunication Environment. There was also a new document prepared entitled *Missions, Objectives and Strategies of the BDT.* In the light of the new telecommunication environment, the document takes into account the Management by Objectives approach as well as the comments received from the TDAB (Telecommunication Development Advisory Board) members. The document describes BDT's role in assisting countries to improve, expand and harmonize their telecommunication networks and services, dividing BDT's work into three broad elements: Assistance, Partnership and Resource Mobilization.

b) Programming of BDT activities

In the past (before the Plenipotentiary Conference, Nice, 1989) the development activities of the ITU were mainly based on the implementation of UNDP and Funds-in-Trust projects. The Nice Conference decided to allocate funds in the regular ITU budget for the ITU assistance programme to developing countries. These funds should play a catalytic role to stimulate telecommunication development. They are distributed on the following budget items:

7.130 Short-term missions/Special studies and support
7.140 Radiocommunication and Standardization Seminars
7.145 Seminars administration
7.150 Fellowships programme
7.190 Special assistance to LDCs
7.260 Resources to promote TCDC
7.320 Regional Development Conferences/World Development Conference

In 1992, the "Programming for Telecommunication Development" was undertaken for the first time. The first experience demonstrated that the programming of the development activities requires a well-coordinated approach. The Programme should have been prepared, approved and the necessary measures for its implementation taken prior to the period for which it is intended. This was totally fulfilled for the 1993 Programme. Since proposals received exceeded the budgetary amounts, establishment of priorities was necessary.

The first draft Programme for 1994 was ready in October 1993. After several consultations with the BDT field offices and other BDT departments/divisions, the final version of the Programme was presented to the BDT Management Committee for approval in December 1993.

c) Special Programme of Action for the Least Developed Countries (LDCs)

Over the years the ITU assistance to LDCs has been accorded in a very *ad hoc* fashion, largely on the basis of requests received from these countries. A real first attempt to translate the Union's policy into useful, well planned and coordinated assistance was facilitated by the increase of funds by the Nice Plenipotentiary Conference and by the adoption of a programme approach by the 47th session of the Council (June 1992) *vide* its Document 7279(CA47-63) *Special Measures for the Least Developed Countries* for 1992-1994. In this document Council adopted the recommendation to give priority to the following areas: Management, Maintenance, Planning, and Training.

In 1993 the supervision and implementation of the Programme for LDCs involved more and more the BDT regional offices. Some of the major activities undertaken in 1993 were:

- Mission to Gambia on *Outside Plant Maintenance*
- Missions to Gambia and Zambia on *Introduction of Integrated Accounting System*
- Workshop-type seminar on *Optical Fibre Technology*, jointly with the Organization of Islamic Conferences (Bangladesh, October 1993)
- Workshop on *Financial Management in Telecommunications* for the Asia and Pacific Region (Singapore, December 1993)
- Workshop on *Outside Plant Maintenance* for the Arab Region (Yemen, November 1993)
- Training course on *Outside Plant Installation and Maintenance* for the Africa Region (Malta, November 1993)

A variety of other short-term missions were undertaken for LDCs. Various fellowships for LDCs were also granted (meetings, workshops, seminars, etc.).

d) Coordination with international organizations

Coordination with International Organizations, including the UN system, was maintained. This activity included the review of a large quantity of documents; participation in important meetings; coordination within the BDT and occasionally with other organs of the ITU; preparation of ITU's views; answering questionnaires; replying to correspondence; informing the relevant ITU officials on activities within International Organizations/UN Agencies and on the decisions taken by these institutions, as well as their possible impact on the activities of the Union generally and telecommunication development in particular.

e) List of meetings

Information on meetings in which BDT is involved, is now available on the electronic network in the new version of TIES using Internet Gopher. The information on BDT meetings is presented in two ways:

1) Schedule of BDT meetings
(which is a list of meetings indicating date, title, and place)

2) ITU/BDT meetings
(which is an interactive option allowing users to search and retrieve information according to place, category, organizer, ITU involvement, contact person, etc.

f) Membership in the Development Sector

The ITU Council, at its 1993 session, established the criteria and procedure for the participation of entities and organizations other than Administrations in the work of the BDT. Following the membership promotion activities undertaken by the BDT, the process of implementation of BDT membership began. The relevant formalities for the registration of new members were ensured. Contact with new and potential members of the BDT is maintained in close cooperation with ITU's External Affairs Unit. By the end of 1993, 21 members with a total of ten 9/16 contribution units, joined the BDT. The breakdown of membership is as follows: 11 Recognized Operating Agencies, five Scientific or Industrial Organizations, one entity dealing with telecommunication matters, and four International Organizations.

5.4.3 Programme Support, Organization and Methods Department (SUP)

5.4.3.1 Organization & Methods Division (O&M)

Four major activities have been pursued in 1993, namely: establishment of the BDT's mission and objectives in the framework of the management-by-objectives (MBO) project; study of the BDT's structure, with a view to tailoring it to the mission and objectives established; development of procedures for pinpointing the respective responsibilities of the units at headquarters and the field offices (support for regionalization); and lastly, computerization of the BDT's administrative and financial activities.

Establishment of the BDT's mission and objectives

Following a number of meetings, the BDT management has prepared a preliminary draft document setting out the BDT's mission and objectives for the next five years.

Study of BDT's structure

Taking into account the BDT mission and objectives established, the O&M Division, assisted by the Interdepartmental Working Group, has prepared a proposal for the BDT's long-term structure (five years).

Procedures

Procedures for the clear identification of responsibilities (headquarters/field) have been introduced with a view to making the BDT's activities more efficient. Together with a detailed description of the BDT's structure, they will in due course be incorporated in the BDT's organizational handbook (Office Handbook).

The Interdepartmental Working Group is reviewing and validating the procedures in order to ensure that they reflect the concerns of all the BDT's units.

Computerization

The BDT's field offices are now properly fitted out with computer equipment. Links with headquarters in Geneva using the TIES system are still problematic in the case of some field offices, owing to the poor quality of data transmission links.

The BDT's integrated management system (IMS) was tested by users at headquarters and numerous improvements have been made. The computer programs for the budget control (BCS), equipment (EQT) and fellowships (FEL) services are operational. The experts recruitment program is being prepared and will be ready in 1994. The initial version of the software for the field offices programs is operational; it was delivered late in 1993.

5.4.3.2 Administrative support

a) Budget control

The Budget Control Service (BCS) continued with its traditional tasks of liaison and provision of information in connection with technical cooperation projects, tasks which became more complex since 1992 due to the new, larger structure of BDT and the increase in the number of field offices. It provided administrative, budgetary and financial advice and information to various services.

BCS assisted in drafting the 1995 budget for the BDT as a whole and in the establishment of budgets for new projects, prepared project budget revisions, gave cost estimates, accorded budgetary approval for expenditures, monitored implementation, compiled a large number of reports and statistics both regular and ad hoc, gave debiting instructions to the Finance Department, processed travel authorizations for experts and ITU field personnel, and dealt with a large number and variety of other activities, all geared to the correct and efficient financial and administrative of 153 projects funded from over 20 different sources.

b) Expert recruitment

In 1993, 547 posts were processed, for which 608 candidates were evaluated and 278 recruited as experts for 345 missions. The tendency, noted last year, towards many last-minute requests for very specific urgent missions has continued to prevail in 1993. As a consequence, in spite of their decreasing number, the recruitments were done under pressure most of the time. Due to the fact that responsibilities and workforce were transferred to the field offices, a significant amount of time was taken up liaising with the ITU offices for instructions or for problem solving at a distance.

Experts recruited in 1993

Region/Activity	1993	1992	% change from 1992
Africa	71	87	-19%
Americas	91	62	+47%
Asia/Pacific	48	96	-50%
Arab States	47	38	+20%
Europe & CIS	21	35	-40%
Total	**278**	**318**	**-13%**

c) Equipment Procurement Service

	1993	1992	Percentage
No. of Purchase Orders placed	387	345	+12%
Value in US$	4,654,731	4,521,960	+3%
No. of Contracts signed	10	6	+67%
Value in US$	9,124,405	648,818	+1,306%

During 1993, the Equipment Procurement Service coordinated the preparation and negotiation of ten new subcontracts and managed the administrative and financial implementation of 13 subcontracted projects. It must be emphasized that the increase in purchasing activities and contractual engagements has been funded mainly through Funding-in-Trust projects, in contrast with 1992 when most of the funds came from UNDP.

Aside from its regular activities, the Service reviewed legal and financial aspects of 14 Administrative Agreements.

d) Fellowships

In 1993, 1,343 fellowships were awarded, comprising 291 individual training programmes and 1,052 through group-training activities, including in-country training schemes; 46% of these were under ITU financing, 46% under UNDP and 8% from other funds.

Twenty-five percent of the fellows in 1993 were from the Africa region, 41% from Asia & Pacific, 13% from the Americas, 10% from the Arab States, and 11% from Europe.

The major host countries organizing individual training programmes in 1993 were Australia, Canada, France, Germany, India, Thailand, UK and USA

5.4.4 Evaluation Unit

The following projects were evaluated:

Andean Region 9/RLA/92/08 - Pre investment and feasibility study for the Andean Telecommunication System

India IND/86/007 - Radio Monitoring and Spectrum Management

Indonesia INS/89/013/D - Telecommunication Human Resource Development

Sudan SUD/88/041 - Development of Telecommunication Planning and Project Coordination

Within the context of the study of region presence, the Evaluation Officer visited all twelve BDT field offices.

1993 Fellowship Statistics

By Fund Source

UNDP	628
ITU	612
Other	103
Total	**1,343**

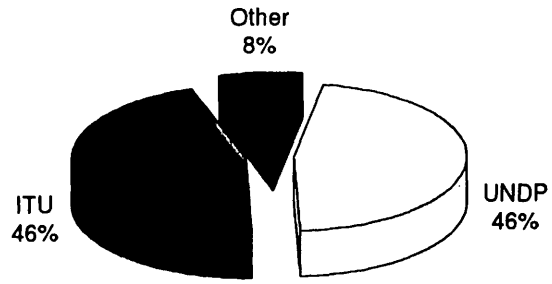
By Type of Training

Individual	291
Group	1,052
Total	**1,343**

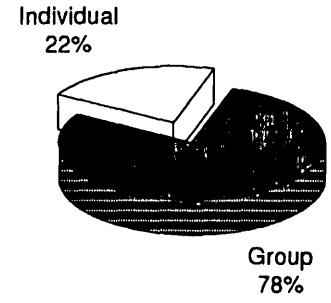
By Region

Africa	342
Americas	170
Arab States	138
Asia & Pacific	551
Europe	142
Total	**1,343**

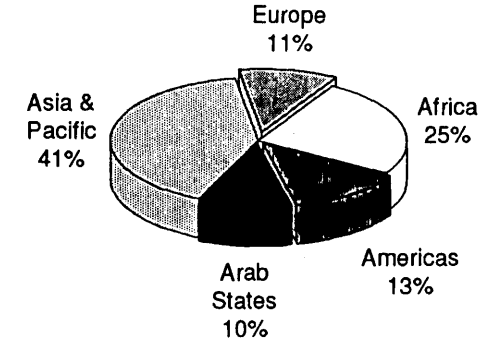
By Fund Source



By Type of Training



By Region



6. ADMINISTRATION OF THE UNION

6.1 Staff matters

6.1.1 The manning table in the 1993 budget comprised 810 posts, 736 of them permanent. The following changes occurred during the year among staff with permanent or fixed-term contracts : 32 retirements, 3 resignations and one termination for reasons of health. Three fixed-term contracts were not renewed. As on 31 December 1993, 33 officials were working part-time.

6.1.2 The following tables (Tables 1 to 4) show the staff situation as of 31 December 1993. Where applicable the figures for the preceding year are shown in parentheses for comparison purposes.

6.1.3 Short-term contracts (Table 2) have been established to ensure necessary reinforcement of staff during conferences and meetings, for temporary increase in urgent work, shift work or prolonged sick leave of essential staff.

6.1.4 The principle of geographical distribution applies to elected officials and staff in the senior counsellor and professional categories (excluding language staff). (The principle does not apply to posts in the General Service category.) The geographical distribution at the end of 1993 is shown in Table 4 and concerns staff employed by ITU except for language staff, technical cooperation project personnel and short-term staff.

TABLE 1

Distribution of staff between the General Secretariat and the Sectors of the Union
(excluding staff on short-term contracts and project personnel)

General Secretariat/ Sector	Elected Officials	Number of contracts		Total
		Permanent	Fixed-term	
General Secretariat	2	366 (368)	53 (41)	421 (411)
ITU-R*	6	134 (138)	10 (12)	150 (156)
ITU-T	1	40 (41)	1 (2)	42 (44)
ITU-D	1 (-)	28 (34)	77 (84)	106 (118)
TOTAL	**10 (9)**	**568 (581)**	**141 (139)**	**719 (729)**

* Includes contracts previously listed under IFRB and CCIR.

(The figures for 1992 are shown in parentheses.)

TABLE 2

Staff on short-term contracts

	Number of contracts		Total number of working days	
Interpreters	566	(610)	3,143	(5,692)
Engineers, engineer-editors	5	(10)	497	(120)
Programmer-analysts, Programmers	5	(6)	786	(1,040)
Translator/revisers, precis-writers	57	(120)	2,086	(5,545)
Administrative Officers	16	(12)	991	(1,177)
Secretaries, Computer clerks	132	(100)	14,094.5	(10,436.5)
Programming assistants	18	(17)	3,154	(2,862)
Text composition clerks	18	(15)	2,614	(1,209)
Typists, operators	207	(290)	13,293.5	(24,694)
Documents / reproduction operators	50	(38)	4,010	(4,684)
Dispatching clerks and other staff	72	(96)	3,679.5	(4,838)
TOTAL	1,146	(1,314)	48,348.5	(62,297.5)

(The figures for 1992 are shown in parentheses in columns 2 and 4)

TABLE 3

Distribution of staff according to grade
(excluding staff on short-term contracts and project personnel)

Grade	General Secretariat		TSB		BR		BDT		Total	
Elected	2		1		6		1		10	
	Perm.	FT	Perm.	FT	Perm.	FT	Perm.	FT	Perm.	FT
D.1	6	1	1	-	5	-	1	6	13	7
P.5	18	5	6	-	13	4	1	37	38	46
P.4	36	4	5	1	30	2	5	7	76	14
P.3	34	9	2	-	13	-	-	-	49	9
P.2	8	3	2	-	1	-	2	-	13	3
P.1	-	-	-	-	-	-	-	1	-	1
G.7	29	1	2	-	11	-	11	2	53	3
G.6	52	7	20	-	31	3	3	8	106	18
G.5	77	7	-	-	22	-	5	14	104	21
G.4	49	11	2	-	7	1	-	2	58	14
G.3	46	5	-	-	1	-	-	-	47	5
G.2	11	-	-	-	-	-	-	-	11	-
G.1	-	-	-	-	-	-	-	-	-	-
	366	53	40	1	134	10	28	77	568	141
TOTAL	**421**		**42**		**150**		**106**		**719**	

Perm. = permanent
FT = Fixed-Term

Note: The above table shows the grades of staff members, those receiving a special post allowance granted upon a recommendation by the Appointment and Promotion Board being shown in the grade for which they receive the allowance.

TABLE 4
Geographical distribution of staff on 31 December 1993 (excluding project personnel)

Country	Elected officials	D.1	P.5	P.4	P.3	P.2	P.1	Total
Region A - America								
(32 countries)								
Argentina				1				1
Brazil		1		4	1			6
Canada	1	2	2	3 (4)	1 (2)			9 (11)
Chile						1		1
Colombia			1	1	1			3
Costa Rica			2					2
Ecuador			1					1
United States	1	1	4 (3)	10 (9)	1 (2)			17 (16)
Jamaica			1					1
Mexico			1					1
Peru			1					1
Uruguay		1	2					3
Region B - Western Europe								
(27 countries)								
Germany	1	1	5 (4)	3	2			12 (11)
Austria		1		1		1		3
Belgium			2	1				3
Spain			2	2 (3)		1 (-)		5
Finland	1		2					3
France		1 (3)	5 (4)	6 (7)	8 (7)	3 (4)		23 (25)
Greece			1					1
Ireland					1			1
Italy			5 (4)	- (2)			1* (-)	6
Norway			1		1			2
Netherlands		1						1
Portugal				2 (1)	- (1)			2
United Kingdom	1		3 (2)	2 (1)	2	2		10 (8)
Sweden			2	2	2 (3)			6 (7)
Switzerland			2 (3)	3	7 (5)	4 (6)		16 (17)
Turkey			1	1				2
Region C - Eastern Europe and Northern Asia								
(25 countries)								
Bulgaria			1	2				3
Hungary		1		1	1			3
The Former Yugoslav Republic of Macedonia			1 (-)					1 (-)
Poland		- (1)		1		1		2 (3)
Slovak Republic				1 (-)				1 (-)
Czech Republic				1				1
Russia	1	1	3	5				10
Slovenia (Rep. of)			1					1
Ukraine				1				1
Yugoslavia			1 (2)					1 (2)
Region D - Africa								
(52 countries)								
Algeria	1	1	1		1			4
Benin				1				1
Burkina Faso			2					2
Cameroon	1				1			2
Congo			1					1
Côte d'Ivoire			1					1
Egypt			1		1			2
Ethiopia		1	- (1)					1 (2)
Guinea			1	1				2
Kenya				1				1
Mali				1				1
Morocco		1	- (1)		3			4 (5)
Mauritius					3 (2)			3 (2)
Uganda				1				1
Senegal		1						1
Sierra Leone			1					1
Sudan			1					1
South Africa (Rep.)				1 (-)				1 (-)
Tanzania					- (1)			- (1)
Tunisia		1	1					2
Zimbabwe			1					1
Region E - Asia & Australasia								
(46 countries)								
Afghanistan		1						1
Australia		1	3	1	2			7
China		1	1 (-)	1 (2)		1		4
Korea (Rep. of)				3 (2)	- (1)			3
India			2	4	3 (2)			9 (8)
Indonesia	1 (-)			1				2 (1)
Iran		1 (-)	1 (2)					2
Iraq				1				1
Japan	1		2	1	1	1* (-)		6 (5)
Jordan			1					1
Pakistan			- (1)		1			1 (2)
Singapore			1					1
Sri Lanka			1					1
Syrian Arab Republic			1 (2)					1 (2)
Viet Nam					1			1
TOTAL - 74 countries	**10 (9)**	**20 (22)**	**77**	**72**	**45 (46)**	**15 (16)**	**1 (-)**	**240 (242)**

* 2 posts paid on funds-in-trust.

(Wherever changes have taken place, the figure for 1992 appears in parentheses.)

6.2 Financial matters

6.2.1 The financial year 1993 was governed by the International Telecommunication Convention (Nairobi, 1982), by Resolutions and Decisions taken by the Plenipotentiary Conference, Nice 1989, as well as by the 1990 edition of the Financial Regulations of the Union approved by the Council at its 45th session (1990).

Budget for 1993

6.2.2 The Council approved at its 1992 session (Resolution 1031) the 1993 budgets as shown in the table below. The table also gives the adjustments made during the year in accordance with Resolution 647, as well as the final budgets.

- Swiss francs -

	Budget for 1993 Res. 1031	**Adjustments Res. 647**	**Final Budget for 1993**	**Final Budget for 1992**
Ordinary Budget	132,610,000	4,660,950	137,270,950	139,908,500
Technical Cooperation Special Accounts Budget	5,101,000	200,500	5,301,500	6,988,500
Supplementary Publications Budget	8,515,000	62,400	8,577,000	7,714,700

The details are given in Annex 2. *Budget and Accounts for 1993*.

6.2.3 In Resolution 1031, the Council fixed the amount of the contributory unit for Members at 310,600 Swiss francs (306,000 for 1992) on the basis of the class of contribution chosen under No. 139 of the Constitution and 368 of the Convention (Nice 1989), i.e. on the basis of 375 12/16 units in all. In the same Resolution, the Council fixed at 62,120 Swiss francs (61,200 for 1992) the annual value of the contributory unit for defraying the expenses of the meetings of the Radiocommunication Sector (former CCIR) and the Telecommunication Standardization Sector (former CCITT) by recognized operating agencies, scientific or industrial organizations and non-exempt international organizations, in accordance with Nos. 378 and 382 of the Nice Convention, i.e. at 1/5 of the contributory unit of Members.

Accounts for 1993

Ordinary Budget

6.2.4 The budgeted income for 1993 was 137,270,950 Swiss francs including a withdrawal of 6,660,950 Swiss francs from the Reserve Account. The actual income amounts to 140,478,306.94 Swiss francs (142,340,287.63 in 1992).

6.2.5 The credits and expenditure for recurrent operating costs in 1993 are the following:

- Swiss francs -

	Final Budget for 1993	Actual expenditure	Unused credits	%
- Council (Section 1)	966,300	881,974.85	84,325.15	8.73
- Common headquarters expenditure (Sections 2 to 6)	98,977,000	97,376,034.55	1,600,965.45	1.62
- Technical cooperation and assistance (Section 7)	23,906,800	23,713,854.80	192,945.20	0.08
- Additional working languages (Section 8)	3,585,600	3,585,600.00	0.00	0.00
- Conferences and meetings (Sections 11 to 17)	9,835,250	8,474,510.10	1,360,739.90	13.84
	137,270,950	134,031,974.30	3,238,975.70	2.36

Technical Cooperation Special Accounts Budget

6.2.6 Pursuant to Resolution 21, Nice 1989, the administrative and operational costs resulting from the Union's participation in the United Nations Development Programme and the costs relating to other technical cooperation activities are set out in a separate part of the Union's budget. These costs are not defrayed by contributions from Members but mainly by support cost payments from UNDP and from donors through funds-in-trust.

6.2.7 With regard to the low level of project delivery and support cost income received from UNDP, the economy measures applied to administrative costs were maintained. Expenditure amounted to 4,840,805.89 Swiss francs i.e. 8.7% less than the budget. The income under the United Nations Development Programme (3,004,654.00) and funds-in-trust technical assistance (916,072.00) amounted to 3,920,726.00 Swiss. francs. Taking into account other income of 114,431.82 Swiss francs and the unspent balance of 23,214.70 Swiss francs of credits granted for previous years, the total income for 1993 was 4,058,372.52 Swiss francs, or 782,433.37 Swiss francs less than the amount required to cover actual expenditure in 1993. The shortfall in income to cover administrative costs of the UNDP programme is attributable essentially to the rapidly fallen payments received for project delivery and support costs.

Supplementary Publications Budget

6.2.8 Expenditure and income relating to the production and sale of publications represent an account supplementary to the budget of the Union. The Supplementary Publications account shows surplus income of 1,341,193.29 Swiss francs (1,485,585.64 in 1992). The surplus has been credited to the Publications Capital Account.

Liquidity

6.2.9 Due to timely payments by most of the Union's contributors, the liquidity remained satisfactory throughout the year although most contributors postponed their payments for 1994 to late December 1993 and after. Nevertheless, 103,974,499 Swiss francs or 77.0% of the budgeted contributions for 1994 were received by the year end 1993 and no funds had to be sought from the Government of the Swiss Confederation in 1993. It must be emphasized that the

Union has no cash reserves other than the funds advanced by its Members and that, similar to the situation in previous years, 93.3% of the contributions invoiced for 1993 were actually received by 31 December 1993. The available funds were invested during the year. The revenue from interest on investments amounted to 3,789,720.88 Swiss francs.

Debtors

6.2.10 The amounts owed to the Union for the financial year 1993 were 12,261,795.95 Swiss francs for contributions and publications. The arrears for contributions and publications amounted to 34,186,511.82 Swiss francs (30,789,702.77 in 1992) including 7,259,163.32 Swiss francs posted to the Special Arrears Accounts.

6.2.11 In addition to the regular reminders regarding outstanding amounts, each debtor with a special arrears account was again requested to submit a repayment schedule. These interventions met with little success, and only two countries settled part of their special arrears during 1993.

Special Reserve for Debtors' Accounts

6.2.12 The credit balance of the Special Reserve was 15,752,185.85 Swiss francs on 31 December 1993 (13,373,817.90 in 1992). The arrears not covered by the Special Reserve were in round figures 18.4 million Swiss francs.

Capital of the Union

Reserve Account

6.2.13 The Reserve Account referred to in No. 385 of the Nice Convention (1989) and Article 47 of the ITU Financial Regulations derives its assets mainly from unused budget credits cancelled at the end of the year and from surplus amounts in the Interest Account. On 31 December 1993 the balance of the Reserve Account stood at 20,086,932.94 Swiss francs (14,292,423.17 in 1992).

Publications Capital Account

6.2.14 At the end of 1993 the surplus income of the account was 1,341,193.29 Swiss francs. The credit balance of the Publications Capital Account stood at 4,803,355.06 Swiss francs on 31 December 1993 (3,462,161.77 in 1992). The value of the stock of publications was 800,000 Swiss francs (1,430,000 in 1992), which can be regarded very prudent in view of sales expectations.

Stores, Reprography and Technical Services Capital Account

6.2.15 The credit balance of the fund stood at 565,272.40 Swiss francs on 31 December 1993 after excess expenditure of 73,180.35 Swiss francs and transfer of 1,300,000.00 Swiss francs to the Reserve Account (Decision 449) (1,938,452.75 in 1992).

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7. RELATIONS WITH THE UNITED NATIONS AND OTHER INTERNATIONAL ORGANIZATIONS

Recommendation 1 of the High Level Committee has called for the ITU to "play a leading role by working co-operatively, more strategically, and in a more systematic manner, with other intergovernmental and non-governmental organizations to ensure that, at the international level, a more comprehensive approach be taken to the broader issues of the global information economy and society". Pursuant to this recommendation, ITU has intensified its efforts to strengthening its cooperation namely with UNESCO, UNCTAD, UNIDO, UNEP and GATT. With the successful conclusion of the Uruguay Round on Multilateral Trade Negotiations, ITU is looking forward to implement recommendation 69 of the HLC which requested it to examine the possibility of "entering into an agreement with GATT setting out GATT's and the ITU's complementary roles and how the two organizations should work co-operatively".

The ever-rising importance of telecommunications in any development sector is being recognized and the ITU has now sharpened its focus in the work of the United Nations System as a whole.

Continued efforts are being made to work closer with the Bretton Woods institutions as well as with INMARSAT and INTELSAT. Besides maintaining close collaboration with organizations interested in the radiocommunication and standardization sector, ITU celebrated the World Standards Day on 14 October 1993 when ISO, IEC and ITU co-authored the 1993 World Standards Day message on the theme "Information management - Faster and better with global standards".

Cooperation with the specialized agencies were good and attempts continued to promote a more global approach to telecommunications.

In addition, the Headquarters of the Union maintained relations with a large number of other organizations. Mention should be made of the following:

Organization of American States (OAS)
Organization of African Unity (OAU)
African Development Bank (ADB)
Preferential Trade Area (PTA)
Asia-Pacific Telecommunity (APT)
European Telecommunicqations Standards Institute (ETSI)
European Communities
European Broadcasting Union (EBU)
European Conference of Postal and Telecommunications Administrations (CEPT)
European Space Agency (ESA)
International Air Transport Association (IATA)
International Electrotechnical Commission (IEC)
International Organization for Standardisation (ISO)
Organisation for Economic Cooperation and Development (OECD)
Union of Radio Science (URSI)
Panafrican Telecommunications Union (PATU)
African Posts and Telecommunications Union (UAPT)
Union of National Radio and Television Organizations of Africa (URTNA)

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ANNEX 1

POSITION OF MEMBERS IN RELATION TO THE ACTS OF THE UNION ON 31 DECEMBER 1993

Table I. *Final Acts of Geneva (1992) and Administrative Regulations:*

- Constitution and Convention of the International Telecommunication Union (Geneva, 1992);
- Optional Protocol on the Compulsory Settlement of Disputes Relating to the Constitution, to the Convention and to the Administrative Regulations (Geneva, 1992);
- International Telecommunication Regulations (Melbourne, 1988);
- Radio Regulations (Geneva, 1979);
- Partial revision of the Radio Regulations (WARC for the Mobile Services, Geneva, 1983) (MOB-83);
- Partial revision of the Radio Regulations (WARC on the Use of the Geostationary-Satellite Orbit and the Planning of the Space Services Utilizing It, Geneva, 1985) (ORB-85);
- Partial revision of the Radio Regulations (WARC for the Planning of the HF Bands Allocated to the Broadcasting Service, Geneva, 1987) (HFBC-87);
- Partial revision of the Radio Regulations (WARC for the Mobile Services, Geneva, 1987) (MOB-87);
- Partial revision of the Radio Regulations (WARC on the Use of the Geostationary-Satellite Orbit and the Planning of the Space Services Utilizing It, Geneva, 1988) (ORB-88).
- Partial revision of the Radio Regulations (WARC for Dealing with Frequency Allocations in Certain Parts of the Spectrum, Malaga-Torremolinos, 1992) (WARC-92).

Table I Bis. *Final Acts of Nairobi (1992) and Final Acts of Nice (1989):*

- International Telecommunication Convention, Nairobi, (1982);
- Optional Additional Protocol to the International Telecommunication Convention, Nairobi, (1982), on the Compulsory Settlement of Disputes;
- Constitution and Convention of the International Telecommunication Union, (Nice, 1989);
- Optional Protocol on the Compulsory Settlement of Disputes Relating to the Constitution, to the Convention and to the Administrative Regulations (Nice, 1989).

Table II. *Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service in Frequency Bands 11.7 - 12.2 GHz (in Regions 2 and 3) and 11.7 - 12.5 GHz (in Region 1) (Geneva, 1977).*

Table III. *Regional Agreement concerning the use by the broadcasting service of frequencies in the medium frequency bands in Regions 1 and 3 and in the low frequency bands in Region 1 (Geneva, 1975).*

Table IV. *Regional Agreement concerning the Use of the Band 87.5 - 108 MHz for FM Sound Broadcasting (Region 1 and part of Region 3) (Geneva, 1984).*

Table V. *Regional Agreement concerning the Maritime Mobile and the Aeronautical Radionavigation Services in the MF Band (Region 1) (Geneva, 1985).*

Table VI. *American Regional Agreements:*

- Inter-American Radio Agreement (FIAR) (Washington, 1949);
- North-American Regional Broadcasting Agreement (NARBA) (Washington, 1950);
- Regional Agreement relating to MF Broadcasting Service in Region 2 (Rio de Janeiro, 1981);
- Regional Agreement concerning the Use of the Band 1605 - 1705 kHz in Region 2 (Rio de Janeiro, 1988).

Table VII. *European Regional Agreements and Protocol:*

- Regional Agreement for the Use of Frequencies in the Bands 68 - 73 MHz and 76 - 87.5 MHz by the Broadcasting Service on the one hand and by the Fixed and Mobile Services on the other (Geneva, 1960);
- Regional Agreement for the European Broadcasting Area (Stockholm, 1961);
- Protocol amending the Stockholm Agreement (Geneva, 1985);
- Regional Agreement for the Planning of Maritime Radionavigation Service (Radiobeacons) in the European Maritime Area (Geneva, 1985).

Table VIII. *African Regional Agreements and Protocols:*

- Regional Agreement for the African Broadcasting Area concerning the use of frequencies by the broadcasting service in the very high frequency and ultra high frequency bands (Geneva, 1963);
- Protocol amending this agreement (Geneva, 1985);
- Protocol abrogating those parts of this agreement, which are still in force (Geneva, 1989);
- Regional Agreement relating to the Planning of VHF/UHF Television Broadcasting in the African Broadcasting Area and Neighbouring Countries (Geneva, 1989).

IX. *Special Agreements.*

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Table I. Final Acts of Geneva (1992) and Administrative Regulations

POSITION ON 31 DECEMBER 1993

The letter S means that the Act concerned has been signed.
The letter A in columns 3 or 5 means accession; in the other columns, it means approval.

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF GENEVA (1992)				ADMINISTRATIVE REGULATIONS													
		Constitution and Convention		Optional Protocol		International Telecommunication Regulations Melbourne, 1988		Radio Regulations											
			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat			Geneva, 1979		Partial Revision Geneva, 1983 MOB-83		Partial Revision Geneva, 1985 ORB-85		Partial Revision Geneva, 1987 HFBC-87		Partial Revision Geneva, 1987 MOB-87		Partial Revision Geneva, 1988 ORB-88		Partial Revision Malaga-Torremolinos, 1992 CAMR-92	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Afghanistan (Islamic State of)	1/16	S 60)		S		–	A 54)	S	A 4)	–	A 54)	–	A 54)	S	A 54)	S	A 54)	S	A 54)	–	
Albania (Republic of)	1/4	S		S		S		–	A 4)	–		–		S		–		–		–	
Algeria (People's Dem Rep of))	1	S 60)		–		–	A 54)	S	A 4)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Germany (Federal Republic of)	30	S 60)		–		S	A	S	A 6)	S	A 7)	S	A 46)	S	A 48)	S	A 3)	S	A 62)	S	
Andorra (Principality of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)
Angola (Republic of)	1/4	–		–		S		S	A 4)	S	A 4)	S	A 4)	S	A 4)	S		S		–	
Antigua and Barbuda	1/16	–		–		–		–	A 4)	–	A 4)	–	A 4)	S		S		S		–	
Saudi Arabia (Kingdom of)	10	S 60)		S		S	A	S	A	S	A 4)	S	A	S	A	S	A	S	A	S	
Argentine Republic	1/4	S 60)		–		S		S	A 3)	S	A 3)	S	A 3)	S	A 3)	S		S		S	
Armenia (Republic of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Australia	15	S 60)		S		S	A	S	A 4)	S	A	S	A	S	A 3)	S	A 3)	S	A	S	
Austria	1	S 60)		S		S		S	A 4)	S	A 4)	S	A 4)	S	A 4)	S		S		S	
Azerbaijani Republic	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Bahamas (Commonwealth of the)	1/2	S		S		S		–	A	–	A 4)	–	A 4)	–		S		S		S	
Bahrein (State of)	1/2	S 60)		S		–		S	A 4)	S		S		–		–		S		S	
Bangladesh (People's Republic of)	1/8	–		–		–		S	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		S	
Barbados	1/4	S		S		–	A 54)	–	A 4)	–	A 4)	–	A 54)	–	A 54)	–	A 54)	–	A 54)	–	
Belarus (Republic of)	1/2	S 60)		S		S		S	A 16)	S	A 4)	S		S	A	S	A	S		S	A
Belgium	5	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	A
Belize	1/8	A	9.XI.1993	A	7.XII.1993	–	A 61)	–	A	–	A 4)	–	A 61)	–	A 61)	–	A 61)	–	A 61)	S	A 61)
Benin (Republic of)	1/4	S 60)		S		S		S	A 4)	S	A 4)	–		–		–		S		S	
Bhutan (Kingdom of)	1/8	S		S		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		S	
Bolivia (Republic of)	1/4	A	30.XII.1993	–		–	A 61)	–	A 4)	–	A 61)	–	A 61)	–	A 61)	–	A 61)	–	A 61)	–	A 61)
Bosnia and Herzegovina (Republic of)	1/16	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Botswana (Republic of)	1/2	S		S		S		S	A 4)	–	A 4)	–		S		–		–		S	
Brazil (Federative Republic of)	3	S		S		S	A 54)	S	A 4)	S	A 4)	S	A 4)	S	A 4)	S	A 4)	S	A 54)	S	
Brunei Darussalam	1/2	S 60)		S		S		–	A 4)	–		S		–		–		S		S	
Bulgaria (Republic of)	1	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Burkina Faso 20)	1/8	S 60)		S		S		S	A 4)	–	A 4)	–	A	S	A 3)	S	A 3)	S	A 3)	S	
Burundi (Republic of)	1/8	S 60)		S		–		S	A 4)	–	A 4)	–	A 4)	–		S		S		S	
Cambodia (Kingdom of)	1/2	–		–		–		–		–		–		–		–		–		–	
Cameroon (Republic of) 8)	1	S 60)		S		S	A 54)	S	A 4)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Canada	18	S 60)	21.VI.1993 57)	S	21.VI.1993	S	A	S	A 13)	S	A	S	A 3)	S	A 3)	S	A 3)	S	A 3)	S	A 3)
Cape Verde (Republic of)	1/8	S		S		–		S	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		S	
Central African Republic	1/8	S		S		S		S	A 4)	–	A 4)	–	A 4)	S	A 4)	–		S		S	
Chile	1	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
China (People's Republic of)	10	S 60)		–		S		S	A 3)	S	A 4)	S		S		S		S		S	
Cyprus (Republic of)	1/4	S 60)		S		S		S	A 4)	S	A 4)	–		S		S		S		S	
Vatican City State	1/4	S		–		S		S	A 4)	–	A 4)	S		S		S		S		S	
Colombia (Republic of)	1	S 60)		S		S		S	A	S	A 4)	S		S		S		S		S	
Comoros (Islamic Federal Rep. of the)	1/16	S		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Congo (Republic of the)	1/2	–		–		S		S	A 4)	–	A 4)	–	A 4)	–		–		–		S	
Korea (Republic of)	5	S 60)		S		S		S	A	S	A	S	A	S		S		S		S	
Costa Rica	1/4	–		–		–		S		–		–		–		S		–		–	
Côte d'Ivoire (Republic of) 31)	1	S 60)		S		S	A 54)	S	A	S	A	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Croatia (Republic of)	1/4	S		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Cuba	1/2	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Denmark	5	S 60)	18.VI.1993	S	18.VI.1993	S	A 54)	S	A 3)	S	A 3)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	A 61)
Djibouti (Republic of)	1/8	S		S		S		–	A 4)	–	A 4)	S	A 4)	–		–		–		–	
Dominican Republic	1/2	–		–		–		–		–		–		–		–		–		–	
Egypt (Arab Republic of)	1/2	S		S		S		S	A 4)	S	A 4)	S		S		S		S		–	
El Salvador (Republic of)	1/4	S		–		S		S	A 4)	–	A 4)	–		–		–		–		–	
United Arab Emirates	1	S 60)		S		S	A 54)	S	A 4)	S	A 4)	–	A 54)	S	A 54)	–	A 54)	S	A 54)	S	
Ecuador	1/2	–		–		–		S	A 4)	S	A 4)	S	A 4)	S		–		S		S	
Eritrea	1/8	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Spain	8	S 60)		–		S	A 3)	S	A 4)	S	A 4)	S	A	S	A	S	A 3)	S	A 3)	S	
Estonia (Republic of)	1/4	S 60)		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
United States of America	30	S 60)		–		S	A 3)	S	A 18)	S	A 3)	S	A 3)	S		S	A 3)	S	A 3)	S	
Ethiopia	1/8	S 60)		S		S		S	A	S		S		–		S		S		S	
Fiji (Republic of)	1/4	S 60)		S		S		S	A 4)	–	A 4)	–		–		–		–		–	
Finland	5	S 60)		S		S	A 54)	S	A 4)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
France	30	S 60)		–		S	A 3)	S	A 4)	S		S		S		S		S		S	
Gabonese Republic	1/2	S 60)		S		S	A 54)	S	A 4)	–	A 4)	S	A 4)	S	A 54)	–	A 54)	S	A 54)	S	
Gambia (Republic of the)	1/8	S		S		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		S	
Georgia (Republic of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Ghana	1/4	S 60)		S		S	A 54)	S	A 4)	–	A 4)	S	A 4)	S	A 54)	–	A 54)	S	A 54)	S	
Greece	1	S 60)		S		S		S	A	S	A 4)	S		S		S		S		S	
Grenada	1/8	S		S		–		–		–		–		–		–		–		–	
Guatemala (Republic of)	1/4	–		–		S		S	A 4)	–	A 4)	S	A 4)	–		–		–		S	
Guinea (Republic of) 9)	1/8	S 60)		S		S	A 54)	S	A 4)	S	A 4)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	
Guinea-Bissau (Republic of)	1/8	–		–		–		–		–		–		–		–		–		–	
Equatorial Guinea (Republic of)	1/8	–		–		–		–	A 4)	–	A 4)	–		–		–		–		–	
Guyana	1/4	–		–		–		S	A 4)	–	A 4)	–		–		–		–		–	
Haiti (Republic of)	1/8	–		–		–		S	A	–		–		–		–		–		–	
Honduras (Republic of)	1/4	S		S		–		S	A 4)	–	A 4)	S		S		–		–		S	

Table I. Final Acts of Geneva (1992) and Administrative Regulations *(continued)*

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF GENEVA (1992)				ADMINISTRATIVE REGULATIONS													
		Constitution and Convention		Optional Protocol				Radio Regulations											
			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat	International Telecommunication Regulations Melbourne, 1988		Geneva, 1979		Partial Revision Geneva, 1983 MOB-83		Partial Revision Geneva, 1985 ORB-85		Partial Revision Geneva, 1987 HFBC-87		Partial Revision Geneva, 1987 MOB-87		Partial Revision Geneva, 1988 ORB-88		Partial Revision Malaga-Torremolinos, 1992 CAMR-92	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Hungary (Republic of)	1	S 60)		S		S		S	A	S	A	S		S	A	S		S		S	
India (Republic of)	5	S 60)		S		S		S	A	S	A 4)	S		S	A	S		S		S	
Indonesia (Republic of)	1	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Iran (Islamic Republic of)	1	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Iraq (Republic of)	1/4	–		–		S		S	A 4)	S	A 4)	S		S		S		S		–	
Ireland	2	S 60)		S		S		S	A 4)	S	A 4)	S	A 4)	S	A 4)	S		S		S	
Iceland	1/4	S 60)		S		S		S	A 4)	S	A 4)	–		S		–		S		S	
Israel (State of)	1	S 60)		S		S		S	A 4)	S		S		S		S		S		S	
Italy	20	S 60)		S		S		S	A	S	A	S		S	A	S		S	A	S	
Jamaica	1/4	S		S		–		–	A	–	A 4)	S		–		–		–		–	
Japan	30	S 60)		S		S	A	S	A	S	A	S	A	S	A	S	A 61)	S	A	S	A
Jordan (Hashemite Kingdom of)	1/2	S 60)		S		–	A 64)	S	A 4)	S	A 64)	S	A 64)	S	A 64)	S	A 64)	S	A 64)	S	
Kazakhstan (Republic of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Kenya (Republic of)	1/4	S 60)		S		S		S	A 4)	S	A 4)	S		S	A	S		S		S	
Kiribati (Republic of)	1/8	–		–		–		–	A 4)	–	A 4)	–	A 4)	–		–		–		–	
Kuwait (State of)	3	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Lao People's Democratic Republic	1/16	–		–		–		–	A 4)	–		–		–		–		–		–	
Lesotho (Kingdom of)	1/16	S 60)		S		–		S	A 4)	–	A 4)	–		S		–		–		–	
Latvia (Republic of)	1/4	S 60)		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	S	
The Former Yugoslav Republic of Macedonia	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Lebanon	1/4	S 60)		S		S		S	A 4)	–	A 4)	S	A	–		S		S		S	
Liberia (Republic of)	1/4	S		S		–		S	A 4)	S	A 4)	S	A 4)	S		S		S		–	
Libya (Socialist People's Libyan Arab Jamahiriya)	1	–		–		–		S	A 4)	–	A 4)	S	A 4)	S		S		S		S	
Liechtenstein (Principality of)	1/2	S 60)		S		S		S	A 4)	–	A 4)	–		–		–		S		S	
Lithuania (Republic of)	1	S 60)		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	S	
Luxembourg	1/2	S 60)		S		S		S	A 4)	–		S		S		–		S		S	
Madagascar (Republic of)	1/4	S		S		S		S	A 4)	S	A 4)	S	A 4)	S		S		S		S	
Malaysia	1	S 60)		–		S		S	A 4)	S	A 4)	S		S		S		S		S	
Malawi	1/8	S 60)		S		–		S	A 4)	–	A 4)	S		–		–		–		S	
Maldives (Republic of)	1/8	–		–		S		–	A 4)	–	A 4)	–		S		–		–		–	
Mali (Republic of)	1/8	S		S		S		S	A 4)	–	A 4)	S	A 4)	S		S		S		S	
Malta	1/4	S 60)		S		S	A 3)	S	A 4)	–		S		S		S		S		S	
Morocco (Kingdom of)	1	S 60)		–		S		S	A 4)	S	A 4)	S	A 4)	S	A 4)	S		S		S	
Mauritius (Republic of)	1/4	A	6.XII.1993	A	6.XII.1993	S	A 61)	S	A 4)	–	A 4)	–	A 61)	–	A 61)	–	A 61)	–	A 61)	–	A 61)
Mauritania (Islamic Republic of)	1/4	S 60)		S		–		S	A 4)	S	A 4)	–	A 4)	S	A 4)	S		S		–	
Mexico	1	S 60)	27.IX.1993 62)	S	27.IX.1993	S	A 3)	S	A 3)	S	A 54)	S	A 3)	S	A 3)	S	A 3)	S	A 54)	S	A 61)
Micronesia (Federated States of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Moldova (Republic of)	1/4	S		–		–	A 4)	–	A 4)	–	A 4)		A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Monaco (Principality of)	1/4	S 60)		S		S		S	A 4)	S	A 4)			S		S		S		S	
Mongolia	1/4	S 60)		–		–		S	A 4)	–	A 4)	–		S		–		S		S	
Mozambique (Republic of)	1/16	–		–		–		S	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		S	
Myanmar (Union of)	1/8	S 60)		–		–		–	A 4)	–	A 4)	–		–		–		–		–	
Namibia (Republic of)	1/4	–		–		–		–	A 4)	–		–		–		–		–		–	
Nauru (Republic of)	1/8	–		–		–				–		–		–		–		–		–	
Nepal	1/8	S		S		S	A 54)	S	A 4)	–	A 4)	–	A 4)	–	A 54)	–	A 54)	–	A 54)	–	
Nicaragua	1/4	–		–		–		S	A 4)	S	A 4)	–	A 4)	–		–		–		S	
Niger (Republic of the)	1/8	S 60)		S		S		S	A 4)	–		–		S		–		–		S	
Nigeria (Federal Republic of)	2	S 60)		S		S		S	A 4)	–	A 4)	S		–		S		S		S	
Norway	5	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
New Zealand	2	S 60)		S		S		S	A 34)	S	A 34)	S	A 55)	S	A 55)	S	A 55)	S	A 55)	S	
Oman (Sultanate of)	1/2	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Uganda (Republic of)	1/16	–		–		S	A 4)	S	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	S	
Uzbekistan (Republic of)	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Pakistan (Islamic Republic of)	2	S 60)		S		S		S	A 4)	–	A 4)	S		S		S		S		S	
Panama (Republic of)	1/2	S 60)		S		–		S	A 4)	S	A 4)	–		–		S		S		S	
Papua New Guinea	1/2	S 60)		S		S		S	A 4)	S		S		S		S		S		S	
Paraguay (Republic of)	1/2	–		–		S		S	A 4)	–	A 4)	S		S		S		S		–	
Netherlands (Kingdom of the)	8	S 60)		S		S	A 12)	S	A 12)	S	A 12)	S	A	S	A	S	A 3)	S 12)	A 3)	S	
Peru	1/4	–		–		–		S	A 4)	–	A 4)	S		–		S		S		–	
Philippines (Republic of the)	1	S 60)		S		S		S	A 4)	–	A 4)	S		S		S		–		S	
Poland (Republic of)	1	S		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Portugal	1	S 60)		S		S		S	A 4)	S	A 4)	S	A 4)	S		S		S		S	
Qatar (State of)	1/2	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Syrian Arab Republic	1/2	A	25.XI.1993	–		S	A	S	A 4)	S	A 4)	S	A 4)	S	A 61)	S	A 61)	S	A 61)	S	A 61)
Democratic People's Republic of Korea	1/4	S 60)		S		S	A 54)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Slovak Republic	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Czech Republic	1	–		–		–	A 4)	–	A 4)		A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Romania	1/2	S 60)	30.XI.1993	–		S	A 61)	S	A 4)	S	A 4)	S	A 61)	S	A 61)	S	A 61)	S	A 61)	S	A 61)
United Kingdom of Great Britain and Northern Ireland	15	S 60)		S		S	A 3)	S	A 17)	S	A 3)	S	A 3)	S	A 3)	S	A 3)	S	A 3)	S	
Russian Federation	30	S 60)		–		S		S	A 14)	S	A 4)	S		S	A	S	A	S	A	S	A
Rwandese Republic	1/8	–		–		S		S	A 4)	–	A 4)	–		S		–		–		–	
San Marino (Republic of)	1/4	S		S		S		S	A 4)	–	A 4)	S		–		S		S		S	
Saint Vincent and the Grenadines	1/16	–		–		–		–	A 4)	–	A 4)	–	A 4)	–		–		–		–	
Solomon Islands	1/16	–		–		–		–	A 4)	–	A 4)	–	A 4)	–		–		–		–	
Western Samoa (Independent State of)	1/16	–		–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		–	
Sao Tome and Principe (Democratic Republic of)	1/8	–		–		–		–	A 4)	–		–		–		–		–		–	
Senegal (Republic of)	1	S 60)		S		S		S	A 4)	–		S		S		S		S		S	
Sierra Leone	1/8	–		–		–		–	A 4)	–	A 4)	–		–		–		–		–	
Singapore (Republic of)	1	S 60)		S		S		S	A 4)	S	A 4)	S		S		S		S		S	
Slovenia (Republic of)	1/4	S 60)		S		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Somali Democratic Republic	1/8	–		–		–		S	A 4)	–		S		S		–		–		–	

Table I. Final Acts of Geneva (1992) and Administrative Regulations *(continued)*

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF GENEVA (1992)				ADMINISTRATIVE REGULATIONS															
		Constitution and Convention		Optional Protocol		Radio Regulations															
			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat	International Telecommunication Regulations Melbourne, 1988		Geneva, 1979		Partial Revision Geneva, 1983 MOB-83		Partial Revision Geneva, 1985 ORB-85		Partial Revision Geneva, 1987 HFBC-87		Partial Revision Geneva, 1987 MOB-87		Partial Revision Geneva, 1988 ORB-88		Partial Revision Malaga-Torremolinos, 1992 CAMR-92	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Sudan (Republic of the) 32)	1/16	S 60)		S		–		S	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		–	
Sri Lanka (Democratic Socialist Republic of)	1/2	S 60)		S		–		S	A 4)	S	A 4)	S		S		S		–		S	
South Africa (Republic of)	1	–		–		–		–	A 4)	–		–		–		–	A	–	A	–	
Sweden	10	S 60)		S		S		S	A 4)	S	A 3)	S	A 3)	S	A 3)	S		S		S	A 3)
Switzerland (Confederation of)	10	S 60)		S		S		S	A	S	A	S	A	S	A	S	A	S	A	S	A
Suriname (Republic of)	1/4	S 60)		S		–		–	A 4)	–		S		S		S		–		S	
Swaziland (Kingdom of)	1/8	S 60)		S		S	A 54)	S	A 4)	–	A 4)	–	A 54)	S	A 54)	S	A 54)	–	A 54)	S	
Tanzania (United Republic of)	1/8	S		S		S		S	A 4)	–	A 4)	S	A 4)	S		S		S		S	
Chad (Republic of)	1/16	S		S		S		S	A 4)	–		S		–		–		–		–	
Thailand	1 1/2	S 60)		S		S		S	A	S	A 4)	S		S		S		S		S	
Togolese Republic	1/16	–		–		S		S	A 4)	S	A 4)	–		S		S		S		S	
Tonga (Kingdom of)	1/16	–		–		S		–	A 4)	–	A 4)	S	A 4)	–		–		S		–	
Trinidad and Tobago	1/2	–		–		–		S	A 4)	–		–		–		–		S		–	
Tunisia	1/2	S 60)		S		S	A 54)	S	A 4)	S	A 4)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	
Turkmenistan	1/4	–		–		–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	A 4)	–	
Turkey	1	S 60)		S		S	A	S	A 4)	S	A 4)	S		S		S		S		S	
Ukraine	1/2	S 60)		–		S		S	A 15)	S	A 4)	S		S	A	S		S		S	
Uruguay (Eastern Republic of)	1/2	S 60)		S		–	A 54)	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Vanuatu (Republic of)	1/8	–		–		–		–	A 4)	–	A 4)	–	A 4)	–		–		–		–	
Venezuela (Republic of)	1 1/2	S 60)		–		–	A	S	A 3)	S	A 4)	S		S		S		S		S	
Viet Nam (Socialist Republic of)	1/2	S 60)		S		S		–	A 37)	S	A 37)	–		S		S		S		–	
Yemen (Republic of)	1/4	S 60)		S		S		–	A 4)	–	A 4)	–	A 4)	S		–		–		S	
Yugoslavia (Federal Rep. of)	1	–		–		S	A 54)	S	A	S	A 4)	S	A 54)	S	A 54)	S	A 54)	S	A 54)	S	
Zaire (Republic of)	1/2	–		–		S		S	A 4)	–	A 4)	–	A 4)	–	A 4)	–		–		–	
Zambia (Republic of)	1/4	S 60)		S		–		S	A 4)	S	A 4)	–		–		S		S		S	
Zimbabwe (Republic of)	1/2	S		S		S		–	A 4)	–	A 4)	–		S		–		S		S	

Table I Bis. Final Acts of Nairobi (1982) and Final Acts of Nice (1989)

POSITION ON 31 DECEMBER 1993

The letter S means that the Act concerned has been signed.
The letter A in columns 3, 5, 8 or 10 means accession; in the other columns, it means approval.

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF NAIROBI (1982)				Class of Contribution Number of Units	FINAL ACTS OF NICE (1989)			
		Convention, etc. *)		Opt. Add. Prot. **)			Constitution and Convention		Optional Protocol	
			Date on which the instrument of ratification or accession was deposited with the General Secretariat		Date on which the instrument of ratification or accession was deposited with the General Secretariat			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat
1	2	3	4	5	6	7	8	9	10	11
Afghanistan (Islamic State of)	1/8	S 1)	26.X.1984 2)	S		1/16	S 53)	5.VI.1991	S	5.VI.1991
Albania (Republic of)	1/4	A	2.XI.1984 23)	–	–	1/4	–		–	
Algeria (People's Dem Rep of))	1	S 1)	14.I.1986	–		1	S 53)	5.VIII.1992 57)	–	
Germany (Federal Republic of)	30	S 1)	6.XII.1985 2) 27)	–		30	S 53)		–	
Andorra (Principality of)	1/4	A	12.XI.1993	–		1/4	–		–	
Angola (Republic of)	1/4	S	10.VI.1989	–		1/4	S		S	
Antigua and Barbuda	1/8	A	4.II.1987	–		1/16	S 53)		S	
Saudi Arabia (Kingdom of)	10	S 1)	25.IV.1986 39)	S		10	S 53)		S	
Argentine Republic	3	S 1)	2.II.1987 45)	S		1/4	S 53)		–	
Armenia (Republic of)	1/4	A	30.VI.1992	–		1/4	–		–	
Australia	18	S 1)	12.I.1984	S	3.IV.1985	15	S 53)		S	
Austria	1	S 1)	30.III.1989 2)	S	30.III.1989	1	S 53)		S	
Azerbaijani Republic	1/4	A	10.IV.1992	–		1/4	–		–	
Bahamas (Commonwealth of the)	1/2	A	5.II.1988	–		1/2	S 53)		S	
Bahrein (State of)	1/2	A	13.I.1984 25)	–		1/2	S 53)		S	
Bangladesh (People's Republic of)	1/8	S 1)	12.IV.1989	S		1/8	S 53)		S	
Barbados	1/4	S 1)	22.V.1986	S	18.III.1987	1/4	S 53)	5.X.1990	S	5.X.1990
Belarus (Republic of)	1/2	S 1)	13.I.1986 36)	–		1/2	S 53)		–	
Belgium	5	S 1)	9.X.1986	S	9.X.1986	5	S 53)		S	
Belize	1/8	S	20.XII.1985 30)	S	21.III.1986	1/8	–		–	
Benin (Republic of)	1/4	S 1)	4.VII.1986	S		1/4	S 53)		S	
Bhutan (Kingdom of)	1/8	A	15.IX.1988	–		1/8	S 53)		S	
Bolivia (Republic of)	1/4	A	30.I.1984	–		1/4	–		–	
Bosnia and Herzegovina (Republic of)	1/16	A	20.X.1992	–		1/16	–		–	
Botswana (Republic of)	1/2	S 1)	11.IV.1986 2)	S	21.IV.1987	1/2	S		S	
Brazil (Federative Republic of)	3	S 1)	31.I.1990	S		3	S 53)	18.I.1993	S	
Brunei Darussalam	1/2	A	19.XI.1984	–		1/2	S 53)		S	
Bulgaria (Republic of)	1	S 1)	21.V.1986 40)	–		1	S 53)		–	
Burkina Faso 20)	1/8	S 1)	30.IV.1986	S		1/8	S 53)		S	
Burundi (Republic of)	1/8	S 1)	17.V.1988	S		1/8	S 53)		S	
Cambodia (Kingdom of)	1/2	–		–		1/2	–		–	
Cameroon (Republic of) 8)	1/2	S 1)	17.VI.1986	S	3.X.1986	1	S 53)	24.VII.1991	S	24.VII.1991

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF NAIROBI (1982) Convention, etc. *)		Opt. Add. Prot. **)		Class of Contribution Number of Units	FINAL ACTS OF NICE (1989) Constitution and Convention		Optional Protocol	
			Date on which the instrument of ratification or accession was deposited with the General Secretariat		Date on which the instrument of ratification or accession was deposited with the General Secretariat			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat
1	2	3	4	5	6	7	8	9	10	11
Canada	18	S 1)	11.X.1983	S	11.X.1983	18	S 53)	20.II.1991 56)	S	20.II.1991
Cape Verde (Republic of)	1/8	S	9.VI.1989	–		1/8	S 53)		S	
Central African Republic	1/8	S 1)	28.XI.1988	S		1/8	S 53)		S	
Chile	1	S 1)	12.XII.1985 28)	S	12.XII.1985	1	S 53)		S	
China (People's Republic of)	10	S 1)	19.VIII.1985 2)	–		10	S 53)		–	
Cyprus (Republic of)	1/4	S 1)	22.VIII.1986	S	22.VIII.1986	1/4	S 53)		S	
Vatican City State	1/4	S	30.XII.1985	–		1/4	S		–	
Colombia (Republic of)	1	S 1)	19.IX.1985 2)	S	19.IX.1985	1	S 53)		S	
Comoros (Islamic Federal Rep. of the)	1/8	–	5.X.1992	–		1/16	S		S	
Congo (Republic of the)	1/2	S 1)	27.IV.1988	S		1/2	S 53)		S	
Korea (Republic of)	1	S 1)	26.XI.1985	S	26.XI.1985	5	S 53)		S	
Costa Rica	1/4	S 1)		S		1/4	S 53)		S	
Côte d'Ivoire (Republic of) 31)	1	S 1)	17.IX.1986	S	17.IX.1986	1/4	S 53)	30.IV.1993	S	
Croatia (Republic of)	1/4	A	3.VI.1992	–		1/4	–		–	
Cuba	1/2	S 1)	28.I.1986 38)	S		1/2	S 53)		–	
Denmark	5	S 1)	14.III.1985	S	14.III.1985	5	S 53)	14.V.1992	S	14.V.1992
Djibouti (Republic of)	1/8	A	21.IV.1987	–		1/8	S 53)		S	
Dominican Republic	1/2	–		–		1/2	–		–	
Egypt (Arab Republic of)	1	S	16.IX.1985	S	16.I.1987	1/2	S		S	
El Salvador (Republic of)	1/4	S 1)	28.III.1985	S	28.III.1985	1/4	–		–	
United Arab Emirates	1	A	22.V.1986 41)	–		1	S 53)	7.X.1991	S	7.X.1991
Ecuador	1/2	S 1)	13.IV.1988 2)	S	13.IV.1988	1/2	S 53)		S	
Eritrea	1/8	A	6.VIII.1993	–		1/8	–		–	
Spain	3	S 1)	17.XII.1985	–		8	S 53)	27.IV.1992 58)	–	
Estonia (Republic of)	1/4	A	22.IV.1992	–		1/4	–		–	
United States of America	30	S 1)	10.I.1986 2)	–		30	S 53)		–	
Ethiopia	1/8	S	3.VII.1984	–		1/8	S 53)		–	
Fiji (Republic of)	1/4	S	25.IX.1986	S	25.IX.1986	1/4	–		–	
Finland	5	S 1)	3.I.1986	S	3.I.1986	5	S 53)	6.V.1992 59)	S	6.V.1992
France	30	S 1)	1.X.1984 2)	–		30	S 53)		–	
Gabonese Republic	1/2	S 1)	28.IV.1988	S		1/2	S 53)	8.IV.1991	S	8.IV.1991
Gambia (Republic of the)	1/8	S	8.III.1989	S	8.III.1989	1/8	S		S	
Georgia (Republic of)	1/4	A	7.I.1993	–		1/4	–		–	
Ghana	1/4	S 1)	19.II.1987	S		1/4	S 53)	31.VII.1991	S	
Greece	1	S 1)	15.V.1985 2)	S	15.V.1985	1	S 53)		S	
Grenada	1/8	S 1)		S		1/8	–		–	
Guatemala (Republic of)	1/4	S 1)	21.XI.1986	S	21.XI.1986	1/4	S		S	
Guinea (Republic of) 9)	1/8	S 1)	11.I.1988	S		1/8	S 53)	10.XII.1991	S	
Guinea-Bissau (Republic of)	1/8	–		–		1/8	–		–	
Equatorial Guinea (Republic of)	1/8	S	11.VI.1986	S	4.II.1987	1/8	–		–	
Guyana	1/4	S 1)	30.XII.1985	S		1/4	–		–	
Haiti (Republic of)	1/8	A	27.IX.1984	–		1/8	–		–	
Honduras (Republic of)	1/4	A	11.IX.1985	A	11.IX.1985	1/4	–		–	

*) Convention, Final Protocol, Additional Protocols.
**) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Table I Bis. Final Acts of Nairobi (1982) and Final Acts of Nice (1989) *(continued)*

MEMBERS (In the alphabetical order of the French version of the country names)	FINAL ACTS OF NAIROBI (1982)					FINAL ACTS OF NICE (1989)				
		Convention, etc. *)		Opt. Add. Prot. **)			Constitution and Convention		Optional Protocol	
	Class of Contribution Number of Units		Date on which the instrument of ratification or accession was deposited with the General Secretariat		Date on which the instrument of ratification or accession was deposited with the General Secretariat	Class of Contribution Number of Units		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat
1	2	3	4	5	6	7	8	9	10	11
Hungary (Republic of)	1	S 1)	4.VII.1985 2)	–		1	S 53)		S	
India (Republic of)	10	S 1)	8.I.1986	–		5	S 53)		–	
Indonesia (Republic of)	1	S 1)	30.XII.1985 2)	–		1	S 53)		–	
Iran (Islamic Republic of)	1	S 1)	8.I.1986	–		1	S 53)		–	
Iraq (Republic of)	1/4	S 1)	16.X.1986	–		1/4	S 53)		S	
Ireland	2	S	3.XI.1988 49)	–		2	S 53)		–	
Iceland	1/4	S 1)	3.VII.1986	S		1/4	S 53)		S	
Israel (State of)	1	S 1)	19.VII.1984	–		1	S 53)		S	
Italy	10	S 1)	13.V.1986 2)	S	13.V.1986	20	S 53)		S	
Jamaica	1/4	S 1)	12.VI.1985	S		1/4	S 53)		S	
Japan	30	S 1)	12.VII.1984	S	12.VII.1984	30	S 53)		S	
Jordan (Hashemite Kingdom of)	1/2	S 1)	14.III.1984	S		1/2	S 53)	29.I.1992	S	29.I.1992
Kazakhstan (Republic of)	1/4	A	23.II.1993	–		1/4	–		–	
Kenya (Republic of)	1/4	S 1)	29.XI.1985	–		1/4	S 53)		S	
Kiribati (Republic of)	1/8	A	3.XI.1986	–		1/8	S 53)		S	
Kuwait (State of)	1	S 1)	9.X.1986	S		3	S 53)		S	
Lao People's Democratic Republic	1/8	A	8.VIII.1984 19)	–		1/16	–		–	
Lesotho (Kingdom of)	1/8	S 1)	18.IX.1986	–		1/16	S 53)		S	
Latvia (Republic of)	1/4	A	11.XI.1991	–		1/4	–		–	
The Former Yugoslav Republic of Macedonia	1/4	A	4.V.1993	–		1/4	–		–	
Lebanon	1/4	S 1)	13.II.1986	S		1/4	S 53)		S	
Liberia (Republic of)	1/4	A	9.III.1987	–		1/4	S 53)		S	
Libya (Socialist People's Libyan Arab Jamahiriya)	1 1/2	S 1)	15.XII.1986	S		1	S 53)		–	
Liechtenstein (Principality of)	1/2	S 1)	1.IV.1985	S	1.IV.1985	1/2	S 53)		S	
Lithuania (Republic of)	1	A	12.X.1991	–		1	–		–	
Luxembourg	1/2	S 1)	1.XI.1984	S	1.XI.1984	1/2	S 53)		S	
Madagascar (Republic of)	1/4	S 1)	22.I.1987	S		1/4	S 53)		S	
Malaysia	3	S 1)	15.IV.1986	–		1	S 53)		–	
Malawi	1/8	S 1)	1.IV.1985	S	9.X.1985	1/8	S 53)		S	
Maldives (Republic of)	1/8	S 1)	1.IV.1985	S		1/8	S		S	
Mali (Republic of)	1/8	S 1)	8.V.1987	S		1/8	S 53)		S	
Malta	1/4	A	11.IV.1984 10)	A	11.IV.1984	1/4	S 53)		S	
Morocco (Kingdom of)	1	S 1)	8.VI.1989	S		1	S 53)		–	
Mauritius (Republic of)	1/4	A	24.VII.1985	–		1/4	S 53)		S	
Mauritania (Islamic Republic of)	1/4	S 1)	11.X.1988	S		1/4	–		–	
Mexico	1	S 1)	15.III.1984 2)	S		1	S 53)	24.IV.1991 57)	S	
Micronesia (Federated States of)	1/4	A	18.III.1993	–		1/4	–		–	
Moldova (Republic of)	1/4	A	20.X.1992	–		1/4	–		–	
Monaco (Principality of)	1/4	S 1)	30.XII.1985	–		1/4	S		–	

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF NAIROBI (1982)				Class of Contribution Number of Units	FINAL ACTS OF NICE (1989)			
		Convention, etc. *)		Opt. Add. Prot. **)			Constitution and Convention		Optional Protocol	
			Date on which the instrument of ratification or accession was deposited with the General Secretariat		Date on which the instrument of ratification or accession was deposited with the General Secretariat			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat
1	2	3	4	5	6	7	8	9	10	11
Mongolia	1/4	S 1)	17.III.1986 2)	–		1/4	S 53)		S	
Mozambique (Republic of)	1/4	S	31.X.1988	–		1/16	–		–	
Myanmar (Union of)	1/2	A	24.X.1986	–		1/8	S 53)		–	
Namibia (Republic of)	–	A	25.I.1984	–		1/4	–		–	
Nauru (Republic of)	1/8	–		–		1/8	–		–	
Nepal	1/8	S	4.I.1988	S		1/8	S 53)	11.IV.1991	S	
Nicaragua	1/2	S 1)	17.II.1988	S		1/4	–		–	
Niger (Republic of the)	1/8	S 1)	6.II.1984	S		1/8	S 53)		S	
Nigeria (Federal Republic of)	2	S 1)	26.VIII.1986	S		2	S 53)		S	
Norway	5	S 1)	6.III.1986	S		5	S 53)		S	
New Zealand	2	S 1)	3.I.1986 33)	S	3.I.1986 33)	2	S 53)		S	
Oman (Sultanate of)	1/2	S 1)	23.I.1986	S	23.I.1986	1/2	S 53)		S	
Uganda (Republic of)	1/8	S 1)	2.XI.1992	S		1/16	S 53)		S	
Uzbekistan (Republic of)	1/4	A	10.VII.1992	–		1/4	–		–	
Pakistan (Islamic Republic of)	2	S 1)	6.III.1986	–		2	S 53)		–	
Panama (Republic of)	1/2	A	23.X.1986	–		1/2	–		–	
Papua New Guinea	1/2	S 1)	25.I.1984 11)	S	25.I.1984	1/2	S 53)		S	
Paraguay (Republic of)	1/2	S	30.XII.1985	S	27.III.1987	1/2	S 53)		S	
Netherlands (Kingdom of the)	10	S 1)	31.VIII.1984 21)	S	31.VIII.1984 22)	8	S 53)	8.I.1993 12)	S	8.I.1993 12)
Peru	1/4	S 1)	19.III.1986	–		1/4	S 53)		S	
Philippines (Republic of the)	1	S 1)	23.VII.1986	S		1	S 53)		S	
Poland (Republic of)	2	S 1)	25.III.1986	–		1	S 53)		S	
Portugal	1	S 1)	11.II.1987	–		1	S 53)		S	
Qatar (State of)	1/2	S 1)	2.V.1985 2)	S	18.XI.1985	1/2	S 53)		S	
Syrian Arab Republic	1/2	S 1)	15.I.1987	S		1/2	S 53)		S	
Democratic People's Republic of Korea	1/4	A	9.I.1984	–		1/4	S 53)	9.I.1991	S	
Slovak Republic	1/4	A	23.II.1993	–		1/4	–		–	
Czech Republic	1	A	1.I.1993	–		1	–		–	
Romania	1/2	S 1)	1.VII.1986 42)	–		1/2	S 53)		–	
United Kingdom of Great Britain and Northern Ireland	30	S 1)	15.XI.1984 26)	S	15.XI.1984 26)	15	S 53)		S	
Russian Federation	30	S 1)	16.XII.1985 29)	–		30	S 53)		–	
Rwandese Republic	1/8	S 1)	5.IX.1986	S		1/8	S 53)		S	
San Marino (Republic of)	1/4	S	3.VII.1985	S		1/4	S		S	
Saint Vincent and the Grenadines	1/8	A	15.XII.1986	–		1/16	S 53)		S	
Solomon Islands	1/8	A	27.VII.1987 47)	–		1/8	S		S	
Western Samoa (Independent State of)	1/8	A	7.X.1988	–		1/16	–		–	
Sao Tome and Principe (Democratic Republic of)	1/8	A	6.II.1984	–		1/8	–		–	
Senegal (Republic of)	1	S 1)	13.XI.1984	S		.1	S 53)		S	
Sierra Leone	1/8	A	2.IX.1985	–		1/8	–		–	
Singapore (Republic of)	1	S 1)	23.XII.1985	–		1	S 53)		–	
Slovenia (Republic of)	1/4	A	16.VI.1992	–		1/4	–		–	
Somali Democratic Republic	1/8	S 1)	25.VI.1984	–		1/8	S 53)		–	

*) Convention, Final Protocol, Additional Protocols.
**) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Table I Bis. Final Acts of Nairobi (1982) and Final Acts of Nice (1989) *(continued)*

MEMBERS (In the alphabetical order of the French version of the country names)	Class of Contribution Number of Units	FINAL ACTS OF NAIROBI (1982)				Class of Contribution Number of Units	FINAL ACTS OF NICE (1989)			
		Convention, etc. *)		Opt. Add. Prot. **)			Constitution and Convention		Optional Protocol	
			Date on which the instrument of ratification or accession was deposited with the General Secretariat		Date on which the instrument of ratification or accession was deposited with the General Secretariat			Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat		Date on which the instrument of ratification, acceptance, approval or accession was deposited with the General Secretariat
1	2	3	4	5	6	7	8	9	10	11
Sudan (Republic of the) 32)	1/8	S 1)	17.II.1989	S		1/16	S 53)		–	
Sri Lanka (Democratic Socialist Republic of)	1/2	S	1.IX.1986	S		1/2	S 53)		S	
South Africa (Republic of)	1	A	14.XI.1984 24)	–		1	–		–	
Sweden	10	S 1)	3.X.1985 2)	S	3.X.1985	10	S 53)		S	
Switzerland (Confederation of)	10	S 1)	1.IV.1985	S	1.IV.1985	10	S 53)		S	
Suriname (Republic of)	1/4	S	7.I.1985	S		1/4	S		S	
Swaziland (Kingdom of)	1/4	S 1)	23.V.1985 2)	S	23.V.1985	1/8	S 53)	8.VII.1991	S	8.VII.1991
Tanzania (United Republic of)	1/8	S 1)	5.I.1987	S		1/8	S 53)		S	
Chad (Republic of)	1/8	A	12.XII.1984	–		1/16	S 53)		S	
Thailand	1 1/2	S 1)	13.XI.1985	S		1 1/2	S 53)		S	
Togolese Republic	1/4	S 1)	17.III.1986	S		1/16	S 53)		S	
Tonga (Kingdom of)	1/8	S 1)	11.I.1988	–		1/16	S		S	
Trinidad and Tobago	1	A	1.X.1984	–		1/2	S 53)		S	
Tunisia	1	S 1)	10.II.1987	S	10.II.1987	1/2	S 53)	2.V.1991	S	2.V.1991
Turkmenistan	1/4	A	7.V.1993	–		1/4	–		–	
Turkey	1	S 1)	10.III.1986	–		1	S 53)		S	
Ukraine	1	S 1)	13.I.1986 35)	–		1/2	S 53)		–	
Uruguay (Eastern Republic of)	1/2	S 1)	24.IX.1984 2)	S	24.IX.1984	1/2	S 53)	23.X.1992 57)	S	23.X.1992
Vanuatu (Republic of)	1/8	A	30.III.1988	–		1/8	–		–	
Venezuela (Republic of)	2	S 1)	23.VI.1986	–		1 1/2	S 53)		–	
Viet Nam (Socialist Republic of)	1/2	S 1)	23.I.1986 37)	–		1/2	S 53)		–	
Yemen (Republic of)	1/4	S 1)	11.III.1987	S		1/4	S 53)		S	
Yugoslavia (Federal Rep. of)	1	S 1)	9.V.1986	–		1	S 53)	13.XI.1992	S	13.XI.1992
Zaire (Republic of)	1/2	S	8.VI.1989	S		1/2	S 53)		S	
Zambia (Republic of)	1/4	S	29.V.1986	S	5.IV.1988	1/4	S 53)		S	
Zimbabwe (Republic of)	1/2	S 1)	4.VII.1986 43)	S	4.VII.1986	1/2	S 53)		S	

*) Convention, Final Protocol, Additional Protocols.

**) Optional Additional Protocol on the Compulsory Settlement of Disputes.

1) See the statement or statements appearing in the Final Protocol annexed to the Convention.

2) In ratifying the Convention, the country concerned confirmed the reservation(s) made at the time of signature.

3) This approval was given subject to the reservation(s) made at the time of signature.

4) Regulations approved *ipso facto*, since they were in force when the country concerned ratified or acceded to the International Telecommunication Convention of Malaga-Torremolinos, 1973 or to that of Nairobi, 1982.

5) See Notification No. 1088.

6) See Notifications Nos. 1171, 1179, 1187, 1192 and 1195.

7) See Notifications Nos. 1205, 1217, 1219 and 1226.

8) Formerly: Cameroon (United Republic of).

9) Formerly: Guinea (Revolutionary People's Republic of).

10) In acceding to the Convention, the Government of the Republic of Malta has reserved the right to take such action as it may consider necessary to protect its interests, should Members in any way fail to comply with the requirements of the Convention, Annexes, Protocols, etc., or should the reservations made by such Members jeopardize its telecommunications services or lead to an increase in Malta's share in defraying the expenses of the Union.

11) In ratifying the Convention, the Government of Papua New Guinea confirmed the reservation contained in No. 63 of the Final Protocol to the aforementioned Convention.

12) For the Netherlands, the Netherlands Antilles and Aruba.

13) This approval was given subject to the two reservations appearing under No. 19 in the Final Protocol made at the time of signature.

14) The notification of approval was accompanied by the following declarations:

a) in approving the Radio Regulations (Geneva, 1979), the Union of Soviet Socialist Republics reserves the right to take the necessary steps to protect its interests in the event that other States fail to observe the provisions of the said Regulations and in the event that any other action is taken which may be prejudicial to the interests of the USSR;

b) the Union of Soviet Socialist Republics does not recognize claims to the extension of State sovereignty to any segment of the orbit of geostationary satellites, since such claims are contrary to the status of outer space universally recognized in international law;

c) as the Soviet Government has already declared on several occasions in connection with the territorial claims of certain countries in Antarctica, the Union of Soviet Socialist Republics has never recognized and cannot recognize as legitimate any separate solution whatsoever to the question of the ownership of Antarctica by any State.

15) The notification of approval was accompanied by the following declarations:

a) in approving the Radio Regulations (Geneva, 1979), the Ukrainian Soviet Socialist Republic reserves the right to take the necessary steps to protect its interests in the event that other States fail to observe the provisions of the said Regulations and in the event that any other action is taken which may be prejudicial to the interests of the Ukrainian S.S.R.;

b) the Ukrainian Soviet Socialist Republic does not recognize claims to the extension of State sovereignty to any segment of the orbit of geostationary satellites, since such claims are contrary to the status of outer space universally recognized in international law;

c) in connection with the territorial claims of certain countries in Antarctica, the Ukrainian Soviet Socialist Republic has never recognized and cannot recognize as legitimate any separate solution whatsoever to the question of the ownership of Antarctica by any State.

16) The notification of approval was accompanied by the following declarations:

a) in approving the Radio Regulations (Geneva, 1979), the Byelorussian Soviet Socialist Republic reserves the right to take the necessary steps to protect its interests in the event that other States fail to observe the provisions of the said Regulations and in the event that any other action is taken which may be prejudicial to the interests of the Byelorussian S.S.R.;

b) the Byelorussian Soviet Socialist Republic does not recognize claims to the extension of State sovereignty to any segment of the orbit of geostationary satellites, since such claims are contrary to the status of outer space universally recognized in international law;

c) in connection with the territorial claims of certain countries in Antarctica, the Byelorussian Soviet Socialist Republic has never recognized and cannot recognize as legitimate any separate solution whatsoever to the question of the ownership of Antarctica by any State.

17) The approval is in respect of the United Kingdom of Great Britain and Northern Ireland and Territories under the territorial sovereignty of the United Kingdom.

18) In ratifying these Acts, the Government of the United States of America confirmed the reservations and statements made when the Final Protocol was signed (Nos. 32, 36, 38, 39, 72 and 75). The following is also contained in the instrument:

> The United States reservation contained in statement XII of the Final Protocol associated with the partial revision of the 1959 Radio Regulations adopted at the World Maritime Administrative Radio Conference, Geneva, 1974, should be regarded as continuing to apply to the Radio Regulations (Geneva, 1979), the text of that reservation being as follows:
>
> "The Delegation of the United States of America formally declares that the United States of America does not, by signature of these Final Acts on its behalf, accept any obligations in respect of the Frequency Allotment Plan for Coast Radiotelephone Stations Operating in the Exclusive Maritime Mobile Bands between 4 000 kHz and 23 000 kHz and the associated implementing procedures, and that, although the United States of America will observe the provisions of the Plan and implementing procedures to the extent practicable, pending the results of a future World General Administrative Radio Conference, the United States of America reserves its right to take such measures as may be necessary to protect its maritime radiotelephony interests."

19) In acceding to the Convention, the Government of the Lao People's Democratic Republic has reserved the right not to accept any financial measures which would lead to an unjustified increase in its contributory share in defraying Union expenses, as well as the right to take any measures to safeguard its interests, should other States fail to comply with the provisions of the International Telecommunication Convention or in the event of any other actions that might encroach upon its sovereignty.

20) Formerly: Upper Volta (Republic of the).

21) On behalf of the Kingdom in Europe, the Netherlands Antilles and Aruba. In ratifying the Convention, the Government of the Netherlands confirmed the statements in Nos. 91, 92 and 104 of the Final Protocol to the Convention and made the following new statement *(translation)*:

> "Ratification implies that the Kingdom of the Netherlands agrees that the granting of technical assistance to developing countries should be one of the objectives of the International Telecommunication Union (Article 4, Nos. 14 and 20 of the Convention). However, the Kingdom does not consider that expenditure relating to material equipment incurred in the implementation of projects, should be covered by funds included in the ordinary budget of the Union.
>
> Nor could the Kingdom subscribe to any major change in the allocation of Union funds in relation to the distribution pattern applied from 1973 to the end of 1983.
>
> This is the standpoint adopted by the Kingdom in notifying its choice of class of contribution to ITU expenditure."

22) On behalf of the Kingdom in Europe, the Netherlands Antilles and Aruba.

23) In acceding to the Convention, the Government of the Socialist People's Republic of Albania formulated the following statements *(translation)*:

> "1. The Socialist People's Republic of Albania accepts the settlement of disputes by arbitration in accordance with Articles 50 (No. 189) and 82 of the International Telecommunication Convention (Nairobi, 1982) only after prior agreement of all the parties to the dispute.
>
> 2. The Socialist People's Republic of Albania reserves the right to take such action as it may deem necessary to safeguard its interests if reservations made by other countries lead to an increase in its contributory share in defraying the expenses of the Union or if any Members of the Union fail to pay their contribution to defraying the expenses of the International Telecommunication Union."

24) In acceding to the Convention, the Government of the Republic of South Africa formulates the following statement:

> "The Government of the Republic of South Africa reserves the right to take any action it deems necessary to protect its interests should other Members in any way fail to comply with the requirements of the International Telecommunication Convention (Nairobi, 1982) in respect of South Africa."

25) In acceding to the Convention, the State of Bahrain has made the following reservations:

> "1. The State of Bahrain wishes to reserve the right of its Government to take such action as it may consider necessary to protect its interests, should Members in any way fail to comply with the requirements of the International Telecommunication Convention (Nairobi, 1982) or should the reservations made by such Members jeopardize its telecommunication services or lead to an increase in Bahrain's share in defraying the expenses of the Union.
>
> 2. The accession of the State of Bahrain to the International Telecommunication Convention (Nairobi, 1982) shall in no way imply recognition of the Member appearing in Annex 1 to the said Convention under the name of «Israel»."

Further to the above statement, the General Secretariat has received, from the Government of Israel, a note of which the contents has been published in Notification No. 1200.

26) The Government of the United Kingdom has declared that the instrument of ratification is on behalf of the United Kingdom of Great Britain and Northern Ireland, the Bailiwick of Jersey, the Bailiwick of Guernsey, the Isle of Man, Anguilla, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Falkland Islands Dependencies, Gibraltar, Hong Kong, Montserrat, Pitcairn, Henderson, Ducie and Oeno Islands, Saint Helena, Saint Helena Dependencies, Turks and Caicos Islands, and United Kingdom Sovereign Base Areas of Akrotiri and Dhekelia in the island of Cyprus.

In correction to the above statement, see the communications from the Government of the USSR and from the Government of the United Kingdom, published in Notifications Nos. 1217 and 1221, respectively.

27) See Notifications Nos. 1217, 1227 and 1233.

28) In ratifying the Convention, the Government of Chile confirmed the statements in No. 59 and in the second paragraph of No. 60 of the Final Protocol to the Convention.

29) In ratifying the Convention, the Government of the Union of Soviet Socialist Republics confirmed the statements contained in Nos. 79, 105 and 106 of the Final Protocol to the Convention and also declared that in the light of its well-known position on the Korean question, it cannot recognize as lawful the appellation "Republic of Korea" used in the Convention.

30) In ratifying the Convention, the Government of Belize reserved the right to take any action it deems necessary to protect its interests should other Members in any way fail to comply with the requirements of the International Telecommunication Convention (Nairobi, 1982).

31) Formerly: Ivory Coast (Republic of the).

32) Formerly: Sudan (Democratic Republic of the).

33) This ratification also applies to the Cook Islands and Niue.

34) This approval also applies to the Cook Islands and Niue.

35) In ratifying the Convention, the Government of the Ukrainian Soviet Socialist Republic confirmed the statements contained in Nos. 79 and 105 of the Final Protocol to the Convention and also declared that in the light of its well-known position on the Korean question, it cannot recognize as lawful the appellation "Republic of Korea" used in the Convention.

36) In ratifying the Convention, the Government of the Byelorussian Soviet Socialist Republic confirmed the statements contained in Nos. 79 and 105 of the Final Protocol to the Convention and also declared that in the light of its well-known position on the Korean question, it cannot recognize as lawful the appellation "Republic of Korea" used in the Convention.

37) In ratifying the Convention, the Government of the Socialist Republic of Viet Nam confirmed the statements in No. 48 of the Final Protocol to the Convention.

38) In ratifying the Convention, the Government of Cuba made the following statement *(translation):*

> The Government of the Republic of Cuba wishes to make it clear that, in the light of the aggressive acts of the United States Government in directing radio broadcasts at our country for subversive and destabilizing purposes in contravention of the provisions of the International Telecommunication Convention, it reserves the right to use, whenever it considers it necessary, all the radio facilities at its disposal and to take all the measures it deems necessary in this connection for appropriately responding to such acts of aggression.

39) In ratifying the Convention, the Government of Saudi Arabia made the following statement *(translation):*

> The Convention has been ratified subject to the proviso that this ratification does not constitute any recognition of Israel and does not imply the exchange of any formalities or relations of any sort with Israel by virtue of this Convention.

40) In ratifying the Convention, the Government of the People's Republic of Bulgaria confirmed the statements contained in Nos. 53, 73 (first paragraph) and 105 of the Final Protocol to the Convention.

41) In acceding to the Convention, the Government of the United Arab Emirates made the following reservation *(translation):*

> The accession of the Government of the United Arab Emirates to the International Telecommunication Convention of Nairobi (1982) does not apply to the Zionist entity whose name appears in Annex 1 to the Convention and in no way constitutes recognition of that entity.

42) In ratifying the Convention, the Government of the Socialist Republic of Romania confirmed the statement contained in No. 14 of the Final Protocol to the Convention.

43) In ratifying the Convention, the Government of the Republic of Zimbabwe confirmed the statement contained in the third paragraph of No. 93 of the Final Protocol to the Convention.

44) (Obsolete)

45) In ratifying the Convention, the Government of the Argentine Republic confirmed the statements contained in No. 109 (paragraphs 1 and 2) of the Final Protocol to the Convention and also declared the following *(translation):*

> "1. With reference to ratification of the International Telecommunication Convention (Nairobi, 1982) and its Optional Additional Protocol on compulsory settlement of disputes, signed at Nairobi, Kenya, on 6 November 1982, with regard to which an instrument of ratification was deposited by the Government of the United Kingdom of Great Britain and Northern Ireland with the General Secretariat of the International Telecommunication Union on 15 November 1984, the Argentine Republic rejects

that ratification in so far as it is made on behalf of the Malvinas, South Georgia and South Sandwich Islands and reaffirms its rights of sovereignty over those archipelagos, which are an integral part of its national territory.

The General Assembly of the United Nations has adopted Resolutions 2065 (XX), 3160 (XXVIII), 31/49, 38/12, 39/6, 40/21 and 41/40 in which it recognizes the existence of a dispute concerning sovereignty over the Malvinas Islands and urges the Argentine Republic and the United Kingdom of Great Britain and Northern Ireland to resume negotiations in order to find, as soon as possible, a peaceful and definitive solution to the dispute and to their remaining differences over this matter, through the good offices of the Secretary-General of the United Nations, who is to report on the progress made.

2. The Argentine Republic also rejects the ratification referred to in the previous paragraph in so far as it is made on behalf of the so-called "British Antarctic Territory", and likewise all ratifications and/or declarations made by Governments of Member States in so far as they mention or refer to "Antarctic Territories" as territorial dependencies of other States which overlap with the Argentine Antarctic Sector, lying between the meridians of longitude 25° and 74° West and the parallel of latitude 60° South, over which the Argentine Republic has and exercices sovereignty, the Sector being an integral part of its territory."

46) See Notification No. 1237.

47) In acceding to the Convention, the Government of the Solomon Islands reserves the right to take such action as it may consider necessary to safeguard its interests should certain Members not share in defraying the expenses of the Union, or should they fail in any other way to comply with the requirements of the International Telecommunication Convention (Nairobi, 1982) or its Annexes or the Protocols attached thereto, or should reservations by other countries jeopardize the telecommunications services of the Solomon Islands.

48) See Notification No. 1249.

49) In ratifying the Convention, the Government of Ireland made the following statement:

"The Government of Ireland wishes to refer to statement No. 90 forming part of the Final Acts of the Plenipotentiary Conference (Nairobi, 1982) and to state that in as much as that statement refers to the Bogota Declaration of 3 December 1976 and to the claims therein to the exercise of rights over segments of the geostationary-satellite orbit, the Government wishes to reaffirm the statements made on behalf of the Irish delegation at the time of signing the Final Acts of the World Broadcasting Satellite Administrative Radio Conference, Geneva, 1977 and the World Administrative Radio Conference, Geneva, 1979.

The Government of Ireland also wishes to state that the reference to the "geographical situation of particular countries" in Article 33 of the International Telecommunication Convention, Nairobi, 1982 does not imply a recognition of claim to any preferential rights to the geostationary orbit".

50) (Obsolete)

51) In approving these Acts, the Government of Japan confirmed the statement made at the time of signature of the Final Acts of the Plenipotentiary Conference (Nice, 1989).

52) See Notification No. 1269.

53) See Declarations and Reservations in the Final Acts (Nice, 1989).

54) Administrative Regulations or revisions thereof, which were adopted by competent world administrative conferences prior to the date of signature (30 June 1989) of the Nice Constitution and Convention and with regard to which the Member State automatically consented to be bound by them by virtue of its ratification, acceptance or approval of, or of its accession to, the Nice Constitution and Convention (See No. 195 in Article 43 of the Nice Constitution).

55) This approval also applies to Niue.

56) In ratifying the Constitution and the Convention, Canada made the following statement (which also appears in the declarations and reservations made at the time of signature):

"The reference in Article 33 of the Constitution to the "geographical situation of particular countries" does not imply a recognition of claim to any preferential rights to the geostationary orbit".

57) In ratifying the Constitution and the Convention, the country concerned confirmed the declarations and/or reservations made at the time of signature.

58) In ratifying the Constitution and the Convention, Spain reaffirmed the declarations and reservations made at the time of signing. The following text also appears in the instrument of ratification *(translation)*:

"Spain declares that it will exercise the right conferred on it by Article 23 of the Constitution of the International Telecommunication Union only to the extent that it is compatible with its Constitution."

59) In accepting the Constitution and Convention, Finland made the following declaration in connection with Article 43 of the Constitution (which also appears in the Declarations and reservations made at the time of signing):

"The Government of Finland maintains the reservations it made when signing the Administrative Regulations or revisions of the Administrative Regulations."

60) See Declarations and Reservations in the Final Acts (Geneva, 1992).

61) Administrative Regulations or revisions thereof, which were adopted by competent world administrative conferences prior to the date of signature (22 December 1992) of the Constitution and Convention of Geneva and with regard to which the Member State automatically consented to be bound by them by virtue of its ratification, acceptance or approval of, or of its accession to, the Constitution and Convention of Geneva (See No. 216 in Article 54 of the Geneva Constitution).

62) In ratifying the Constitution and the Convention, Mexico reaffirmed the reservation No. 55, made at the time of signing.

Table II. Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service in Frequency Bands 11.7-12.2 GHz (in Regions 2 and 3) and 11.7-12.5 GHz (in Region 1) (Geneva, 1977) *)

Note: The provisions and associated Plan contained in the Final Acts have become an integral part of the Radio Regulations, Geneva (1979) (see Article 15 and Appendix 30 of the Regulations).

S = Signature; A = Approval.

1	2	3
Afghanistan (Islamic State of)	S	6)
Albania (Republic of)	—	6)
Algeria (People's Democratic Republic of)	S	6)
Germany (Federal Rep. of)	S	A 5)
Antigua and Barbuda	—	6)
Saudi Arabia (Kingdom of)	S	6)
Argentine Republic	S	A 4)
Australia	S	6)
Austria	S	
Bahamas (Commonwealth of the)	—	6)
Bahrain (State of)	S	6)
Bangladesh (People's Rep. of)	S	
Barbados	—	6)
Belarus (Republic of)	S	A
Belgium	S	6)
Belize	—	6)
Benin (Republic of)	S	6)
Bolivia (Republic of)	S	6)
Botswana (Republic of)	—	6)
Brazil (Federative Rep. of)	S	
Brunei Darussalam	—	6)
Bulgaria (Republic of)	S	6)
Burkina Faso	S	6)
Burundi (Republic of)	S	
Cameroon (Republic of)	—	6)
Canada	S	A
Central African Republic	S	
Chile	S	6)
China (People's Republic of)	S	6)
Cyprus (Republic of)	S	6)
Vatican City State	S	6)
Colombia (Republic of)	S	6)
Comoros (Isl. Fed. Rep. of the)	S	
Congo (Republic of the)	S	
Korea (Republic of)	S	A
Côte d'Ivoire (Republic of)	S	6)
Cuba	S	6)
Denmark	S	A
Djibouti (Republic of)	—	6)
Egypt (Arab Republic of)	S	6)

1	2	3
El Salvador (Republic of)	—	6)
United Arab Emirates	S	6)
Ecuador	S	
Spain	S	6)
United States of America	S	6)
Ethiopia	S	6)
Fiji (Republic of)	—	6)
Finland	S	A
France	S	A
Gabonese Republic	S	
Ghana	S	6)
Greece	S	A
Guatemala (Republic of)	S	6)
Guinea (Republic of)	S	
Equatorial Guinea (Rep. of)	—	6)
Guyana	—	6)
Haiti (Republic of)	S	6)
Honduras (Republic of)	—	6)
Hungary (Republic of)	S	A 4)
India (Republic of)	S	A
Indonesia (Republic of)	S	6)
Iran (Islamic Republic of)	S	6)
Iraq (Republic of)	—	6)
Ireland	S	A
Iceland	S	6)
Israel (State of)	—	6)
Italy	S	A
Jamaica	—	6)
Japan	S	6)
Jordan (Hashemite Kingdom of)	—	6)
Kenya (Republic of)	S	6)
Kiribati (Republic of)	—	6)
Kuwait (State of)	S	6)
Lao People's Dem. Rep.	S	6)
Lesotho (Kingdom of)	—	6)
Lebanon	S	6)
Liberia (Republic of)	—	6)
Libya (Soc. People's Libyan Arab Jamahiriya)	S	6)
Liechtenstein (Princ. of)	S	A
Luxembourg	S	6)

1	2	3
Madagascar (Rep. of)	S	6)
Malaysia	S	A
Malawi	—	6)
Maldives (Republic of)	—	6)
Mali (Republic of)	S	6)
Malta	S	6)
Morocco (Kingdom of)	S	
Mauritius (Republic of)	S	6)
Mauritania (Islamic Rep. of)	S	
Mexico	S	6)
Monaco (Principality of)	S	6)
Mongolia	S	6)
Myanmar (Union of)	—	6)
Namibia (Republic of)	—	6)
Niger (Republic of the)	—	6)
Nigeria (Federal Republic of)	S	6)
Norway	S	6)
New Zealand	S	6)
Oman (Sultanate of)	S	6)
Uganda (Republic of)	S	
Pakistan (Islamic Republic of)	S	6)
Panama (Republic of)	S	6)
Papua New Guinea	S	6)
Paraguay (Republic of)	S	A
Netherlands (Kingdom of the)	S	A 3)
Peru	—	6)
Philippines (Republic of the)	S	6)
Poland (Republic of)	S	6)
Portugal	S	6)
Qatar (State of)	—	A
Syrian Arab Republic	—	6)
Dem. People's Rep. of Korea	S	6)
Romania	S	6)
United Kingdom of Great Britain and Northern Ireland	S	A 1)
Russian Federation	S	A
Rwandese Republic	—	6)
San Marino (Republic of)	—	6)
Saint Vincent and the Grenadines	—	6)

Table II *(cont.)*

1	2	3
Solomon Islands	—	6)
Sao Tome and Principe (Dem. Republic of)	—	6)
Senegal (Republic of)	S	A
Sierra Leone	—	6)
Singapore (Republic of)	S	A
Somali Democratic Republic	—	6)
Sudan (Republic of the)	S	6)
Sri Lanka (Dem. Soc. Rep. of)	—	6)
South Africa (Republic of)	—	6)

1	2	3
Sweden	S	A 4)
Switzerland (Confederation of)	S	A 2)
Suriname (Republic of)	—	6)
Swaziland (Kingdom of)	—	6)
Tanzania (United Rep. of)	S	6)
Chad (Republic of)	S	6)
Czech and Slovak Fed. Rep.	S	A 4)
Thailand	S	6)
Togolese Republic	S	6)
Trinidad and Tobago	—	6)

1	2	3
Tunisia	S	6)
Turkey	S	6)
Ukraine	S	A
Uruguay (Eastern Rep. of)	S	6)
Venezuela (Republic of)	S	6)
Yemen (Republic of)	S	6)
Yugoslavia (Fed. Rep. of)	S	6)
Zaire (Republic of)	S	
Zambia (Republic of)	—	6)
Zimbabwe (Republic of)	—	6)

*) In the alphabetical order of the French version of the country names.

1) The approval is in respect of the United Kingdom of Great Britain and Northern Ireland and Territories under the territorial sovereignty of the United Kingdom.

2) In approving these Final Acts, Switzerland supported the statement No. 74 of the Final Protocol to these Acts.

3) For the Netherlands, the Netherlands Antilles and Aruba.

4) In approving the Final Acts, the Member concerned confirmed the statement(s) made at the time of signature.

5) See Notifications Nos. 1146, 1169, 1175 and 1182.

6) This Member has approved the Radio Regulations, Geneva, 1979, of which the provisions and associated Plan contained in the Final Acts form an integral part.

Table III. Regional Agreement concerning the use by the broadcasting service of frequencies in the medium frequency bands in Regions 1 and 3 and in the low frequency bands in Region 1 (Geneva, 1975) *)

S = Signature; A = Approval or Accession.

1	2	3
Afghanistan (Islamic State of)	S	
Albania (Republic of)	—	A
Algeria (People's Democratic Republic of)	S	
Germany (Fed. Rep. of)	S	A 4)
Angola (Rep. of)	—	
Saudi Arabia (Kingdom of)	S	
Australia	S	
Austria	S	
Bahrain (State of)	—	A
Bangladesh (People's Rep. of)	S	
Belarus (Republic of)	S	A
Belgium	S	A
Benin (Rep. of)	S	
Botswana (Rep. of)	S	A
Bulgaria (Rep. of)	S	A
Burkina Faso	S	A 1)
Burundi (Rep. of)	S	
Cambodia (Kingdom of)	—	
Cameroon (Republic of)	S	A
Cape Verde (Republic of)	—	
Central African Republic	S	
China (People's Rep. of)	S	A
Cyprus (Rep. of)	S	
Vatican City State	S	A
Comoros (Isl. Fed. Rep. of the)	—	
Congo (Rep. of the)	S	
Korea (Rep. of)	S	A
Côte d'Ivoire (Republic of)	S	A
Croatia (Republic of)	—	A
Denmark	S	A
Djibouti (Rep. of)	—	
Egypt (Arab Rep. of)	S 6)	
United Arab Emirates	S	
Spain	S	A
Ethiopia	S	A
Fiji (Republic of)	S	A
Finland	S	A
France	S	A
Gabonese Republic	S	
Gambia (Rep. of the)	S	
Ghana	S	
Greece	S	A
Guinea (Rep. of)	S	
Guinea-Bissau (Rep. of)	—	

1	2	3
Equatorial Guinea (Rep. of)	—	
Hungary (Republic of)	S	A 1)
India (Rep. of)	S	A
Indonesia (Rep. of)	S	
Iran (Islamic Rep. of)	S	
Iraq (Republic of)	—	
Ireland	S	A
Iceland	S	A
Israel (State of)	S	
Italy	S	A
Japan	S	A
Jordan (Hashemite Kingdom of)	S	A
Kenya (Republic of)	S	
Kiribati (Rep. of)	—	
Kuwait (State of)	S	
Lao People's Dem. Rep.	-	
Lesotho (Kingdom of)	S	
The Former Yugoslav Republic of Macedonia	—	A
Lebanon	S	
Liberia (Republic of)	S	
Libya (Soc. People's Libyan Arab Jamahiriya)	S	
Liechtenstein (Princ. of)	S	A
Luxembourg	S	A
Madagascar (Rep. of)	S	
Malaysia	S	
Malawi	S	A
Maldives (Rep. of)	—	
Mali (Rep. of)	S	
Malta	—	
Morocco (Kingdom of)	S	A
Mauritius (Republic of)	S	
Mauritania (Islamic Rep. of)	S	
Monaco (Principality of)	S	A
Mongolia	S	A
Mozambique (Republic of)	S	A
Myanmar (Union of)	—	A
Namibia (Republic of)	—	
Nauru (Rep. of)	—	A
Nepal	S	A
Niger (Rep. of the)	S	
Nigeria (Fed. Rep. of)	S	
Norway	S	A
New Zealand	S	A

1	2	3
Oman (Sultanate of)	—	A
Uganda (Rep. of)	S	
Pakistan (Islamic Rep. of)	S	
Papua New Guinea	S	A
Netherlands (Kingdom of the)	S	A 3)
Philippines (Rep. of the)	S	
Poland (Republic of)	S	A 1)
Portugal	S	
Qatar (State of)	S	
Syrian Arab Republic	S	
Dem. People's Rep. of Korea	—	
Romania	S	A 5)
United Kingdom of Great Britain and Northern Ireland	S	A 2)
Russian Federation	S	A
Rwandese Republic	—	
San Marino (Republic of)	—	
Solomon Islands	—	
Sao Tome and Principe (Dem. Rep. of)	—	
Senegal (Rep. of)	S	A
Sierra Leone	—	A
Singapore (Rep. of)	S	A
Somali Democratic Republic	—	
Sudan (Rep. of the)	S	
Sri Lanka (Dem. Soc. Rep. of)	S	
South Africa (Rep. of)	—	
Sweden	S	A
Switzerland (Confederation of)	S	A
Swaziland (Kingdom of)	—	
Tanzania (United Rep. of)	S	
Chad (Rep. of)	S	
Czech and Slovak Federal Rep.	S	A 1)
Thailand	S	
Togolese Republic	S	
Tonga (Kingdom of)	—	A
Tunisia	S	
Turkey	S	
Ukraine	S	
Viet Nam (Soc. Rep. of)	—	
Yemen (Republic of)	S	
Yugoslavia (Fed. Rep. of)	S	A
Zaire (Republic of)	S	
Zambia (Republic of)	S	
Zimbabwe (Rep. of)	—	

*) In the alphabetical order of the French version of the country names.

1) In approving the Agreement, the Member concerned confirmed the statement(s) made at the time of signature.

2) This approval is also in respect of the Territories under the territorial sovereignty of the United Kingdom in Regions 1 and 3.

3) This approval is in respect of the Kingdom in Europe.

4) See Notification No. 1132.

5) In approving this Agreement, the Government of the Socialist Republic of Romania has made the following statement:

"The Socialist Republic of Romania reserves the right to take the necessary action to ensure that its broadcasting transmitters cover the entire national territory with broadcast programmes, in an appropriate manner, in the event that the coordination provided for in the Plan annexed to this Agreement cannot be achieved by negotiations."

6) See Notification No. 1175.

Table IV. Regional Agreement concerning the Use of the Band 87.5-108 MHz for FM Sound Broadcasting (Region 1 and part of Region 3) (Geneva, 1984) *)

S = Signature; A = Approval or Accession.

1	2	3
Afghanistan (Islamic State of) ...	S	
Albania (Rep. of) ...	S	
Algeria (People's Democratic Republic of) ...	S	
Germany (Fed. Rep. of) ...	S	A 1)
Angola (Rep. of) ...	S	
Saudi Arabia (Kingdom of) ...	S	A
Austria ...	S	
Bahrain (State of) ...	—	
Belarus (Republic of) ...	S	A
Belgium ...	S	
Benin (Rep. of) ...	S	
Botswana (Rep. of) ...	S	
Bulgaria (Rep. of) ...	S	
Burkina Faso ...	S	A 2)
Burundi (Rep. of) ...	—	
Cameroon (Republic of) ...	S	
Cape Verde (Republic of) ...	—	
Central African Republic ...	—	
Cyprus (Rep. of) ...	S	
Vatican City State ...	S	A
Comoros (Isl. Fed. Rep. of the) ..	—	
Congo (Rep. of the) ...	S	
Côte d'Ivoire (Rep. of) ...	S	A
Croatia (Republic of) ...	—	A
Denmark ...	S	A
Djibouti (Rep. of) ...	—	
Egypt (Arab Rep. of) ...	S	A
United Arab Emirates ...	—	A
Spain ...	S	A 3)
Ethiopia ...	—	
Finland ...	S	A
France ...	S	A 4)
Gabonese Republic ...	S	
Gambia (Rep. of the) ...	—	
Ghana ...	—	
Greece ...	S	A

1	2	3
Guinea (Rep. of) ...	S	
Guinea-Bissau (Rep. of) ...	—	
Equatorial Guinea (Rep. of) ...	—	
Hungary (Republic of) ...	S	
Iran (Islamic Rep. of) ...	S	
Iraq (Republic of) ...	S	
Ireland ...	S	
Iceland ...	—	
Israel (State of) ...	S	
Italy ...	S	
Jordan (Hashemite Kingdom of)	S	
Kenya (Republic of) ...	S	
Kuwait (State of) ...	S	
Lesotho (Kingdom of) ...	S	
The Former Yugoslav Republic of Macedonia ...	—	A
Lebanon ...	—	
Liberia (Republic of) ...	—	
Libya (Soc. People's Libyan Arab Jamahiriya) ...	S	
Liechtenstein (Princ. of) ...	S	
Luxembourg ...	S	
Madagascar (Rep. of) ...	—	
Malawi ...	—	
Mali (Republic of) ...	S	
Malta ...	S	
Morocco (Kingdom of) ...	S	
Mauritius (Republic of) ...	—	
Mauritania (Islamic Rep. of) ...	—	
Monaco (Principality of) ...	S	
Mongolia ...	S	
Mozambique (Rep. of) ...	—	
Namibia (Republic of) ...	—	
Niger (Rep. of the) ...	—	
Nigeria (Fed. Rep. of) ...	—	
Norway ...	S	
Oman (Sultanate of) ...	S	

1	2	3
Uganda (Rep. of) ...	S	
Netherlands (Kingdom of the) ...	S	A
Poland (Republic of) ...	S	
Portugal ...	S	
Qatar (State of) ...	S	A
Syrian Arab Republic ...	S	
Romania ...	S	
United Kingdom of Great Britain and Northern Ireland ...	S	
Russian Federation ...	S	A 2)
Rwandese Republic ...	—	
San Marino (Rep. of) ...	S	
Sao Tome and Principe (Dem. Rep. of) ...	—	
Senegal (Rep. of) ...	S	
Sierra Leone ...	—	
Somali Democratic Republic ...	—	
Sudan (Rep. of the) ...	—	
South Africa (Rep. of) ...	—	A
Sweden ...	S	A
Switzerland (Confederation of) ..	S	A
Swaziland (Kingdom of) ...	S	
Tanzania (United Rep. of) ...	S	
Chad (Rep. of) ...	S	
Czech and Slovak Federal Republic ...	S	
Togolese Republic ...	S	
Tunisia ...	S	
Turkey ...	S	
Ukraine. ...	S	A
Yemen (Republic of) ...	S	
Yugoslavia (Fed. Rep. of) ...	S	
Zaire (Republic of) ...	—	
Zambia (Republic of) ...	S	
Zimbabwe (Republic of) ...	S	

*) In the alphabetical order of the French version of the country names.

1) See Notification No. 1235.

2) In approving the Agreement, this Administration confirmed the statements made at the time of signature.

3) In approving the Agreement, the Government of Spain confirmed the statements made at the time of signature.

4) In approving the Agreement, the Government of France announced that it dit not maintain the declaration made at the time of signing.

Table V. Regional Agreement concerning the Maritime Mobile and the Aeronautical Radionavigation Services in the MF Band (Region 1) (Geneva, 1985) *)

S = Signature; A = Approval or Accession

1	2	3
Albania (Republic of)	—	
Algeria (People's Democratic Republic of)	S	
Germany (Fed. Rep. of)	S	A
Angola (Rep. of)	S	
Saudi Arabia (Kingdom of)	S	A
Austria	S	
Bahrain (State of)	S	
Belarus (Republic of)	—	
Belgium	S	
Benin (Rep. of)	S	
Botswana (Rep. of)	—	
Bulgaria (Rep. of)	S	
Burkina Faso	—	A
Burundi (Rep. of)	—	
Cameroon (Republic of)	S	
Cape Verde (Republic of)	—	
Central African Republic	—	
Cyprus (Rep. of)	S	
Vatican City State	—	
Comoros (Isl. Fed. Rep. of the)	—	
Congo (Rep. of the)	—	
Côte d'Ivoire (Rep. of)	S	A
Croatia (Republic of)	—	A
Denmark	S	A
Djibouti (Rep. of)	—	
Egypt (Arab Rep. of)	S	
United Arab Emirates	—	
Spain	S	A
Ethiopia	—	
Finland	S	
France	S	A
Gabonese Republic	—	
Gambia (Rep. of the)	—	
Ghana	S	
Greece	S	

1	2	3
Guinea (Rep. of)	S	
Guinea-Bissau (Rep. of)	—	
Equatorial Guinea (Rep. of)	—	
Hungary (Republic of)	S	A
Iraq (Republic of)	S	
Ireland	S	
Iceland	—	
Israel (State of)	S	
Italy	S	A
Jordan (Hashemite Kingdom of)	—	
Kenya (Republic of)	S	
Kuwait (State of)	S	
Lesotho (Kingdom of)	—	
Lebanon	—	
Liberia (Republic of)	—	
Libya (Soc. People's Libyan Arab Jamahiriya)	S	
Liechtenstein (Princ. of)	—	A
Lithuania (Republic of)	—	A
Luxembourg	—	
Madagascar (Rep. of)	S	
Malawi	—	
Mali (Republic of)	—	
Malta	S	
Morocco (Kingdom of)	S	
Mauritius (Republic of)	—	
Mauritania (Islamic Rep. of)	—	
Monaco (Principality of)	S	
Mongolia	—	
Mozambique (Rep. of)	—	
Namibia (Republic of)	—	
Niger (Rep. of the)	—	
Nigeria (Fed. Rep. of)	—	
Norway	S	
Oman (Sultanate of)	S	
Uganda (Rep. of)	—	

1	2	3
Netherlands (Kingdom of the)	S	A
Poland (Rep. of)	S	
Portugal	S	
Qatar (State of)	S	
Syrian Arab Republic	—	
Romania	S	
United Kingdom of Great Britain and Northern Ireland	S	
Russian Federation	S	A
Rwandese Republic	—	
San Marino (Rep. of)	—	
Sao Tome and Principe (Dem. Rep. of)	—	
Senegal (Rep. of)	—	A
Sierra Leone	—	
Somali Democratic Republic	—	
Sudan (Rep. of the)	—	
South Africa (Rep. of)	—	A
Sweden	S	A
Switzerland (Confederation of)	S	A
Swaziland (Kingdom of)	—	
Tanzania (United Rep. of)	—	
Chad (Rep. of)	S	
Czech and Slovak Federal Republic	S	
Togolese Republic	—	
Tunisia	S	
Turkey	S	
Ukraine	—	
Yemen (Republic of)	—	
Yugoslavia (Fed. Rep. of)	S	
Zaire (Republic of)	—	
Zambia (Republic of)	—	
Zimbabwe (Republic of)	—	

*) In the alphabetical order of the French version of the country names.

Table VI. American Regional Agreements

S = Signature; A = Approval or Accession; R = Ratification.

Members *)	Inter-American Radio Agreement (FIAR) (Washington, 1949)		North-American Regional Broadcasting Agreement (NARBA) (Washington, 1950)		Regional Agreement for the MF Broadcasting Service in Region 2 (Rio de Janeiro, 1981)		Regional Agreement concerning the Use of the Band 1605-1705 kHz in Region 2 (Rio de Janeiro, 1988)	
1	2	3	4	5	6	7	8	9
Antigua and Barbuda	—		—		—		S	
Argentine Republic	S		—		S	A 4)	S	
Bahamas (Commonwealth of the)	—		—		S		—	
Barbados	—		—		—		S	
Belize	—		—		S		—	
Bolivia (Republic of)	S		—		—		—	
Brazil (Federative Republic of)	S		—		S	A	S	
Canada	S		S	2)	S	A	S	R
Chile	S		—		S		S	
Colombia (Republic of)	S		—		S		S	
Costa Rica	S	A	—		S		S	
Cuba	S		S	1)	—		S	
Denmark	—		—		S	A	—	A
Dominican Republic	S	A	S	R	—		—	
El Salvador (Republic of)	S		—		—		—	
Ecuador	S		—		S		—	
United States of America	S	A	S	R	S	A 5)	S	A 5)
France	—		—		S	A	S	A
Grenada	—		—		S		—	
Guatemala (Republic of)	S		—		—		—	
Guyana	—		—		S		—	
Haiti (Republic of)	—	A	—		—		S	
Honduras (Republic of)	S	A	—		—		S	
Jamaica	—		—		S		—	
Mexico	S	A	—		S		S	
Nicaragua	S	A	—		S		—	
Panama (Republic of)	S		—		S		—	
Paraguay (Republic of)	—	A	—		S		S	
Netherlands (Kingdom of the)	—		—		S	A 3)	—	A 3)
Peru	—		—		S		—	
United Kingdom of Great Britain and Northern Ireland	—		S	R	S		S	
Saint Vincent and the Grenadines	—		—		—		—	
Suriname (Republic of)	—		—		—	A	S	
Trinidad and Tobago	—		—		S		S	
Uruguay (Eastern Republic of)	S		—		S		S	
Venezuela (Republic of)	S		—		S		S	

*) In the alphabetical order of the French version of the country names.

1) The Government of Cuba has denounced this Agreement with effect from 3 November 1981.

2) The Government of Canada has denounced this Agreement with effect from 17 February 1985.

3) For the Netherlands Antilles and Aruba.

4) In approving the Agreement, the Argentine Government confirmed the statements contained in No. 2 (paragraphs A.1, A.2, A.3, B and C) of the Final Protocol to the Agreement and also declared the following *(translation)*:

"Furthermore, the United Nations General Assembly adopted Resolutions 2065 (XX), 3160 (XXVIII), 31/49, 37/9, 38/12, 39/6, 40/21 and 41/40 recognizing the existence of a sovereignty dispute relating to the question of the Malvinas Islands and urging the Argentine Republic and the United Kingdom of Great Britain and Northern Ireland to conduct negotiations with a view to resolving the dispute peacefully and definitively through the good offices of the Secretary-General of the United Nations, who was asked to report to the General Assembly on the progress made."

5) This approval was given subject to the declarations made at the time of signature.

Table VII. European Regional Agreements and Protocol

S = Signature; A = Approval or Accession; R = Ratification.

Members *)	Regional Agreement in the bands 68-73 MHz and 76-87.5 MHz (Geneva, 1960) **)		Regional Agreement for the European Broadcasting Area (Stockholm, 1961)		Protocol amending the Stockholm Agreement (Geneva, 1985)		Regional Agreement concerning Maritime Radio-beacons (Geneva, 1985) ***)	
1	2	3	4	5	6	7	8	9
Albania (Republic of)	S		—		—		—	
Algeria (People's Democratic Republic of)	—		—		—		S	
Germany (Federal Republic of)	S	A	S	A 3)	S	A 5)	S	A 5)
Saudi Arabia (Kingdom of)	—		—		—			
Austria	S	A	S	A	S	A	S	
Belarus (Republic of)	S		S	A 2)	S	A	—	
Belgium	—		S	A	—	A	S	
Bulgaria (Republic of)	S		S		—		S	
Cyprus (Republic of)	—		S	A	—		S	
Vatican City State	—		S	A	S	A	—	
Croatia (Republic of)			—	A	—	A	—	A
Denmark	S	A	S		S		S	A
Egypt (Arab Republic of)	—		—		S		—	
Spain	—		S	A 1)	S	A	S	A
Finland	—		S	A	S	A	S	
France	S	A	S	A	S	A	S	A
Greece	S		S	A	S	A	S	
Hungary (Republic of)	S	A	S	A	S		S	A
Iraq (Republic of)	—		—		—		—	
Ireland	—		S	A	S		S	
Iceland	—		S	A	—	A	—	
Israel (State of)	—		S		S		S	
Italy	S	A	S	A	S		S	A
Jordan (Hashemite Kingdom of)	—		—		—		—	
The Former Yugoslav Republic of Macedonia			—	A	—	A		
Lebanon	—		S		—		—	
Libya (Soc. People's Libyan Arab Jamahiriya)	—		—		—		S	
Liechtenstein (Principality of)	—		—		—		—	
Lithuania (Republic of)							—	A
Luxembourg	—		S		S		—	
Malta	—		—		S		S	
Morocco (Kingdom of)	—		S	A	—	A	S	
Monaco (Principality of)	—		S		S		S	
Norway	S	A	S	A	S	A	S	
Netherlands (Kingdom of the)	—		S	A	S	A	S	A
Poland (Republic of)	S		S		S		S	
Portugal	—		S	A	S		S	
Syrian Arab Republic	—		—		—		—	
Romania	S	A	S		S		S	
United Kingdom of Great Britain and Northern Ireland	—		S 4)	A 4)	S		S	
Russian Federation	S	A	S	A 2)	S	A 6)	S	A
San Marino (Republic of)	—		—	A	S	A	—	
Sweden	S	A	S	A	S	A	S	A
Switzerland (Confederation of)	S	A	S	A	S	A	—	A
Czech and Slovak Federal Republic	S	A	S		S		S	
Tunisia	—		—		S		S	
Turkey	S		S		S		S	
Ukraine	S	A	S	A 2)	S	A	—	
Yugoslavia (Federal Republic of)	S		S	A	S	A	S	

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*) In the alphabetical order of the French version of the country names.

**) Regional Agreement for the use of frequencies in the bands 68-73 MHz and 76-87.5 MHz by the broadcasting service on the one hand and by the fixed and mobile services on the other (Geneva, 1960).

***) Regional Agreement for the Planning of Maritime Radionavigation Service (Radiobeacons) in the European Maritime Area (Geneva, 1985).

1) The Spanish Government has approved this Agreement while maintaining the three reservations which appear in paragraph I (A, B and C) of the Final Protocol.

2) Considering that, when the plans for the assignment of frequencies to television stations in the 645-960 MHz band were established at the Stockholm Conference in 1961, the requirements of the air radionavigation services of the USSR, the Ukrainian SSR and the Byelorussian SSR were not sufficiently taken into consideration, and in view of the special nature of the air radionavigation services, the Telecommunication Administrations of the USSR, the Ukrainian SSR and the Byelorussian SSR cannot assure countries using this range for television of the necessary means to prevent interference from the air radionavigation services of the USSR, the Ukrainian SSR and the Byelorussian SSR.

3) In giving its approval, the Administration of the Federal Republic of Germany expressed the following considerations:

"According to the frequency plan for television stations in the frequency band 162-230 MHz (Annex 2, Chapter 2, of the Agreement), the frequencies 224.25/229.75 MHz are assigned to the Sonneberg television station appearing in the plan with an effective radiated power of 30/6 kW and an effective radiated power of 5 kW for the television carrier permitted in the sector between 45 and 135 degrees.

This assignment is capable of causing harmful interference to the aeronautical radionavigation service stations which operate in the frequency band 223-235 MHz in accordance with Article 5 of the Radio Regulations, Geneva, 1959.

Harmful interference to stations operating in the frequency band 223-235 MHz, which is allocated to the aeronautical radionavigation service on a primary basis, can only be avoided if the effective radiated power of the Sonneberg television station does not exceed 0.5/0.1 kW in the sector between 135 and 345 degrees."

4) Also signed and approved on behalf of the Overseas Territories for the international relations of which the Government of the United Kingdom is responsible.

5) See Notification No. 1235.

6) In approving this Protocol, the Administration of the USSR confirmed the statements made at the time of signature.

Table VIII. African Regional Agreements and Protocols

S = Signature; A = Approval or Accession.

Members*)	Geneva Agreement (1963)		Geneva Protocol (1985)		Geneva Protocol (1989)		Geneva Agreement (1989)	
1	2	3	4	5	6	7	8	9
Algeria (People's Democratic Republic of)	—		—		S		S	
Angola (Republic of)	—		—		—		—	
Saudi Arabia (Kingdom of)							S	
Bahrain (State of)							S	
Benin (Republic of)	S		—		S		S	
Botswana (Republic of)	—		S		—		S	
Burkina Faso	S	A	—	A	S	A	S	A
Burundi (Republic of)	—		S		—		S	
Cameroon (Republic of)	S		S		S		S	
Cape Verde (Republic of)	—		—		—		—	
Central African Republic	—		—		—		—	
Comoros (Isl. Fed. Rep. of the)	—		—		—		—	
Congo (Republic of the)	S		—		S		S	
Côte d'Ivoire (Republic of)	S	A	S	A	S		S	
Djibouti (Republic of)	—		—		—		—	
Egypt (Arab Republic of)	—	A	S		S		S	
United Arab Emirates							S	
Spain	S	A	S	A	S	A	S	A
Ethiopia	S	A	S		S		S	
France	S	A	S	A	S		S	
Gabonese Republic	S		S		S		S	
Gambia (Republic of the)	—		—		—		—	
Ghana	S		S		S		S	
Guinea (Republic of)	S		—		—		S	
Guinea-Bissau (Republic of)	—		—		—		—	
Equatorial Guinea (Republic of)	—		—		—		—	
Iran (Islamic Republic of)							S	
Iraq (Republic of)							S	
Kenya (Republic of)	S	A	S	A				
Kuwait (State of)							S	
Lesotho (Kingdom of)	—		—					
Liberia (Republic of)	S		—					
Libya (Socialist People's Libyan Arab Jamahiriya)	S		—					
Madagascar (Republic of)	S		S		S		S	
Malawi	—		—		—		S	
Mali (Republic of)	S		—		S		S	
Morocco (Kingdom of)	—		—		S		S	
Mauritius (Republic of)	—		—		S		S	
Mauritania (Isl. Republic of)	S		—		S		S	
Mozambique (Republic of)	—		—		S		S	
Namibia (Republic of)	—		—		—		—	
Niger (Republic of the)	S		—		—		S	
Nigeria (Federal Republic of)	S	A	—		S		S	
Oman (Sultanate of)							S	
Uganda (Rep. of)	S	A	—		—		—	
Qatar (State of)							S	

Table VIII *(continuation)*

Members*)	Geneva Agreement (1963)		Geneva Protocol (1985)		Geneva Protocol (1989)		Geneva Agreement (1989)	
1	2	3	4	5	6	7	8	9
United Kingdom of Great Britain and Northern Ireland	S		S		—		—	
Rwandese Republic	S		—		—		S	
Sao Tome and Principe (Dem. Rep. of)	—		—		—		—	
Senegal (Republic of)	S	A	S		S		S	
Sierra Leone	S	A	—		—		—	
Somali Democratic Republic	S		—		—		—	
Sudan (Republic of the)	—		—		—		—	
South Africa (Republic of)	S	A	—	A	—	A	—	A
Swaziland (Kingdom of)	—		—		S		S	
Tanzania (United Republic of)	S	A	—		—		—	
Chad (Republic of)	S		—		S		S	
Togolese Republic	S		S		—		S	
Yemen (Republic of)	----------						S	
Zaire (Republic of)	S		—		—		—	
Zambia (Republic of)	—		S		S		S	
Zimbabwe (Republic of)	—		—		S		S	

*) In the alphabetical order of the French version of the country names.

IX. Special Agreements

Special Agreement for use of the 582 - 606 MHz band for radionavigation purposes (Brussels, 1962)

This Agreement was concluded between the following Administrations: Federal Republic of Germany, Belgium, Denmark, France, Kingdom of the Netherlands, United Kingdom of Great Britain and Northern Ireland and Confederation of Switzerland.

Special Agreement concerning the use of frequencies for additional low-power television transmitters operating in the ultra high-frequency range (Band IV, 472 - 582 MHz and Band V, 582 - 960 MHz) in the frontier areas (Karlsruhe, 1966)

This Agreement was concluded between the following Administrations: Federal Republic of Germany, Austria, Belgium, France, Italy, Luxembourg and Kingdom of the Netherlands.

This Agreement was approved without reservation by all these Administrations.

Special Agreements concerning the coordinated use of frequencies between 29.7 and 470 MHz by the fixed and land mobile services

Agreement signed at Vienna on 25 April 1969 by the following Administrations: Austria, Hungarian People's Republic and Czechoslovak Socialist Republic.

This Agreement, which was approved without reservation by these Administrations, came into force on 1 January 1970.

Agreement signed at Budapest on 1 July 1976 by the following Administrations: Hungarian People's Republic and Socialist Federal Republic of Yugoslavia.

This Agreement became effective sixty days after signing.

Agreement signed at Athens on 23 June 1979 by the following Administrations: Greece and Socialist Federal Republic of Yugoslavia.

This Agreement, which was ratified by these Administrations, came into force on 1 January 1980.

Agreement signed by the following Administrations: Socialist Republic of Romania and Socialist Federal Republic of Yugoslavia.

This Agreement came into force on 10 February 1981.

Special Agreements concerning the coordinated use of frequencies between 29.7 and 960 MHz by the fixed and land mobile services

Agreement signed at Vienna on 23 September 1976 by the following Administrations: Austria and Socialist Federal Republic of Yugoslavia.

This Agreement, which was approved without reservations by these Administrations, came into force on 1 January 1977.

Agreement signed at Vienna on 24 January 1986 by the following Administrations: Austria, Federal Republic of Germany, Belgium, France, Italy, Luxembourg, the Kingdom of the Netherlands and the Confederation of Switzerland.

By a letter dated 4 February 1991, the Austrian Administration notified that the Administrations of the Republic of Hungary and the Czech and Slovak Federal Republic had adhered to the Agreement.

By a letter dated 30 March 1993, the Austrian Administration notified that the Administrations of the Republic of Croatia and the Republic of Slovenia had adhered to the Agreement.

This Agreement came into force on 1 January 1989.

Regional Arrangement concerning the Rhine radiotelephone service (Munich, 1976)

This Arrangement was concluded on 1 October 1976 between the Administrations of the following countries: Federal Republic of Germany, Belgium, France, Luxembourg, the Kingdom of the Netherlands and the Confederation of Switzerland.

The Arrangement, which was approved by all the said Administrations (with some reservations on the part of the Netherlands Administration), came into force on 1 April 1977.

In addition, the Administration of the United Kingdom of Great Britain and Northern Ireland became a *participating Administration* under the provisions of Article 9 of the Arrangement.

Special Agreement concerning the use of the band 174 - 225 MHz

One such Agreement was signed at Paris on 10 April 1984 between the Administrations of France and the United Kingdom of Great Britain and Northern Ireland.

This Agreement came into force on 10 May 1984.

Protocol of Agreement concerning the bringing into service of broadcasting frequency assignments appearing in the Geneva Plan (1984) in the band 104 - 108 MHz

This Protocol of Agreement was signed at Geneva on 7 December 1984 by the delegates of the Administrations of France and the United Kingdom of Great Britain and Northern Ireland on the one hand, and the Administrations of the Federal Republic of Germany, Belgium, Ireland, Italy, Luxembourg, Monaco, the Kingdom of the Netherlands and the Confederation of Switzerland on the other hand.

The provisions of the Protocol of Agreement came into force on 1 January 1986.

Protocol of Agreement concerning criteria of sharing between different services in the band 174 - 225 MHz

This Protocol of Agreement was signed at Geneva on 27 November 1984 by the delegates of the Administrations of the Kingdom of the Netherlands and of the United Kingdom of Great Britain and Northern Ireland.

The provisions of this Protocol of Agreement came into force on 27 December 1984.

Special Agreement concerning implementation of the broadcasting service in frequency band 104 - 108 MHz

This Agreement was signed at Copenhagen on 29 January 1986 by delegates of the Administrations of the Federal Republic of Germany, Denmark, the People's Republic of Poland, Sweden and the USSR.

The Agreement contains details of frequency usage that can be implemented in the time period mentioned in Resolution 3 of the RAC for the Planning of VHF Sound Broadcasting (Region 1 and part of Region 3) (Geneva, 1984).

Special Agreement concerning the assignment and use of frequency-modulated sound-broadcasting channels in the VHF band 88 - 108 MHz

This Agreement was signed at Montevideo on 8 July 1980 by the representatives of the Administrations of the Argentine Republic, the Federative Republic of Brazil and the Eastern Republic of Uruguay.

Note: The terms of the Agreement were received by the General Secretariat on 10 June 1987.

Memorandum of Understanding concerning the frequency coordination of FM Sound Broadcasting stations in the band 87.5 - 108 MHz and Aeronautical Radionavigation stations in the band 108 - 117.975 MHz

This Memorandum of Understanding was signed at Malaga-Torremolinos on 12 February 1992 by the Administrations of Belgium, Ireland, the Kingdom of the Netherlands and the United Kingdom of Great Britain and Northern Ireland.

The provisions of this Memorandum of Understanding entered into force on 1 July 1992.

ANNEX 2

BUDGET AND ACCOUNTS FOR 1993

International Telecommunication Union

BUDGET AND ACCOUNTS FOR 1993

- Swiss francs -

EXPENDITURE	Expenditure 1992	Budget 1993*)	Expenditure 1993
I. ORDINARY BUDGET			
Sect. 1 - Council	844,839.00	966,300	881,974.85
Common Headquarters' expenditure			
Sect. 2 - Staff	63,398,626.60	65,714,000	64,695,453.55
Sect. 3 - Social security	16,008,731.10	16,716,000	16,637,104.20
Sect. 4 - Premises	5,736,003.20	6,064,000	5,794,174.15
Sect. 5 - Missions	278,870.30	310,000	282,212.90
Sect. 6 - Office and miscellaneous expenses	9,712,644.70	10,173,000	9,967,089.75
	95,134,875.90	98,977,000	97,376,034.55
	95,979,714.90	99,943,300	98,258,009.40
Sect. 7 - Telecommunications Development Bureau	20,483,499.00	23,906,800	23,713,854.80
Sect. 8 - Translation into Arabic, Chinese and Russian	3,432,600.00	3,585,600	3,585,600.00
	119,895,813.90	127,435,700	125,557,464.20
Sect. 11.1 - Additional Plenipotentiary Conference	752,351.40	-	-
Sect. 11.2 - WRC 1992 and VGE	2,332,250.60	188,400	163,855.40
Sect. 11.8 - WRC HFBC 1993 and VGE	291,847.30	180,450	143,812.85
Sect. 12 - Meetings of Radiocommunication Sector	1,387,859.95	2,570,700	1,941,561.25
Sect. 13 - Meetings of Telecommunic. Std. Sector	3,559,892.50	3,468,600	2,983,103.40
Sect. 15 - Seminars of Radiocommunication Sector	103,000.00	-	-
Sect. 17 - Common exp. for conf. and meetings	7,440,088.75	3,427,100	3,242,177.20
	15,867,290.50	9,835,250	8,474,510.10
	135,763,104.40	137,270,950	134,031,974.30
Cancellation of bad debts	223,108.60	-	-
	135,986,213.00	137,270,950	134,031,974.30
Surplus income	6,354,074.63		6,446,332.64
	142,340,287.63	**137,270,950**	**140,478,306.94**

*) including additional credits

International Telecommunication Union

BUDGET AND ACCOUNTS FOR 1993

- Swiss francs -

INCOME	Income 1992	Budget 1993*)	Income 1993
I. ORDINARY BUDGET			
Contributions:			
Contributions by Members of the Union	115,260,000.00	116,707,950	117,776,033.15
Contributions by other entities and organizations:			
- Radiocommunication Sector	5,129,180.00	4,907,480	5,575,270.20
- Telecommunication Standardization Sector	9,677,250.00	8,976,340	9,967,615.65
- Telecommunication Development Sector	-	-	144,621.25
- WRC 93	-	-	8,140.00
- Regional development conferences	47,097.10	-	21,946.00
Miscellaneous and unforeseen income	740,151.93	18,230	323,730.69
	130,853,679.03	130,610,000	133,817,356.94
Subvention from the Supplem. Publications Budget	500,000.00	-	-
	131,353,679.03	130,610,000	133,817,356.94
Withdrawal from the ITU Reserve Account	1,000,000.00	2,000,000	2,000,000.00
Withdrawal from the ITU Reserve Account to cover the additional credits - Res. No. 647	9,763,500.00	4,660,950	4,660,950.00
Withdrawal from the Reserve Account to cover the cancellation of bad debts	223,108.60	-	-
	142,340,287.63	**137,270,950**	**140,478,306.94**

*) including additional credits

International Telecommunication Union

BUDGET AND ACCOUNTS FOR 1993

- Swiss francs -

EXPENDITURE	Expenditure 1992	Budget 1993*)	Expenditure 1993
II. TECHNICAL COOPERATION SPECIAL ACCOUNTS BUDGET			
Sect. 21 - Technical Cooperation			
Administrative expenditure for 1993	6,266,084.88	5,301,500	4,840,805.89
	6,266,084.88	5,301,500	4,840,805.89
III. SUPPLEMENTARY PUBLICATIONS BUDGET			
Sect. 24 and 25 - Cost of publications issued during the current year, including overheads	6,616,021.60	7,314,400	7,128,941.00
Sect. 26 - Cost of the Telecommunication Journal and the Global Directory	907,103.93	1,129,000	678,316.30
Sect. 26 - Sundry	156,394.55	134,000	137,950.25
	7,679,520.08	8,577,400	7,945,207.55
Surplus income credited to the Publications Capital Account	1,485,585.64	-	1,341,193.29
	9,165,105.72	**8,577,400**	**9,286,400.84**

*) including additional credits

International Telecommunication Union

BUDGET AND ACCOUNTS FOR 1993

- Swiss francs -

INCOME	Income 1992	Budget 1993*)	Income 1993
II. TECHNICAL COOPERATION SPECIAL ACCOUNTS BUDGET			
UNDP contributions to defrayal of project costs and contributions from funds-in trust	4,622,824.00	4,773,500	3,920,726.00
Other income:			
Balance of the account for payments granted for the previous year	25,523.29	-	23,214.70
Miscellaneous and unforeseen income	326,084.95	-	114,431.82
	4,974,432.24	4,773,500	4,058,372.52
Excess expenditure for 1993	1,291,652.64	528,000	782,433.37
	6,266,084.88	5,301,500	4,840,805.89
III. SUPPLEMENTARY PUBLICATIONS BUDGET			
Sale of publications issued during the current and prior years	8,128,082.85	7,475,000	8,659,561.20
Sale of the Telecommunication Journal and the Global Directory	290,365.25	200,000	193,510.00
Advertisements in the Telecommunication Journal	564,848.27	650,000	203,529.46
Miscellaneous	181,809.35	190,000	229,800.18
Excess expenditure	-	62,400	-
	9,165,105.72	**8,577,400**	**9,286,400.84**

*) including additional credits

ANNEX 3

LIST OF PUBLICATIONS ISSUED BY THE UNION IN 1993

	TITLE OF PUBLICATIONS	Number of copies	Total number of pages per language
1.	Resolutions and Decisions of the Council, 1992 update, 47th session *Supplement N° 28* *Addendum N° 1*	F 300 E 500 S 150	6
2.	12 Notifications, N°S 1301 to 1312	F 500 E 650 S 150	124
3.	32nd Report by the International Telecommunication Union on telecommunication and the peaceful uses of outer space *1993 edition* *A.C. Doc. for New York*	F 300 E 500 S 200 F 50 E 120 S 40	119 44
4.	List of publications, *September 1993*	F 1500 E 5000 S 1000	68
5.	Telecommunication Journal, 11 issues, *Volume 60, I-XII*	F 2277 E 4600 S 739	484
6.	ITU Global Directory, 6th edition 1993, *trilingual* *February 1993 issue*	1200	408
7.	26 Operational Bulletins, *trilingual* *N°S 537 to 562*	900	528
8.	Final Acts of the Additional Plenipotentiary Conference APP-92 (Geneva, 1992) ***Arabic** edition* ***Russian** edition*	F 1200 E 2400 S 400 200 300	284 288 288
9.	Final Acts of the WARC-92, Malaga-Torremolinos, ***Arabic** edition* ***Russian** edition* ***Chinese** edition*	100 100 25	278 276 264
10.	ITU Regulatory Colloquium N° 1 on the Changing Role of Government in an Era of Deregulation Options for Regulatory Processes and Procedures in Telecommunications (Geneva, february 1993)	E 800	166
11.	Radio Regulations, 1993 edition, *trilingual* *Appendices 25 and 26* ***Arabic** edition* *Volume 2* ***Russian** edition* *Volume 3*	1500 120 60	190 1162 638
12.	List of international telephone routes, *trilingual* *33rd edition, 1993*	400	368

	TITLE OF PUBLICATIONS	Number of copies	Total Number of pages per language
13.	Yearbook of common carrier telecommunication statistics Chronological series 1982-1991, *trilingual*		
	20th edition, 1993	900	494
	diskettes	100	1 disk.
14.	List of coast stations, (List IV), *trilingual*		
	13th edition, 1991 *Supplement N° 3*	20 000	64
15.	List of ship stations, (List V), *trilingual*		
	32nd edition, 1992 *Supplement N° 3*	10 000	192
	33rd edition, 1993	12 500	2664
	Supplement N° 1	12 500	184
	Supplement N° 2	12 500	248
16.	List of radiodetermination and special services stations, (List VI), *trilingual*		
		15 000	64
	11th edition, 1992 *Supplement N° 2* *part A*	16 500	24
	part M	15 500	64
	Supplement N° 3 *part A*	16 500	80
	part M		
17.	Alphabetical List of call signs of stations used by the maritime mobile service, (List VIIA), *trilingual*		
	16th edition, 1993	16 000	896
	Supplements N^OS 1, 2 and 3	16 000	256
18.	Alphabetical List of call signs of stations other than amateur stations, experimental stations and stations of the maritime mobile service (List VIIB), *trilingual*		
	12th edition, 1991 *Supplement N° 3*	1 400	44
	13th edition, 1993	1 200	352
19.	Summaries of monitoring information received by the IFRB, *trilingual*		
	N^OS 252 to 256	250	60
20.	Tentative high frequency Broadcasting Schedule, *June, September and December 93, trilingual*	250	1834
21.	High Frequency Broadcasting Schedule, *March, June, September and December 92, trilingual*	200	1256
22.	Preface to the IFRB Weekly Circular and the International Frequency List,		
	13th edition, 1991 *Supplements N^OS 3 and 4*		
	March and September 1993	F 200 E 400 S 100	518
23.	13th edition 1991 of the International Frequency List on microfiches, *trilingual*		
			(283)
	Edition 13.4, *March 1993*	80	
	Edition 13.5, *September 1993*	75	(279)

( ) Microfiches

	TITLE OF PUBLICATIONS		Number of copies			Total Number of pages per language
24.	International Frequency List on CD-ROM, *trilingual*					
	Edition 13.4,	*(1993-03-17)*	200			(2 CD) + 3 disk.
	Edition 13.5,	*(1993-09-01)*	220			(2 CD)
25.	Frequency assignment plans on CD-ROM, *trilingual*					
	2nd *edition 1993*	*(1993-07-07)*	150			1 CD
26.	CCIR Recommendations	*Serie*				
		RPI	F 350	E 1100	S 250	144
		RIS	F 350	E 1100	S 250	88
		RPN	F 350	E 1300	S 250	344
		RBT	F 350	E 1400	S 250	232
		RBO	F 350	E 1500	S 250	172
	BR Recomnendations	*SF*	F 250	E 800	S 150	52
		S	F 150	E 600	S 100	128
	Addendum N° 1	*Volume XV.1*	F 250	E 1200	S 150	10
		Volume XV.2	F 250	E 1200	S 150	30
		Volume XV.3	F 250	E 1200	S 150	20
	Addendum N° 2	*Volume XV.1*	F 250	E 1200	S 150	6
		Volume XV.3	F 250	E 1200	S 150	40
		Volume XV.4	F 250	E 1200	S 150	28
	Addendum N° 3	*Volume XV.4*	F 250	E 1200	S 150	12
27.	XVIIth CCIR Plenary Assembly, Düsseldorf,1990					
	1991 edition					
	Arabic edition	*Volume I*		60		120
		VolumeVIII		60		358
	Russian edition	*Volume III*		50		96
		Volume VII		"		52
		Volume IX.1		"		166
		Volume X/XI.3		"		132
		Volume I		"		96
		Volume V		60		120
		Volume VIII		50		344
		Volume X/XI.2		20		40
		Volume XIII		60		162
		Volume XV.1		35		162
		Volume XV.4		60		122
		Volume X.1		50		228
		Volume IV/IX.2		30		330
		Volume XV.3		25		266
	Chinese edition	*Volume X.1*		60		540
		Volume XI.1		60		878
28.	Handbook on "Spectrum management and Computer-aided techniques"					
	1993 edition, ***arabic***	*1990 - 1993 update*		50		256

( ) Microfiches

	TITLE OF PUBLICATIONS		Number of copies			Total Number of pages per language
29.	CCIR handbook on Satellite Communications					
	1988 edition	*Suplement N° 2, 1993*	F 300	E 700	S 100	36
30.	Blue Book, IXth CCITT Plenary Assembly, Melbourne, 1988,					
	Russian edition	*Fascicles*				
		II.2		60		376
		II.3		30		424
		II.5		12		160
		V		60		444
		VI.1		60		518
		VII.4		37		122
		VIII.3		60		486
	Arabic edition	*Fascicles*				
		III.6		60		268
		III.8		100		318
		VI.9		100		204
		VIII.1		60		534
		VIII.5		60		602
		VIII.7		100		480
		VIII.8		100		236
	Chinese edition	*Fascicles*				
		I.2		60		68
		III.1		"		318
		III.5		"		296
		IV.4		"		240
		VI.3		"		162
		VI.9		"		576
		VI.13		"		326
		VII.1		"		292
		VII.2		"		296
		VII.3		"		500
		VIII.6		"		244
		VIII.8		"		234
		IX		"		178
		X.4		"		288
		X.5		"		96
		X.7		"		278
31.	World Telecommunication Standardization Conference (WTSC), Helsinki, 1993					
	Volume N° 1	*Resolutions,*	F 350	E 1500	S 200	100
Recommendations			F 200	E 350	S 120	256
	Volume N° 2	*Minutes and reports of*				
meetings						
32.	Catalogue of CCITT Recommendations					
		February 93	F 250	E 500	S 100	64
		July 93		E 500		84

	TITLE OF PUBLICATIONS	Number of copies			Total Number of pages per language
33.	Guide for ITU-TS and ISO/IEC JTC 1 Cooperation *March 93*	F 150	E 700	S 100	64
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