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**REPORT**  
**ON THE ACTIVITIES OF**  
**THE INTERNATIONAL**  
**TELECOMMUNICATION UNION**

in

1967

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## 1. INTRODUCTION

Under the terms of an Agreement signed in Lake Success in 1947, the United Nations recognized the International Telecommunication Union (I.T.U.) — which was founded in 1865 — as « the specialized agency responsible for taking such action as may be appropriate under its basic instrument for the accomplishment of the purposes set forth therein ».

The basic instrument of the I.T.U. is the International Telecommunication Convention, the current version of which, signed in Montreux in November 1965, entered into force on 1 January 1967. Annexed thereto are the Regulations, established by World Administrative Conferences, which govern, on an international basis, the use of radio, the telegraph and the telephone.

The purposes of the Union, as laid down in the Convention, are:

- to maintain and extend international cooperation for the improvement and rational use of telecommunications of all kinds;
- to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, so far as possible, generally available to the public;
- to harmonize the actions of nations in the attainment of those common ends.

In furtherance of its purposes, the Union, in particular:

- effects allocation of the radio frequency spectrum and registration of radio frequency assignments in order to avoid harmful interference between radio stations of different countries;
- coordinates efforts to eliminate harmful interference between radio stations of different countries and to improve the use made of the radio frequency spectrum;
- fosters collaboration among its Members and Associate Members with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis;
- fosters the creation, development and improvement of telecommunication equipment and networks in new or developing countries by every means at its disposal, especially its participation in the appropriate programmes of the United Nations;
- promotes the adoption of measures for ensuring the safety of life through the cooperation of telecommunication services;
- undertakes studies, makes regulations, adopts resolutions, formulates recommendations and opinions, and collects and publishes information concerning telecommunication matters for the benefit of all Members and Associate Members.

The supreme organ of the Union is the *Plenipotentiary Conference*. It meets once every five or six years in order to determine the general policies for fulfilling the purposes of the Union and to revise the International Telecommunication Convention if it considers this necessary.

In intervals between Plenipotentiary Conferences the *Administrative Council*, composed of twenty-nine Members of the Union, meets annually. It is responsible for taking all steps to facilitate the implementation by the Members of the Union of the provisions of the Convention, of the Regulations, of the decisions of the Plenipotentiary Conference and, where appropriate, of

the decisions of other conferences and meetings of the Union. The Secretary-General is responsible to the Administrative Council for all administrative and financial aspects of the Union's activities.

Apart from the General Secretariat the Union has three other permanent organs:

- the *International Frequency Registration Board (I.F.R.B.)*, the essential duties of which are:
  - a) to effect an orderly recording of frequency assignments made by the different countries so as to establish, in accordance with the procedure provided for in the Radio Regulations and in accordance with any decisions which may be taken by competent conferences of the Union, the date, purpose and technical characteristics of each of these assignments, with a view to ensuring formal international recognition thereof;
  - b) to furnish advice to Members and Associate Members with a view to the operation of the maximum practicable number of radio channels in those portions of the spectrum where harmful interference may occur;
  - c) to perform any additional duties, concerned with the assignment and utilization of frequencies, prescribed by a competent conference of the Union or by the Administrative Council with the consent of a majority of the Members of the Union, in preparation for or in pursuance of the decisions of such a conference;
- the *International Radio Consultative Committee (C.C.I.R.)* which studies technical and operating questions relating specifically to radiocommunication and issues recommendations on them;
- the *International Telegraph and Telephone Consultative Committee (C.C.I.T.T.)* which studies technical operating and tariff questions relating to telegraphy and telephony and issues recommendations on them.

The present Report is in the nature of a general review of the activities of the International Telecommunication Union and of its permanent organs in 1967.

## 2. MEMBERSHIP OF THE UNION

1. On 31 December 1967, there were 133 Members of the Union, i.e.:

- a) the 129 countries or groups of territories mentioned in Annex 1 to the Montreux Convention (1965);
- b) the following 4 countries which became Members on the deposit of an instrument of accession to the Convention:

	which became a Member on
Maldivé Islands . . . . .	28.2.1967
Guyana . . . . .	8.3.1967
Kingdom of Lesotho . . . . .	26.5.1967
Barbados . . . . .	16.8.1967

There were no Associate Members.

2. By 31 December 1967, 47 countries had ratified the International Telecommunication Convention (Montreux, 1965) and 5 countries had acceded to it.

In accordance with Administrative Council Decision No. 287, the Secretary-General sent to each Member concerned of the Union a table showing its position in relation to the Montreux Convention (1965) and the Administrative Regulations annexed thereto.

3. The position of Members on 31 December 1967 in relation to the Montreux Convention (1965) is indicated in Table 1 of Annex 1 to this Report. Annex 1 also contains information concerning certain other Conventions and Agreements relating to telecommunications.



### 3. THE WORLD ADMINISTRATIVE RADIO CONFERENCE TO DEAL WITH MATTERS RELATING TO THE MARITIME MOBILE SERVICE

3.1 During its 21st Session, the Administrative Council, under Resolution No. 590, decided that a World Administrative Radio Conference should be convened in Geneva on 18 September 1967 for a maximum duration of seven weeks. The basic agenda of the Conference was to consider, and revise as necessary, the provisions of the Radio Regulations and of the Additional Radio Regulations pertaining to the maritime mobile service.

3.2 Seventy Members of the Union were represented at the Conference, which was also attended by observers from I.M.C.O., UNESCO, I.C.A.O. and W.M.O.

Requests by the International Radio-Maritime Committee, the International Shipping Federation, the International Chamber of Shipping and the International Federation of Radio Officers for admission as observers were granted by the Plenary Meeting.

3.3 Mr. R. M. Billington, Head of the Delegation of the United Kingdom of Great Britain and Northern Ireland, was elected Chairman of the Conference, Mr. Robert T. Bartley, Head of the Delegation of the United States of America, Mr. Yves Place, Head of the Delegation of France, and Mr. A. Badalov, Head of the Delegation of the U.S.S.R., were elected Vice-Chairmen.

Seven Committees were set up as follows:

#### *Committee 1 — Steering Committee*

Composed of the Chairman and Vice-Chairmen of the Conference and the Chairmen and Vice-Chairmen of Committees.

#### *Committee 2 — Credentials*

*Chairman:* Mr. A. Petti (Italy)  
*Vice-Chairman:* Mr. Tesfatsion Sebhatu (Ethiopia)

#### *Committee 3 — Budget Control*

*Chairman:* Mr. José de Jesús Hernández González (Mexico)  
*Vice-Chairman:* Mr. V. V. Rao (India)

#### *Committee 4 — Radiotelegraphy*

*Chairman:* Mr. F. Gérard Perrin (Canada)  
*Vice-Chairman:* Mr. Milan Zahradníček (Czechoslovak Socialist Republic)

#### *Committee 5 — Radiotelephony*

*Chairman:* Mr. P. Mortensen (Norway)  
*Vice-Chairman:* Mr. Alvaro de Souza Coelho (Brazil)

#### *Committee 6 — Operation*

*Chairman:* Mr. Konstantin Čomić (Yugoslavia)  
*Vice-Chairman:* Mr. Jean Jipguep (Federal Republic of Cameroon)

*Committee 7 — Editorial*

*Chairman:* Mr. Habib Ben Cheikh (Tunisia)  
*Vice-Chairmen:* Mr. F. Benito Mestre (Spain)  
Mr. J. D. Campbell (Australia)

3.4 The provisions requiring consideration and revision represented more than three-quarters of the Radio Regulations and Additional Radio Regulations revised at Geneva in 1959, while about a thousand proposals were submitted by Administrations. The work of the Conference was thus arduous and exacting, particularly as in many cases different aspects of the same proposal had to be examined by several Committees.

3.5 Radiotelegraph and radiotelephone procedures, the procedures to be followed in case of distress, and the rules governing the use of the international calling and distress frequencies 500 kc/s and 2182 kc/s were revised to take account of experience acquired since 1959. The Conference adopted other decisions reflecting present trends in the maritime mobile service; many of these, being of a transitional nature, appear in twenty resolutions. The most important of the Conference decisions are briefly summarized below.

*3.5.1 Introduction of single sideband technique*

Provision was already made in Recommendation No. 28 of the Administrative Radio Conference, Geneva, 1959, for the introduction of single sideband technique for radiotelephone purposes, and the Maritime Conference decided that, in view of all the factors involved, including the amortization of ship radio equipment, the conversion should be carried out in stages. The timetable established for this purpose extends until 1 January 1978 for the frequency bands between 4000 kc/s and 23 000 kc/s, and until 1 January 1982 for the bands between 1605 kc/s and 4000 kc/s. These measures will make it easier to meet changing radiotelephone requirements of the maritime mobile service in the years to come without requiring any changes in the frequency bands allocated to it under the 1959 Radio Regulations.

*3.5.2 Selective calling on board ship*

On the basis of conclusions reached by the C.C.I.R., the Conference adopted the technical and operating characteristics of a system for selective calling of ship stations by coast stations, which will be particularly useful in cases where a permanent watch is not kept on board. This system will enable requirements, at least in the very high and medium frequencies, to be satisfied until a more complex system now under study by the C.C.I.R. is ready. The Conference designated the frequencies to be used and agreed on the characteristics of signals and the mode of operation. Each of the ships concerned will be assigned a 5-digit call number and each coast station using the system will have an identification number. The Secretary-General was instructed to supply call numbers for ships in blocks of 100 and identification numbers for coast stations in blocks of 10 to Administrations which request them.

*3.5.3 Emergency position-finding radiobeacons*

On the basis of conclusions reached by the C.C.I.R., the Conference defined the technical characteristics (including signal form and power) of emergency position-finding radiobeacons using frequency 2182 kc/s, which are mainly intended to be carried on board ship and to enable assistance to be given to the crew of any vessel which is lost at sea without having transmitted alarm or distress signals. With regard to radiobeacons using frequencies 121.5 Mc/s and 243 Mc/s, which are used mainly by aircraft, the Conference referred in a resolution to the specifications recommended by I.C.A.O.

### 3.5.4 *International Code of Signals*

The International Code of Signals was revised in recent years by the Intergovernmental Maritime Consultative Organization (I.M.C.O.), and the Conference had to compare these results with the provisions of the Radio Regulations. Appendix 13 to the Regulations contains the Q Code and the abbreviations to be used in all radio services, while Appendix 16 gives a phonetic alphabet and figure code to be used in the maritime mobile service. The Conference adopted the phonetic alphabet and figure code in the International Code of Signals and drew up a new Appendix 13A for application in the maritime mobile service only. In deciding on the signals to be included in Appendix 13A in addition to those relating to radio procedures, the Conference took into consideration the fact that it is not compulsory to carry the International Code of Signals on all ships equipped with radio. It also decided to draw the attention of I.M.C.O. to a number of differences subsisting between the revised International Code of Signals and Appendices 13A and 16 to the Radio Regulations.

### 3.5.5 *International maritime VHF radiotelephony*

The Conference decided to reduce from 50 kc/s to 25 kc/s the channel spacing specified in Appendix 18 to the Radio Regulations for international VHF radiotelephony (156-174 Mc/s band). Here again, to allow for the amortization of ship radio equipment, it established a time-table extending until 1 January 1983 for the introduction of the new spacing.

### 3.5.6 *Rearrangement of the frequency bands between 4000 kc/s and 27 500 kc/s to be used for radio-telegraphy and radiotelephony by coast and ship stations*

Since 1959, the number of passenger ships has diminished considerably while the number of cargo ships has increased, and fishing fleets and the number of certain other types of vessel using mainly radiotelephony have grown to a remarkable degree. To take account of these developments and to give more spectrum space to radiotelephony the Conference radically revised the frequency bands between 4000 kc/s and 27 500 kc/s allocated to the maritime mobile service in the Table of Frequency Allocations as revised in 1959. A number of new telephone channels were thus created at the expense of telegraphy. This new arrangement will involve many changes of frequencies affecting not only ship stations but also coast radiotelegraph and radiotelephone stations. For this purpose, the Conference drew up a time-table extending until 1 March 1970 and in several resolutions specified the tasks which the I.F.R.B., in cooperation with administrations, will have to carry out in this connection. Certain action must be taken to ensure the rational use of the new telephone channels until the entry into force of the decisions of a new administrative conference, which the Maritime Conference recommended be convened in 1973 to revise the Frequency Allotment Plan for coast radiotelephone stations operating in the high frequencies (Appendix 25 to the Radio Regulations).

### 3.5.7 *Collection of oceanographic data*

Under the new arrangement of the frequency bands allocated to the maritime mobile service between 4000 kc/s and 27 500 kc/s, a number of 3.5 kc/s channels, each comprising ten spaced frequencies were assigned, one per band, for the transmission of oceanographic data, which is thus practically incorporated in the maritime mobile service. These channels will be available for this purpose as from 1 July 1969. However, to ensure that they will thereafter be used effectively in a coordinated world-wide system to be established for the collection of oceanographic data employing the most recent radio techniques, the Conference decided that a coordinated frequency

plan should be developed jointly by the Intergovernmental Oceanographic Commission (I.O.C.) and the World Meteorological Organization (W.M.O.) in consultation with the I.F.R.B. and, as appropriate, with Administrations of the Members and Associate Members of the Union. This plan will be considered at a later date by the next competent administrative radio conference. The Conference also specified the manner in which the I.F.R.B. should meanwhile record the frequencies assigned to oceanographic buoys and to the land-based stations which interrogate them. The Conference adopted these decisions only after lengthy discussions, mainly concerned with its field of competence, and a number of delegations expressed regret that it had thus assigned frequencies for oceanography before a plan for the effective use of the spectrum available had been firmly established.

### *3.5.8 Use of direct-printing radiotelegraph apparatus*

Under the new arrangement of frequency bands allocated to the maritime mobile service between 4000 kc/s and 27 500 kc/s, the Conference decided to reserve frequency bands for direct-printing radiotelegraphy, as this technique is expected to be used increasingly in the near future instead of the Morse code which requires the presence of specialized radiotelegraph operators on board. It defined the technical characteristics of the equipment on the basis of the conclusions of the C.C.I.R., and issued directives to the I.F.R.B. on the registration of the frequencies used for this purpose by Administrations.

### *3.5.9 Manual for use by the maritime mobile service*

The Conference decided that, instead of the Radio Regulations, ships shall or may, as appropriate, carry a Manual containing those provisions of the Regulations and the Convention that are applicable or useful to stations in the maritime mobile service. The Secretary-General was given directives for the compilation of the Manual, which must be sent to Administrations by 1 October 1968 at the latest. He may consult certain Administrations concerning this publication.

### *3.5.10 Radiocommunication operator's general certificate*

The Conference decided that provision should be made for the introduction of a radiocommunication operator's general certificate, as an alternative to the present first and second class certificates.

### *3.5.11 Reprint of the Radio Regulations*

The Conference recommended that, arising from the partial revisions of the Radio Regulations and Additional Radio Regulations by the Space, Aeronautical and Maritime Conferences, the Secretary-General should seek the views of all Member Administrations on whether those Regulations should be reprinted in their amended form and, if so, whether the new publications should be in loose-leaf style to facilitate carrying in any future partial revisions.

### *3.5.12 Guard band for the international radiotelephony distress and calling frequency*

The Conference agreed that the guard band for the international radiotelephony distress and calling frequency of 2182 kc/s should be reduced from 2170-2194 kc/s to 2173.5-2190.5 kc/s.

3.6 The Conference completed its work on 3 November 1967 with the signature of the Final Acts comprising:

- a partial revision of the Radio Regulations, Geneva, 1959, which was signed by 68 delegations;
- a partial revision of the Additional Radio Regulations, Geneva, 1959, which was signed by 65 delegations.

These partial revisions will enter into force on 1 April 1969, upon which date the provisions of the 1959 Regulations which are cancelled or modified thereby will be abrogated.

3.7 The Conference also adopted eight recommendations, one of which invites Administrations, the I.M.C.O. and the C.C.I.R. to study the introduction of space communication techniques to meet the requirements of the maritime mobile service and to increase the safety of shipping.

#### 4. THE ADMINISTRATIVE COUNCIL

4.1 The 22nd Session of the Administrative Council was held at I.T.U. Headquarters from 6 to 26 May 1967.

It was attended by representatives of all 29 Members of the Council, i.e.:

Algeria (Algerian Democratic and Popular Republic), the Kingdom of Saudi Arabia, the Argentine Republic, the Commonwealth of Australia, Brazil, Canada, China, the Republic of Dahomey, the United States of America, Ethiopia, France, the Republic of India, Ireland, Italy, Japan, Lebanon, the Malagasy Republic, the Kingdom of Morocco, Mexico, the Federal Republic of Nigeria, Uganda, Pakistan, the People's Republic of Poland, the Federal Republic of Germany, the United Kingdom of Great Britain and Northern Ireland, the Confederation of Switzerland, the Union of Soviet Socialist Republics, the Republic of Venezuela, and the Federal Socialist Republic of Yugoslavia.

4.2 Mr. P.L. Ó Colmáin (Ireland) was elected Chairman and Mr. Henryk Baczek (People's Republic of Poland), Vice Chairman, and the following Committees were constituted:

*Committee 1 — Finance*

*Chairman:* Mr. Ben Abdellah (Morocco)  
*Vice-Chairman:* Mr. Chaman Lal (India)

*Committee 2 — Personnel and Pensions*

*Chairman:* Mr. H.G. Lillicrap (United Kingdom)  
*Vice-Chairman:* Mr. A. Zaidan (Saudi Arabia)

*Committee 3 — Technical Cooperation*

*Chairman:* Mr. C. Hoyt Price (United States)  
*Vice-Chairman:* Mr. V.A. Haffner (Nigeria)

During the course of the Session a number of ad hoc groups were set up to examine in detail certain reports.

4.3 Apart from the examination of routine annual reports and administrative questions, the Council took a number of important decisions among which mention should be made of the following:

*4.3.1 Coordination of budgetary and financial activities in the United Nations organizations*

Having considered the Report on the findings and recommendations of the Ad Hoc Committee of Experts to examine the finances of the United Nations and specialized agencies as approved by the General Assembly in Resolution No. 2150 (XXI), the Council requested the Secretary-General to continue to participate in inter-agency consultations and in the joint inspection unit as soon as agreement on its establishment had been reached by the relevant inter-agency bodies in United Nations organs.

(Resolution No. 602)

#### 4.3.2 *Budgets for the year 1967*

After providing certain additional credits, the final budgets for 1967 were approved as follows:

- 22,355,400 Swiss francs for the budget of the Union \*);
- 1,977,400 Swiss francs for the Technical Cooperation special accounts budget \*);
- 1,941,800 Swiss francs for the supplementary publications budget.

The contributory unit for 1967 was maintained at 43,200 Swiss francs.

(Resolution No. 603)

#### 4.3.3 *Budgets for the year 1968*

The budgets for 1968 were approved as follows:

- 22,807,400 Swiss francs for the budget of the Union;
- 2,616,400 Swiss francs for the Technical Cooperation special accounts budget;
- 2,576,500 Swiss francs for the supplementary publications budget.

The contributory unit for 1968 was fixed at 45,600 Swiss francs.

(Resolution No. 604)

#### 4.3.4 *Grading standards*

During its 21st Session the Council, under Resolution No. 581, instructed the Secretary-General to constitute a team of two Job Classification Experts from Administrations. The terms of reference of these Experts were to make recommendations to the Council on the application to I.T.U. posts of common grading standards adopted by the Consultative Committee on Administrative Questions (C.C.A.Q.) in the fields of budget and accounts, personnel, languages and statistics and to draw up detailed job descriptions of technical posts within the I.T.U., to be referred to the C.C.A.Q. for purposes of comparison with the work carried out by technically qualified officials in other specialized agencies.

At its 22nd Session the Council decided to amend those terms of reference to include the establishment of detailed job descriptions of all I.T.U. posts in the General Service, Professional and Senior Counsellor categories and to recommend gradings for those posts, based on the common grading standards adopted by the C.C.A.Q. as adapted by the Experts or on standards formulated by them.

For this purpose the Secretary-General was instructed to ask the Administrations concerned (France and the United Kingdom) if they would agree to lend the services of the Experts for a further period not exceeding four months.

(Resolution No. 608)

#### 4.3.5 *Situation arising from the death of Dr. M. B. Sarwate, former Secretary-General*

Following the death of Dr. M.B. Sarwate, Mr. Mohamed Mili, Deputy Secretary-General, was called upon to discharge the duties of Secretary-General ad interim.

The Council therefore examined the question of providing for the filling ad interim of the post of Deputy Secretary-General. After a most thorough discussion, the Council decided to seek the opinion of the Members of the Union as to whether it could, if it considered it desirable, take action at the 23rd Session in accordance with the provisions of No. 113 of the Convention.

(Resolution No. 609)

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\*) Excluding additional credits under Administrative Council Resolutions Nos. 505 and 533, amounting to 148,400 Swiss francs for the budget of the Union and 15,230 Swiss francs for the Technical Cooperation Special Accounts budget.

#### 4.3.6 *Creation of posts in grades G.1 to G.5*

The Council authorized the Secretary-General to create or abolish, after ascertaining the views of the Coordination Committee, established posts in grades G.1 to G.5 within the limits of credits allocated for this purpose in the budget of the Union, on the understanding that the rate of increase in the credits for posts in these grades should not exceed 2.5% per year.

(Resolution No. 611)

#### 4.3.7 *IVth Plenary Assembly of the C.C.I.T.T.*

The Council decided to accept the generous invitation of the Government of the Argentine Republic to hold the IVth Plenary Assembly and associated meetings of Study Groups of the C.C.I.T.T. in Mar del Plata during the period 23 September to 25 October 1968.

(Decision No. 345)

#### 4.3.8 *Aeronautical Mobile (OR) Service*

As mentioned in last year's report, some delegates to the Extraordinary Administrative Radio Conference for the preparation of a revised Allotment Plan for the Aeronautical Mobile (R) Service expressed the view that there was a need to convene a further conference to revise the Aeronautical (OR) Plan contained in Appendix 26 to the Radio Regulations since that Plan did not reflect the present situation as far as a number of country designations are concerned.

Having examined this question, the Council was of the opinion that, for the time being, any problems on the use of the relevant frequencies which arose could be settled by the conclusion of suitable agreements between the Administrations concerned.

(Resolution No. 613)

#### 4.3.9 *Frequency planning for LF/MF broadcasting*

It will be recalled that the African LF/MF Broadcasting Conference, Geneva, 1966, in its Resolution No. 5, drew the attention of the Council to the need to consider convening at a suitable date a regional conference of the countries in the African Broadcasting Area and the European Broadcasting Area, the countries in the Western Part of Region 3 and the countries of the Middle East which do not belong to the European Broadcasting Area, for the purpose of preparing a common broadcasting plan covering the frequency requirements of all the countries in those areas.

The Council, recognizing that additional information is required in order satisfactorily to undertake a revision of the European Broadcasting Plan, Copenhagen, 1948, or other frequency planning for LF/MF broadcasting, requested the C.C.I.R. to accelerate its studies of questions relating to LF/MF broadcasting. It also invited the I.F.R.B. to undertake studies of methods of frequency planning for LF/MF broadcasting and to assemble data on the implementation of frequency plans for VHF broadcasting.

(Resolution No. 614)

#### 4.3.10 *Operation of the computer*

In order to ensure optimum use of the I.T.U. computer by all the organs of the Union, the Council approved the principle of centralizing staff responsible for programming and operating the computer and of transferring the necessary staff and equipment from the I.F.R.B. to the General Secretariat. The Secretary-General was instructed to submit to the 23rd Session a report containing detailed proposals concerning the organizing of the Computer Service.

(Resolution No. 617)



#### 4.3.11 *Organization of Technical Cooperation*

The Council took steps to reorganize the Technical Cooperation service of the Union to enable all the permanent organs to cooperate more closely and efficiently in technical cooperation activities under the United Nations Development Programme and to coordinate these activities better with the work being done by them for the benefit of developing countries.

(Resolution No. 618)

#### 4.3.12 *South West Africa*

In view of the adoption by the General Assembly of the United Nations of Resolution No. 2145 (XXI), the Council, having consulted the Members of the Union, decided that the Government of the Republic of South Africa no longer had the right to represent the Territory of South West Africa within the Union.

(Resolution No. 619)

#### 4.4 Other Resolutions and Decisions:

- R 605 External audit of I.T.U. accounts for the period 1 January to 31 December 1966
- R 606 Financial Regulations of the Union (Revised)
- R 607 Financial Operating Report of the I.T.U. for the year 1966
- R 610 Creation and continuation of posts
- R 612 Membership of the I.T.U. Staff Pension Committee
- R 615 Regional Administrative Conference for Latin America (R.A.C.L.A.)
- R 616 Coordination of the work of the I.F.R.B. Specialized Secretariat
- R 620 Headquarters accommodation
- D 341 Use of credits allocated by the Council for the installation of the Compactus
- D 342 Remuneration of the Secretary-General ad interim
- D 343 Post of Head of the Technical Cooperation Department
- D 344 Date and duration of the 23rd Session of the Administrative Council
- D 346 Possible revision of the structure of the Radio Regulations

4.5 The Council noted that as a result of the studies on ways and means of improving its methods of work, carried out during the 21st Session, it had been possible, without undue difficulty, to limit the duration of the 22nd Session to three weeks. It therefore decided that a similar duration would also be foreseen for the 23rd Session due to open in Geneva on 11 May 1968.

## 5. ACTIVITIES OF THE PERMANENT ORGANS

### 5.1 ACTIVITIES OF THE GENERAL SECRETARIAT

The duties of the General Secretariat, which are laid down in Article 10 of the Convention, are mainly of an administrative nature since the Secretary-General is responsible to the Administrative Council for all the administrative and financial aspects of the Union's activities.

The activities of the General Secretariat in the fields of Technical Cooperation (which are described in detail in Section 6) and of Public Information continued to increase in 1967. Special efforts were made to render the contents of the Telecommunication Journal more interesting with a view to increasing the number of subscribers. For this purpose, the volume of information contained in each number of the Journal has been considerably expanded and the information itself diversified, without, however, any undue growth in the number of pages, thanks to an improved layout. It has thus been possible to devote more space to outstanding achievements by the Administrations of member countries. Appeals to Administrations for contributions have been frequently made with considerable success. The appearance of each issue of the Journal is heralded by a press release which has helped to publicise the review.

The documents published by the General Secretariat during 1967 are listed in Annex 3. Studies were also carried out, in cooperation with the I.F.R.B., with a view to publishing the List of Ship Stations, which is issued in over 20,000 copies, with the assistance of the I.T.U. computer. This will enable extracts to be made—for example, particulars of all ships of a given country—both rapidly and economically.

In 1967, the General Secretariat made arrangements for holding the 22nd Session of the Administrative Council and provided the Secretariat of the World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service. In accordance with a decision of that Conference, the General Secretariat subsequently commenced the preparation of a Manual for use by the Maritime Mobile Service for use on board ship.

Considerable work was also entailed by the preparation for the first meeting of the Study Group set up as a result of Resolution No. 35 of the Montreux Plenipotentiary Conference to prepare a draft Constitutional Charter and General Regulations for the I.T.U. Over 800 pages of proposals were submitted by Administrations for examination by the Study Group, which met early in December.

Finally, it should be mentioned that the year 1967 was notable for the large number of changes in terminal telegraph charges, in particular as regards the European area. The necessary coordination between Administrations placed an unusual burden on the General Secretariat.

### 5.2 ACTIVITIES OF THE INTERNATIONAL FREQUENCY REGISTRATION BOARD (I.F.R.B.)

#### 5.2.1 *Treatment of frequency assignment notices*

The Board continued to carry out its duties as prescribed in the Convention, Montreux, 1965, and the attached Radio Regulations. These duties in relation to the utilization, notification, technical examination and registration of frequencies involved special steps to ensure the appli-

cation both by the Administrations and the I.F.R.B. of the provisions of the Radio Regulations. During the year 1967, the Board dealt with a total number of 38,420 frequency assignment notices.

#### 5.2.2 *Technical examination of frequency assignment notices*

The required technical examinations or re-examinations of frequency assignments, as prescribed by the Administrative Radio Conference, Geneva, 1959, were made in respect of 20,349 assignments notified according to the provisions of Article 9 of the Radio Regulations with a view to their recording in the Master International Frequency Register. With regard to the frequency bands allocated with equal rights to the space service and to the fixed and mobile services, 66 assignment notices were examined in accordance with Article 9A of the Radio Regulations as revised by the Space E.A.R.C. (1963).

#### 5.2.3 *Interference cases; special assistance in frequency matters*

The Board issued a number of specific suggestions on the use of frequencies and made recommendations with a view to the clearance of harmful interference and the rendering of special assistance to Administrations. It is this phase of the Board's work to which Administrations attach particular importance and in respect of which it is considered that the Board could render most valuable assistance. In addition to the specific requests, many times when the representatives of the Board had the opportunity of meeting with representatives of Administrations it was possible to clarify the procedures for notifying frequency assignments and assigning frequencies that would provide the most effective use of the radio frequency spectrum. The Board continued to assist Administrations in their efforts to put an end to transmissions by broadcasting stations on board ship or other objects outside territorial waters. At its Vth Session, the Assembly of the Intergovernmental Maritime Consultative Organization (I.M.C.O.) expressed its appreciation of the cooperation of the I.T.U. in the investigation of this matter.

#### 5.2.4 *Broadcasting in the high frequency exclusive bands*

The Board continued to apply the procedure specified in Article 10 of the Radio Regulations for the high frequency bands allocated exclusively to the Broadcasting Service. The prescribed Schedules were published together with recommendations for their improvement, and the recapitulative Annual High Frequency Broadcasting Frequency List (4th Edition), required by No. 655 of the Radio Regulations, was prepared.

#### 5.2.5 *Monitoring*

Monthly Summaries of monitoring information received were prepared and issued to Administrations, as well as special summaries of monitoring information on the use of the exclusive high frequency broadcasting bands by broadcasting stations. A special monitoring programme was drawn up in the bands allocated to the maritime mobile service in order to place before the World Administrative Maritime Radio Conference the results of recent systematic observations of out-of-band emissions. In addition, the Board organized in July 1967 a special monitoring programme on the use of the frequency bands allocated exclusively to the standard frequency service. The results were submitted in the form of analytical tables to the meeting of Commission I (Radio Measurements and Standards) of the International Scientific Radio Union (U.R.S.I.).

#### 5.2.6 *Use of the electronic computer*

During the year, the I.F.R.B. used the computer for its work for approximately 93% of the total time of its use; the work and testing of programmes for the General Secretariat and for the Specialized Secretariat of the C.C.I.R. accounted for the remaining 7%.

#### 5.2.7 *Technical Standards*

The revision of Technical Standards Series A is now nearing completion and the Board hopes to be able to publish the fourth edition of its Technical Standards Series A during 1968.

Studies have been carried out in order to incorporate, in a suitable form, the C.C.I.R. Atlas of Ionospheric Characteristics (Oslo, 1966) in the I.F.R.B. Technical Standards on radio wave propagation.

With regard to the technical examination of frequency assignments to stations operating in bands shared by the space and terrestrial services, the Board has continued its study of the relevant C.C.I.R. Recommendations and Reports (Oslo, 1966) to ascertain what changes should be made in the I.F.R.B. Rules of Procedure. The work is being actively pursued and there is every reason to suppose that it will be completed early in 1968.

#### 5.2.8 *World Administrative Radio Conference to deal with matters relating to the Maritime Mobile Service*

The I.F.R.B. submitted, within the framework of the technical preparation of the Conference, a number of documents dealing with technical and regulatory questions, including the implementation in the maritime mobile service of certain of the Radio Regulations and the Appendices thereto, and of resolutions adopted by the Administrative Radio Conference, Geneva, 1959.

Members of the Board took an active part in the Conference. The technical secretariat was provided by I.F.R.B. officials who worked in close collaboration with the three Technical Committees and with the Editorial Committee.

The Final Acts of the Conference will come into force on 1 April 1969. They include, inter alia, a number of provisions on the gradual introduction of certain techniques and new systems and on the rearrangement of frequency bands allocated to the maritime mobile service required by changes in operating conditions in the service. Accordingly, the resolutions adopted by the Conference comprise decisions of a transitional nature, many of which contain directives for the I.F.R.B. on how it should implement these decisions in cooperation with Administrations.

#### 5.2.9 *Entry into force of the Regional Agreement concerning the use by the broadcasting service of frequencies in the medium frequency band in the African Broadcasting Area (Geneva, 1966)*

Preparatory to the entry into force on 1 January 1968 of the Regional Agreement for the African Broadcasting Area which was signed at Geneva in 1966, the Board took special steps to assist the Administrations concerned to notify the amendments required in the relevant entries in the Master Register. Each of the Administrations received full extracts of the assignments appearing under its name in the Master Register and in the Plan adopted by the Conference as well as a Circular-letter explaining in detail the action required to bring the assignments up to date before the regional Agreement became effective.

5.2.10 *Implementation of the revised allotment plan for the Aeronautical Mobile (R) Service adopted by the E.A.R.C. (Geneva, 1966)*

The Aeronautical E.A.R.C., Geneva, 1966, decided that the Final Acts should come into force on 1 July 1967 but that the new Frequency Allotment Plan (Appendix 27 to the Radio Regulations) should come into force on 10 April 1970. In Resolution No. Aer 6, however, it considered that some Administrations might wish to implement certain provisions of the new Plan in advance of the specified date of entry into force.

In Circular-letter No. 170 of 7 April 1967, the Board drew the attention of Administrations to the recommendations of the International Civil Aviation Organization (I.C.A.O.) which are within the framework and spirit of Resolution No. Aer 6.

In Circular-letter No. 176 dated 10 August 1967, the Board informed Administrations that the replies received to its Circular-letter No. 170 contained no objections. The Board therefore concluded that the Frequency Allotment Plan in Appendix 27 to the Radio Regulations could be implemented in two stages (according to frequency bands) in accordance with the detailed programme recommended by the I.C.A.O. for the following dates:

— on 18 September 1969 and 17 September 1970, preceded by preliminary measures on 19 September 1968.

The Board has closely cooperated with the I.C.A.O. Secretariat in preparing draft regional plans for frequency assignments within the framework of Appendix 27 to the Radio Regulations. In approving these drafts on 13 December 1967, the I.C.A.O. Council requested the Secretary-General of I.C.A.O. to inform the I.F.R.B. of the Council's appreciation for its collaboration and assistance in this matter.

5.2.11 *Application of the Recommendations of the Panel of Experts (Geneva, 1963)*

Pursuant to Resolution No. 551 of the Administrative Council, the Board requested Administrations to furnish data concerning the progress made up to the end of 1966, or envisaged, in the implementation of the Panel's Recommendations, especially in respect of the conversion from double sideband to single sideband or independent sideband operation of radio transmitters and receivers in the Fixed, Aeronautical and Maritime Mobile Services. The detailed information received has been condensed by the Board in analytical summaries and communicated to Administrations. The I.F.R.B. has continued to apply the special procedure for the examination of all frequency assignments in the light of the recommendations formulated by the Panel. The Board has continued its preparatory work for the publication of a Handbook on "Recommended Techniques for the Better Utilization and Reduction of Congestion of the High Frequency Radio Spectrum" in accordance with Administrative Council Resolutions Nos. 570 and 592.

5.2.12 *Preparatory work for the 1968 seminar on frequency management and use of the radio frequency spectrum*

The Board is now preparing a seminar which will be held in Geneva from 28 October to 8 November 1968. Administrations were so informed in I.F.R.B. Circular-letter No. 182 dated 30 November 1967.

5.2.13 *Broadcasting in the Tropical Zone in Africa*

In Resolution No. 497, the Administrative Council asked the I.F.R.B. to examine, in consultation with the Administrations of African countries, the use made of the frequency bands between 2300 and 5060 kc/s by African broadcasting services in the Tropical Zone with a view to

proposing the bases of a plan for the assignment of frequencies in these bands to African broadcasting stations.

For this purpose, the Board proposed to the Administrations of African countries a procedure by which it would publish at regular intervals, in the form of graphs, the position of frequency assignments to broadcasting stations in the African Tropical Zone which are recorded in the Master Register. The first version of this publication, entitled "Tropical Broadcasting Frequency Usage Diagram for Africa", was sent to the appropriate Administrations, which were invited to examine the entries shown under their name, to amend or delete those which do not reflect actual frequency use, and to return a corrected copy of the Diagram to the I.F.R.B. African Administrations responded well to the Board's proposal. A revised version of the Diagram is in preparation. The Board hopes that this periodical publication will prove useful to Administrations and that it will enable the conditions of use of these frequencies to be improved with a view to the ultimate evolution of the Diagram towards a plan for the broadcasting service in the Tropical Zone in Africa.

#### 5.2.14 *Visits to and training at the I.F.R.B.*

During 1967, numerous representatives of different Administrations visited the I.F.R.B. to discuss and become informed on the procedures for the treatment of frequency assignment notices and to obtain advice on the assignment of frequencies for the services of their Administrations.

#### 5.2.15 *Technical Cooperation*

During the year 1967, the Board maintained close liaison with the General Secretariat in implementing the United Nations Technical Cooperation projects, including the Special Fund projects. In collaboration with other members of the Board, the Chairman and Vice-Chairman participated in the work of examining the qualifications of the candidates who applied for recruitment as experts and, through the Coordination Committee, made recommendations in each case to the Secretary-General for furnishing a short list of the most suitable candidates to the countries which, in turn, made the final choice. The periodical reports and the final reports submitted by the experts were considered and comments furnished to the Secretary-General for any action that might be necessary in any particular case. The Board's representatives also participated in the meetings and the work of the Standing Committee on Technical Cooperation.

#### 5.2.16 *Miscellaneous*

The Board issued to Administrations 24 Circular-letters and 2 Circular-telegrams in respect of special studies, 52 weekly Circulars, and prepared, for publication, a number of international frequency lists and related documents. In accordance with the Convention and the Radio Regulations, members of the I.F.R.B. attended, as representatives either of the I.T.U. or of the I.F.R.B., 17 conferences or meetings of international organizations whose activities with respect to the use of frequencies are closely connected with those of the I.F.R.B.

### 5.3 ACTIVITIES OF THE INTERNATIONAL RADIO CONSULTATIVE COMMITTEE (C.C.I.R.)

#### *Publication of the results of the XIth Plenary Assembly (Oslo, 1966)*

A considerable part of the time and efforts of the C.C.I.R. Secretariat in 1967 was devoted to the publication of the six volumes containing the results of the XIth Plenary Assembly.

The five technical volumes, as well as a number of separate Reports, were published in English and French during the course of the year. The manuscript of the Spanish edition of these volumes was also prepared and despatched to Madrid for printing, in collaboration with the Spanish Administration, which has materially aided the publication of this edition, and this has made it economically possible to publish these volumes in Spanish.

There remained only a small amount of preparatory work to be done on Volume VI, which is of a more general nature, as well as on a few remaining separately published Reports and it is anticipated that this will be accomplished in French and English early in 1968, with the Spanish edition following somewhat later.

### *Manuals*

The XIth Plenary Assembly also provided for the publication of Manuals on International Monitoring and on Tropical Broadcasting.

The Secretariat was entrusted with the collection of material for the first-mentioned manual and, in collaboration with the 19 Administrations which had volunteered to supply such material, with its publication in a suitable form. This work is now well in hand and it is expected that shortly the manual will appear in a loose-leaf form, containing the first chapters submitted. The remaining chapters will be published as and when they are received.

With regard to the preparation of the Manual on Tropical Broadcasting, this was entrusted to an International Working Party, formed especially for this purpose, under the chairmanship of Mr. S. S. Aiyar (India), and a considerable amount of material has been promised by several Administrations.

Finally, following the Seminar on Radiocommunications organized by the C.C.I.R. Secretariat, it was decided that the material discussed during this seminar should also be made available in the form of a manual, as it was thought to be of particular interest to the new and developing countries, as well as to experts entrusted with Technical Cooperation.

### *Special meeting of Study Group XIII (Mobile Services)*

As proposed by the XIth Plenary Assembly of the C.C.I.R., Oslo, 1966, C.C.I.R. Study Group XIII held a special meeting in Geneva from 17 to 28 April 1967, to review certain technical texts adopted at Oslo, with a view to assisting the Maritime Conference which was scheduled to take place in Geneva towards the end of 1967.

A number of proposals were adopted and transmitted to the Maritime Conference. Among these, the most significant are the following:

#### a) *Selective calling system*

After extensive discussions, the Study Group adopted a draft Recommendation on a selective calling system, based on the sequential single frequency code (s.s.f.c.), that would meet the immediate and urgent requirements of Administrations and decided that the study of other types of selective calling systems should be continued. This Recommendation was implemented by the Maritime Conference and contained in the Final Acts of that Conference as new Appendix 20 C to the Radio Regulations.

#### b) *Single sideband systems*

Further consideration was given to the single sideband mode of operation with suppressed carrier (Class A3J), in particular on the necessity of additional signals, such as a reduced carrier for setting up calls between the coast station and the ship for this mode of operation. This consideration was very useful to the Maritime Conference.

c) *Reduction of channel width in the VHF maritime mobile band*

The Study Group proposed a new Question and decided to include also the study of problems that may arise in the implementation of a smaller frequency separation between adjacent channels. It was assumed that the Maritime Conference would plan for a reduction from 50 kc/s to 25 kc/s frequency separation. This Question was later adopted, in accordance with No. 190 of the International Telecommunication Convention, Montreux, 1965. The preliminary work done by this meeting led to the adoption of Resolution No. MAR 14 of the Maritime Conference.

*Seminar on radiocommunications*

In conformity with Resolution No. 34 of the Plenipotentiary Conference, Montreux, 1965, a Seminar was organized from 6 to 17 November 1967, at I.T.U. Headquarters, by the Secretariat of the C.C.I.R., on the subject of Radiocommunications.

The two weeks of this Seminar were essentially occupied by lectures, given by the technical staff of the C.C.I.R., on the various basic principles, such as propagation, noise, modulation, etc., followed by another series of lectures on the application of these principles to the various services—e.g., fixed services, mobile services, satellite services, etc., each lecture on a specific service being followed by a discussion on planning methods for that particular service.

In addition to these lectures, a number of visits to technical installations and demonstrations were organized. Thus, the meteorological satellite receiving station and HF receiving station of Radio-Suisse at Colovrex was visited, as well as the Swiss television and microwave station on the Dôle. Furthermore, a visit was paid to the I.T.U. computer to demonstrate its use in the solving of radiocommunication problems, while the recording of stereophonic sound broadcasting was also shown.

Finally, thanks to the kindness of the U.S.S.R. and U.S.A. Missions in Geneva, films were shown on the Molniya and Early Bird communication-satellite systems, respectively.

While the Seminar, in conformity with the desires expressed in Montreux Resolution No. 34, was particularly intended for engineers and technicians of the new and developing countries, it should be noted that the representatives of such countries formed only a minor part of the total attendance of some 50 persons in all, the remaining participants coming from what may be considered as developed countries, which participants were interested in increasing their knowledge of C.C.I.R. work, particularly in domains outside their usual sphere of activities.

Efforts will be made to ensure that future I.T.U. organised seminars attract a greater attendance from the new and developing countries. A recent enquiry of administrations as to their detailed requirements concerning the organisation of seminars will be of assistance in this respect.

*Use of the I.T.U. computer*

As mentioned in last year's report the Administrative Council, under Resolution No. 593, requested the Directors of the C.C.I.s to draw up a list of scientific, technical and operational telecommunication problems, the solution of which could be improved or facilitated by the use of an electronic computer. An initial list of such problems was submitted to the Council by the C.C.I.R. in 1967 and details of the various projects undertaken or envisaged by the C.C.I.R. have been submitted to the 23rd Session of the Council. It is clear that if the results of certain studies (e.g. Report 340 — Ionospheric characteristics) are to be handled on a recurrent basis, the capacity of the present I.T.U. computer will prove to be insufficient.



*Preparation for C.C.I.R. interim meetings*

Following the directives of the 22nd Session of the Administrative Council, and after consultation with the Chairmen and Membership of the various C.C.I.R. Study Group, concerning the holding of interim meetings, the following schedule has been fixed:

Study Groups X (Broadcasting), XI (Television) and XII (Tropical Broadcasting)	Palma de Mallorca 29 April — 10 May 1968
Study Groups V (Propagation over the surface of the earth and through the non- ionized regions of the atmosphere), VI (Ionospheric propagation), VII (Standard frequencies and time- signals) and VIII (International monitoring)	Boulder, Colorado 9 July — 7 August 1968
Study Groups IV (Space systems), IX (Radio-relay systems), XIII (Mobile services) and the C.M.T.T. (C.C.I.R./C.C.I.T.T. Joint Study Group for television transmission)	Geneva 4 September — 8 October 1968
Study Groups I (Emission), II (Receivers), III (Fixed service systems) and XIV (Vocabulary)	Geneva 9 — 25 October 1968

At the time of writing, 120 preparatory documents for these interim meetings are in hand, of which some 75 are for the meetings scheduled to take place in Palma. It is to be expected that the amount of documentation will increase considerably as the dates for the respective meetings approach.

5.4 ACTIVITIES OF THE INTERNATIONAL TELEGRAPH AND TELEPHONE  
CONSULTATIVE COMMITTEE (C.C.I.T.T.)

1. *Work of the Study Groups in 1967*

The Study Groups (SG), the Plan Committees, the Working Parties (WP) and Special Autonomous Working Parties for Technical Assistance (GAS) were particularly active in 1967, as can be seen from the following list of meetings, with their date and place and subjects.

Date	Subject of the meeting	Place
16-20 January	GAS/4 (Primary power sources)	Geneva
16-20 January	WP XIII/2 (Theoretical statistical study of traffic)	Geneva
23-27 January	WP XIII/3 (Routing plan)	Geneva
23 Jan.-8 Feb.	Africa Plan	Addis Ababa
30 Jan.-2 Feb.	WP West African Cable	Addis Ababa
30 Jan.-7 Feb.	WP XIII/4 (Supervision of operation and main- tenance)	Geneva
8-14 February	GAS/5 (Economic conditions and telecommuni- cation development)	Geneva
15-24 February	WP of Sp. SG A (Interface and automatic answer- ing)	Geneva
27 Feb.-3 March	WP of Sp. SG A (Maintenance)	Geneva

Date	Subject of the meeting	Place
6-17 March	WP XI/1 (Intercontinental signalling)	Geneva
3-7 April	WP SG XII (Laboratory)	Geneva
3-10 April	SG V (Protection against electromagnetic dangers and disturbance)	Lisbon
6-14 April	WP XIV/1 (Facsimile apparatus) and WP XIV/2 (Test chart and definitions)	Geneva
11-14 April	WP SG V/SG VI (Manual on protection against lightning)	Lisbon
17-21 April	SG VI (Protection and specification of cable sheaths and poles)	Lisbon
17-26 April	SG IX (Telegraph transmission)	Paris
8-19 May	WP II/2 (Instructions for the international telephone service)	Paris
16-26 May	WP II/3 (Telephone Regulations)	Paris
16-26 May	Drafting Group for Volume IV of the Blue Book	Copenhagen
29 May-13 June	WP on Revision of the Telegraph Regulations	Geneva
5-16 June	WP II/1 (International accounts for the automatic and semi-automatic service)	Karlsruhe
6-9 June	WP on Revision of the Regulations governing Phototelegraphy	Geneva
7-16 June	GAS/3 (Economic and technical comparison of transmission systems)	San Francisco
12-16 June	WP of SG IV on IMCs	Geneva
14-16 June	SG X (Telegraph switching)	Geneva
19-23 June	SG XIV (Facsimile telegraphy: apparatus and transmission)	Geneva
21-30 June	GAS/1 (National automatic networks)	Tokyo
26-30 June	WP of SG XV (12 Mc/s systems and small diameter coaxial pairs)	Geneva
3-12 July	SG XI (Telephone switching and signalling)	Tokyo
6-12 July	WP XIII/1 (Human factors)	Tokyo
13-21 July	SG XIII (Automatic and semi-automatic telephone networks)	Tokyo
24-26 July	Sp. SG B (World automatic and semi-automatic network)	Tokyo
14-26 September	Joint Meeting SG IV/SG XIII (Revision of the guiding principles for the maintenance of semi-automatic circuits)	Geneva
25 Sept.-6 Oct.	SG XV (Transmission systems)	Lisbon
27 Sept.-3 Oct.	WP IV/3 (Maintenance programme)	Geneva
4-10 October	WP IV/1 (Maintenance of category B circuits)	Geneva
10-23 October	SG XII (Telephone transmission quality and local telephone networks)	Geneva
17-27 October	GAS/2 (Local networks)	Geneva
24-26 October	WP SG XIV (Definitions)	Geneva
24-31 October	SG XVI (Telephone circuits)	Geneva
30 Oct.-15 Nov.	World Plan Committee	Mexico
6-10 November	WP IV/4 (International network stability)	Geneva
13-16 November	WP IV/2 (Measuring equipment)	Geneva

Date	Subject of the meeting	Place
17-24 November	SG IV (Maintenance of lines, circuits and chains of circuits)	Geneva
20 Nov.-1 Dec.	WP XI/1 (Intercontinental signalling)	Florence
27 Nov.-12 Dec. }	Sp. SG A (Data transmission)	Geneva
13-15 December }		
6-15 December	GAS/5 (Economic conditions and telecommunication development)	Geneva

51 meetings in all were held in 1967, with a total of 461 days (40 meetings and 278 days in 1966).

## 2. *Principal results of the work of the Study Groups*

The principal results of these meetings, grouped in major spheres of activity, are set out below.

### 2.1 *Telegraph technique*

Among other matters, Study Groups VIII, IX and X studied the use of a second standardized alphabet (Alphabet No. 5), the setting up of telegraph channels for 200 bauds and possibly more, the overhaul of switched telegraph networks (or the setting up of new networks). All these new questions arise out of the rapid development of data transmission.

### 2.2 *Telegraph operation*

Study Group I's principal activities in 1967 were the revision of the Telegraph Regulations, with a view to simplifying them by transferring provisions to the C.C.I.T.T. Recommendations, and study of the transferred accounts system.

### 2.3 *Data transmission*

The studies of Special Study Group A, some of which were conducted in collaboration with I.S.O., were mainly concerned with the following matters, the importance of which needs no emphasis:

- standardized layout for the Alphabet No. 5 signals
- standardization of the modem interface to take account of automatic originating and answering of calls
- adoption of a new data signalling rate (2400 bits per second)
- parallel transmission of signals for data
- error control systems
- automatic originating and answering of calls between data communication equipment
- use of wide-band circuits, corresponding to a group bandwidth
- organization of maintenance for data transmission.

In addition, the medium- and long-term outlook for data transmission networks and the questions raised by the possible integration of telegraphy, telephony and data transmission in the same networks were the subject of preliminary discussions which are likely to have a decisive influence on the future evolution of telecommunications.

## 2.4 Telephone transmission

### a) *Integration of telecommunication satellites in the international telephone network*

After further studies, Study Group XII proposed keeping as it stands the existing Recommendation on the acceptable propagation time in an international connection when echo sources exist and echo suppressors are used.

Study Group XVI considered the implications which the limits fixed for propagation time would have for the setting up of telephone connections via high-altitude satellites, within the framework of the C.C.I.T.T. Routing Plan.

Study Group XV prepared the specification for improved echo suppressors which are to be used on long-propagation-time circuits and will also be usable on circuits with a moderate propagation time.

### b) *Specification of transmission systems*

Study Group XV went ahead with its work on the characteristics of analog transmission systems using submarine cables or coaxial pair land cables. It embarked on the study of digital transmission systems with pulse code modulation (PCM). Such systems are already used in a number of countries, particularly to procure short distance circuits, and the C.C.I.T.T. will have to issue recommendations to permit the future interconnection of such systems on the basis of digital signals and even their use in future integrated transmission switching networks. This is one of the questions mentioned at the end of paragraph 2.3, which are likely to lead to profound changes in telecommunication technique.

## 2.5 Telephone operation and signalling

### a) *Operation and tariffs*

During 1967 three Working Parties set up by Study Group II completed the first part of their task:

- Working Party II/1 — Simplification of international accounts in automatic and semi-automatic operation and increased efficiency of the world automatic network;
- Working Party II/2 — Revision of the Instructions for the international and intercontinental services with a view to merging them in a single set of instructions incorporating all the desired simplifications of operational procedure;
- Working Party II/3 — Revision of the Telephone Regulations and, in particular, simplification of those Regulations in pursuance of the aims set out in Resolution No. 36 of the Plenipotentiary Conference.

### b) *Automatic operation*

The Working Parties of Study Group XIII studied the following questions:

- the human factor in international automatic operation;
- Recommendations for calculating, on the basis of theoretical statistical studies of traffic, the number of automatic circuits required;
- bringing up to date of the Regulations for the World Routing Plan, in the light of the new techniques used and with particular reference to the implications of satellite communications;
- operation maintenance and supervision problems (in collaboration with Study Group IV).

### c) *Signalling*

Study Group XI and its Working Party actively pursued the study of the new signalling system No. 6 using data-transmission type signals transmitted on a separate signalling channel

common to all the speech circuits, with a view to the standardization of this system by the IVth Plenary Assembly.

Parallel studies were carried out with a view to improving the interregister signalling of systems Nos. 4 and 5. A solution was found for system No. 5 only, the improved form of which will be known as System 5 bis.

At the present stage in its work, Study Group XI does not propose to standardize the multifrequency system, known as the " Berne System ", which is used by a number of Administrations; it will simply publish a description of its main features in an information supplement to the C.C.I.T.T. Book.

Standardization of the voice-frequency signalling code for push-button sets was completed.

## *2.6 Transmission maintenance*

In 1967, Study Group IV

- approved the final specification for automatic measuring equipment known as " Equipment No. 1 " and pursued its studies with a view to the future specification of more powerful equipment;
- pursued its study of network stability;
- analyzed the results of the inquiry into the transmission quality of connections established by direct-dialling communications;
- drafted Recommendations on the maintenance of satellite communications;
- drafted new maintenance Recommendations to take into account data transmission;
- in conjunction with the European Broadcasting Union, revised the recommendations for the maintenance of sound programme circuits.

## *2.7 Protection*

Study Groups V and VI continued their work on the protection of telecommunication lines.

A start was made on the preparation of a handbook on the maintenance of pressurized cables; questions raised by the use of plastics in conductor insulation, sheaths and protective covering were also examined.

Study Groups V and VI pursued their joint studies on the publication of a handbook for the protection of lines against lightning.

## *2.8 Means of expression*

In collaboration with the I.E.C., Study Group VII carried on with its work on graphical symbols for telecommunications.

The translations being made in preparation for a multilingual edition of the I.T.U. List of Definitions are still in the hands of Administrations.

## *3. Plan for the development of telecommunication networks*

The Regional Plan Committee for Africa met in Addis Ababa at the beginning of 1967. The results of that meeting, published in the " Addis Ababa Plan 1967 " are already known to Administrations. It should nevertheless be mentioned that, for the first time, a rational plan of modern arteries, with well-sited traffic concentration points, was prepared for intra-African communications as a whole. Useful tariff studies were also made.

The World Plan Committee met at Mexico City in October 1967. It prepared forecasts of requirements for inter-regional circuits (virtually corresponding to intercontinental circuits) for

the years 1970 and 1975. In anticipation of the development of intercontinental automatic and semi-automatic operation, it studied the methods to be used henceforward for calculating international circuits to take account of transit and the effect of differences in local time.

The distribution of intercontinental circuits between satellites and submarine cables was discussed, but no formal decisions were reached by Administrations; it was recalled that as a general rule only one satellite should be involved in a connection using satellite communication.

The meeting revised the list of CT1, CT2, CT3 on the basis of the amendments made to the general Routing Plan and decided that in future international traffic statistics would be prepared on a country-to-country instead of a zone-to-zone basis. The numbering plans for the telephone and telex services were amended and amplified.

The World Plan Book was published in April 1968.

#### 4. *Questions of special interest to developing countries*

In addition to the studies made in this sphere by the various Study Groups and Plan Committees, the Special Autonomous Working Parties (GAS), responsible for preparing manuals for the guidance of developing countries, pursued the activities outlined below.

##### 4.1 *National automatic networks*

Special Autonomous Working Party 1 completed the preparation of Part II of its Manual on buildings, power supply, installation of switching equipment, etc.

##### 4.2 *Local networks*

Special Autonomous Working Party 2 completed the preparation of the Manual on Local Networks in November 1967.

##### 4.3 *Economic and technical comparison of transmission systems*

Special Autonomous Working Party 3 established the detailed outline of its handbook and gave instructions to the authors who are now drafting the final text of the handbook.

##### 4.4 *Primary power sources*

Special Autonomous Working Party 4 completed the plan for its Manual and studied the texts for the various chapters; the rapid pace of technical development in certain fields covered by this question has set the Working Party some difficult problems.

##### 4.5 *Economic conditions and telecommunication development*

Special Autonomous Working Party 5 completed the preparation of the work entitled "Economic studies in telecommunications from a national standpoint".

#### 5. *Changes in the Study Groups and Secretariat*

Mr. L. Dia (Senegal) was appointed Chairman of the Plan Committee for Africa, with Mr. Ingidayehu Girmaw (Ethiopia) as Vice-Chairman. Now that Mr. Vasudevan, Chairman of the Plan Committee for Asia and Oceania, has left the Indian Administration, Mr. S. Fujiki (Japan) is acting Chairman of that Committee.

In the C.C.I.T.T. Secretariat, Mr. Lock (Australia), Engineer P.3 in the Plan Department, resigned and has been replaced by Mr. Malek Asghar (Afghanistan) from the Maintenance and Protection Department; Mr. Baillod (Switzerland) has replaced Mr. Malek Asghar in the P.2 post in the latter Department. Mr. Okabe (Japan) was appointed to the P.3 post created in 1967 for data transmission. Mr. Dunne (Ireland) has been appointed to take over Mr. Okabe's former post.

#### 6. Programme of meetings for 1968

For information, the suggested programme of meetings for the part of 1968 before the IVth Plenary Assembly is given below. The programme of meetings during the IVth Plenary Assembly is to be found in the Report on the preparations for that Assembly.

Date or estimated duration	Title	Place planned
15-19 January	WP II/2 (Instructions for the international service)	Geneva
22-26 January	WP II/3 (Telephone Regulations)	Geneva
29 Jan.-2 February	WP II/4 (International television transmissions)	Geneva
5-16 February	WP II/1 (International accounting in automatic and semi-automatic operation)	Geneva
19-23 February	WP IV/5 (Maintenance instructions for new systems)	Geneva
26-27 February	WP XI/1 (Intercontinental signalling)	Geneva
26 Febr.-1 March	Sp. SG C (Noise)	Geneva
4-8 March	WP of SG XV on Question 10 and small coaxial pairs	Geneva
4-8 March	WP on Automatic telegraph maintenance	Geneva
11-15 March	WP of SG XV for Question 33	Geneva
18-22 March	SG VII (Definitions and symbols)	Geneva
18-29 March	WP on Revision of the Telegraph Regulations	Geneva
1-5 April	SG I (Telegraph operation and tariffs)	Geneva
22 April-3 May	Drafting Group for Vol. IV	Geneva
6-10 May	GAS/3 Editorial Committee	Geneva
6-10 May	WP XIII/1 (Human factors)	Geneva
20-31 May	WP XIII/4 (Supervision of operation and maintenance)	Brussels
6-7 June	SG III (General tariff principles)	Geneva
10-21 June	SG II (Telephone operation and tariffs)	Geneva
24-27 June	Meeting of Chairmen and Vice-Chairmen	Geneva
1 week ?	WP of SG IV on signalling between automatic measuring equipment	Geneva
1 week ?	GAS/4 (Primary power sources)	Geneva
A few days	WP on Definitions for data transmission	Geneva
23 Sept.-11 Oct.	Study Group meetings prior to the IVth Plenary Assembly	Mar del Plata
14-25 October	IVth Plenary Assembly	Mar del Plata

## 6. TECHNICAL COOPERATION ACTIVITIES

### 6.1 *General appraisal of 1967 activities*

In 1967 the Union provided technical assistance to developing countries for a total value of U.S. \$4,849,482 in the form of 208 expert missions, 222 fellowships implemented and U.S. \$1,206,645 equipment delivered.

During the year, the three main objectives of the Union's activity in the field of technical assistance continued to be:

a) *Promotion of the development of telecommunication networks in Africa, Asia and Latin America, with emphasis on the regional networks*

Some of the goals envisaged by the I.T.U. World and Regional Plan Committees are being accomplished through I.T.U. regional missions in Africa, Asia and Latin America, as well as through experts assigned to the Central American countries and the Caribbean region. In this operation, the Union collaborated closely with the United Nations Economic Commissions for Africa (E.C.A.) and for Asia and the Far East (ECAFE), as well as with the Inter-American Telecommunication Commission (CITEL), following on Resolution No. 615 of the 22nd Session of the Administrative Council. The impact of these joint efforts on the three regions concerned is steadily leading to concerted action for the development of world-wide telecommunication networks. Especially in Africa and Latin America, a considerable amount of preparatory investigation work has been done in regard to pre-investment surveys, which will be undertaken within the framework of the United Nations Development Programme.

b) *Strengthening of telecommunication technical and administrative services in developing countries*

Approximately 30% of the field experts who served with the I.T.U. during the year, assisted the Administrations of recipient countries in an advisory capacity, or as OPAS \*) officers (recruited under the Operational Assistance scheme), with problems of an administrative, organizational and/or technical nature.

c) *Development of human resources required for telecommunications*

More than half of the Union's total field experts in 1967 were engaged in the training of telecommunication staff in developing countries as organizers, advisers, lecturers or instructors. Many of these experts will be replaced by their local counterparts after the completion of the I.T.U.'s Special Fund assisted projects. To assist their replacement, quite a number of fellowships (i.e. about 20% of the total number implemented during the year) were in the training field. Most of these fellows studied modern training methods, while the fellows under the Technical Assistance Component of U.N.D.P. completed their professional knowledge—indispensable for

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\*) OPAS (*OP*erational *AS*sistance) — a scheme governing the provision of operational and executive personnel financed by the UNDP (TA). The scheme originated as OPEX (*OP*erational and *EX*ecutive Personnel), initially financed by the UN Regular Programme. Both terms (OPAS and OPEX) are current although OPAS predominates.



the performance of duties in their respective national Administrations. It should also be noted that about 66% of the total value of equipment delivered was exclusively for training purposes.

The expenses incurred in connection with the training of telecommunication staff in 1967 represented 61% of the total cost of the I.T.U. field programmes.

## 6.2 *Field of activity*

The trend towards the increasing importance of assistance in the field of training, which was felt during the preceding years, was confirmed during the year under report. In Africa and Latin America, negotiations were begun for several multi-national training projects. In addition the Union was engaged in preliminary studies and/or preparation of requests for new U.N.D.P. (Special Fund) assisted training projects in six countries.

The broad spheres of speciality in which assistance was increasingly demanded, and rendered, in 1967, were: radio, telephone and telegraph equipment and telecommunication planning. The latter speciality is being required, in particular, by the countries of Latin and Central America, in connection with the improvement of telecommunication networks on a regional basis.

## 6.3 *Some problems encountered*

The same difficulties, which were experienced during the preceding years, continued to prevail in 1967 and delayed the implementation of some projects. These were the shortage of candidates not only for expert posts in highly specialized branches of telecommunications, but also in the more commonly required specialities, possessing the necessary language qualifications or teaching experience. On the part of the developing countries, the shortage of counterpart personnel and candidates for fellowships was, in some cases, felt to the same extent as in 1966, although improvements were noticed on some projects.

## 6.4 *The Union's participation in the United Nations Development Programme (U.N.D.P.)*

### 6.4.1 *Technical Assistance Component*

The year under review was the first of the 1967/68 biennial programme of the Technical Assistance Component. The current biennium will bring to an end the two-year programme operations, which have been in force since 1961. From 1969 onwards, a new procedure termed "continuous programming" has been developed and approved by ECOSOC and the General Assembly of the United Nations.

The original programme approved for the 1967/68 biennium was for U.S. \$3,275,088 i.e. U.S. \$1,806,812 in 1967 and U.S. \$1,468,276 in 1968, its distribution for the biennium by geographical region being U.S. \$1,326,250 in Africa, U.S. \$1,000,899 in Asia and the Far East, U.S. \$895,889 in Latin America and U.S. \$52,050 in Europe.

Due to subsequent programme modifications and contingency authorizations granted by the Administrator of the U.N.D.P., the value of the 1967 programme by the end of the year was U.S. \$1,976,862. Against this, obligations entered into during 1967 amounted to U.S. \$1,256,855. The remaining U.S. \$720,007 have been carried forward into 1968 for implementation.

Under the programme approved, 66 countries received assistance during the year. Of these 23 were in Africa, 15 in Asia and the Far East, 23 in Latin America and 5 in Europe.

In 1967 urgent requests for additional assistance were received from 10 countries and their implementation was approved by the Administrator of U.N.D.P. under his contingency authority.

During the year, 68 experts (including 9 OPAS officers), recruited from 22 countries — 6 of which were themselves receiving assistance from the Union — were on missions of varying duration in the developing countries. Of these experts, 24 were working in Africa, 22 in Asia, 20 in Latin America and 2 in Europe. Details on the expert missions are incorporated in Table 1 of Annex 5.

Under the Technical Assistance Component, 104 fellowships were awarded in 1967. Thus, together with the fellowships awarded in previous years, a total of 212 fellowships were dealt with in 1967. 170 of these fellowships were implemented and the remainder will be carried forward into 1968 and the following years for completion.

The expenses involved in the implementation of fellowships amounted to U.S. \$ 232,404. Details concerning the fellowships under report are included in Table 2 of Annex 5.

Training and demonstration equipment was ordered, during the year, for 8 countries — namely Bolivia, China, Central African Republic, Hungary, Iran, Niger, Rwanda and Somalia — to a total value of U.S. \$ 103,565 representing 8.2% of the 1967 expenditure under the Technical Assistance Component.

#### 6.4.2 *Operational assistance*

9 OPAS officers, recruited under the Technical Assistance Component, in addition to 7 under the Funds-in-Trust/OPAS arrangements, served in eight different countries.

9 of these officers were employed in Africa, 4 in Asia and 3 in Latin America, all executing duties of a managerial and/or operational nature.

#### 6.5 *Special Fund Component*

The Union acted as Executing Agency for 20 U.N.D.P. (Special Fund) projects, four of which were new projects approved by the U.N.D.P. Governing Council at its January 1967 meeting, i.e. Telecommunication Training Centres in Turkey, Chile and Saudi Arabia, and a Phase II project for the Telecommunication Training Centre in Malaysia.

Table 3 of Annex 5 gives a list of the projects for which the Union was the Executing Agency as at 31 December 1967.

During the year, 106 experts were on duty at the projects which were in operation. Details of these projects and the specialities of the experts serving in them are included in Table 1 of Annex 5.

There was a gradual increase in the number of fellowships implemented under the projects. A total number of 54 fellowships, including 26 awarded in 1967, were dealt with during the year. 46 of these fellowships were implemented and 8 were carried over to 1968.

Details of the fellowships dealt with are incorporated in Table 2 of Annex 5.

Equipment to the value of U.S. \$ 585,360 was ordered during the year and deliveries were made to the value of U.S. \$ 1,085,937, which figure includes equipment ordered in 1966 and not delivered till 1967.

In addition, the Union administered 29 General Service Category staff (secretaries and drivers) engaged locally for various I.T.U./S.F. projects.

In collaboration with the U.N.D.P. Resident Representatives concerned, the Union dealt with matters relating to the preparation of requests for U.N.D.P. assistance in the establishment

of new training projects in Brazil, Indonesia, Iran, Nigeria, Pakistan and Syria, and the extension (Phase II) of the existing Telecommunication Training Centre projects in Korea and the Sudan.

Expert missions were provided by the Union for carrying out preliminary studies for the preparation of the requests from Indonesia, Iran and Syria, the first two within the framework of the Technical Assistance Component. An I.T.U. Project Manager was also detached briefly to act as consultant to the Administrator of U.N.D.P., to assist with the appraisal of the Pakistani request.

Advice was received late in the year from the Administrator of the U.N.D.P. that he was recommending the projects in Indonesia, the Sudan and Pakistan to the Governing Council for its approval during the January Session, 1968.

Investigations were also made of possible collaboration between the I.T.U. and the Food and Agriculture Organization (F.A.O.) in connection with the arrangement for installation and subsequent maintenance of a radio communication network under the U.N.D.P./S.F. Desert Locust Project, for which F.A.O. is the Executing Agency.

In conjunction with United Nations Economic Commission for Africa (E.C.A.), investigations have been made concerning a new project: pre-investment surveys for the development of an intra-African network.

The Union also collaborated with the Inter-American Development Bank in the development of a similar project in the Latin American region. The Bank, which will contribute to its cost, will be the Executing Agency for this project.

As reported last year, the Telecommunication Survey in Paraguay terminated at the end of 1966. During the year under review, the final report on this project, comprising a long-term master plan for the development of telecommunications was prepared and the technical part submitted to the Paraguayan authorities. The Government of Paraguay took steps to obtain the necessary finances from the International Bank for Reconstruction and Development for the implementation of the plan and submitted a request to the U.N.D.P. for further technical assistance during the implementation of the plan.

## 6.6 *Related Aid Programmes*

### 6.6.1 *Funds-in-Trust*

A further increase in the value of assistance provided under the Funds-in-Trust arrangements occurred in 1967. Thirty-two experts served under this scheme; 14 in the Democratic Republic of the Congo, 8 in Kuwait (four of them under the Funds-in-Trust/OPAS arrangements), 4 in Libya (three under the Funds-in-Trust/OPAS arrangements), 3 in Saudi Arabia and 3 in Venezuela. In addition, 7 fellowships were dealt with under this scheme—Kuwait (one), Libya (one) and Venezuela (five) as indicated in Table 2 of Annex 5.

The total cost of the Funds-in-Trust programme in 1967 was U.S. \$485,131 which amount includes U.S. \$15,850 for supplies and equipment ordered for the Democratic Republic of the Congo. Details of the Funds-in-Trust Missions are incorporated in Table 1 of Annex 5.

### 6.6.2 *Associate Expert Scheme*

In 1967 the Union finalized arrangements for the provision of associate experts—similar to those already existing between the Netherlands and the Union—with Sweden and Denmark, while negotiations were under way with the Federal Republic of Germany. Two associate experts,

both from the Netherlands, served with the Union during the year—one in Ghana and one in Iraq—while three further associate experts from the Netherlands (one for Afghanistan and two for Algeria) and five from Sweden (all for Malaysia) were under recruitment. They will work under the direction of I.T.U. experts at our U.N.D.P. (Special Fund) assisted Telecommunication Training Centres.

The total value of assistance provided under this scheme was U.S. \$14,374.

#### 6.6.3 *Technical assistance in kind*

Within the framework of this programme, the Union, in 1967, disseminated supplementary information on the opportunities offered by technically advanced Member countries for visits and training, as well as sources of capital financing and investment for telecommunication projects. In addition, detailed information on specific training courses available to participants from developing countries was circularized.

It is interesting to note that a course was held at the Experimental Satellite Communication Earth Station in India—an I.T.U. project under the U.N.D.P. (Special Fund)—and that the Government of India offered financial assistance to the foreign participants in this course to enable them to meet their day-to-day expenses while in Ahmedabad.

During the year under review two seminars were organized by the Administrations of the Netherlands and Sweden, the first on “Techniques and Operation of Public Telegraphy and Subscriber Telegraphy (Telex)” and the second on “Planning and Projecting of Automatized Switching Networks”. Under the U.N.D.P. Technical Assistance Component, the Union enabled seven fellows from developing countries to attend these seminars. It should also go on record that the Swedish authorities gave financial assistance to sixteen representatives from eleven developing countries attending the seminar in Stockholm.

Arrangements have been made with the United Kingdom Administration for a seminar on “Communication Satellite Earth Station Planning and Operation” to be held in London during 1968 and the programme of the seminar was circulated to Member countries. The Union was in contact with the Administrations of Japan, Spain and Czechoslovakia in connection with possible seminars to be held in the near future.

In accordance with the directives of the 22nd Session of the Administrative Council, a questionnaire was issued to Member countries, with a view to ascertaining the need for seminars and the fields of telecommunications with which they should deal.

#### 6.6.4 *Preparation of new projects for 1968*

In addition to the workload resulting from the implementation of the projects already approved under the Special Fund and Technical Assistance Components of the U.N.D.P., the latter part of the year found the Union actively engaged in the preparation of new projects to:

- a) enlarge the scope of its activities in Latin America, Africa and Asia with a view to facilitating the planning and development of international telecommunication services;
- b) assist developing countries to organize training facilities on a multi-national basis, especially in Africa and Central America under the Special Fund Component of the U.N.D.P.;
- c) organize a seminar on “Administration and Management of Telecommunication Services”, also in Africa.

At the same time the Union was corresponding with the Telecommunication Administrations of developing countries with a view to assisting them to prepare new requests under the Technical Assistance Component of the U.N.D.P., in accordance with the revised programming procedures.

6.7 Progress was also made towards the introduction, during the course of 1968, of the structural, administrative and policy changes, decided by Plenipotentiary Conference Resolution No. 29 (Montreux, 1965) and Administrative Council Resolution No. 618, in order to render the Union's technical assistance more effective.

## 7. ADMINISTRATION OF THE UNION

### 7.1 STAFF MATTERS

7.1.1 On 31 December 1967, excluding persons engaged on short-term contracts, the staff of the Union was distributed as shown in the following table (for purposes of comparison, the figures for the end of 1966 are given between brackets).

TABLE 1

*Distribution of staff (excluding persons on short-term contracts)  
throughout the various organs of the Union*

Organ	Elected officials	Number of contracts		Total
		Permanent	Fixed term	
General Secretariat . . . . .	1	200	19	220
I.F.R.B. . . . .	5	115	2	122
C.C.I.T.T. . . . .	1	27	1	29
C.C.I.R. . . . .	1	21	1	23
	8 (13)	363 (333)	23 (39)	394 (385)

7.1.2 The manning-table — or establishment — in the 1967 budget comprised 422 posts, of which 401 were permanent. The following separations from service took place during the year as regards staff on permanent or fixed-term contracts: 12 retirements, 5 departures on expiration of contract, 14 resignations or transfers and 4 deaths.

7.1.3 Employment on a short-term basis in 1967 is shown in the table below:

TABLE 2

*Staff engaged on short-term contracts*

	Number of contracts	Total number of working days
Interpreters . . . . .	220	3,468
Engineers . . . . .	2	227
Technician . . . . .	1	243
Translators/Revisors/Précis-Writers . . . . .	54	2,086
Archivists . . . . .	2	97
Associate Administrative Officer I. . . . .	1	31
Proof-readers . . . . .	4	315
Draughtsmen. . . . .	7	1,086
Secretaries, office assistants, book-keepers . . . . .	64	5,435
Shorthand-typists, typists and clerks . . . . .	190	11,160
Punch-card operators . . . . .	3	377
Telephone operators . . . . .	31	344
Roneo operators/assembly staff . . . . .	58	2,529
Simultaneous interpretation equipment operators . . . . .	16	450
Distribution staff, messengers and night-watchmen. . . . .	55	1,925
	708	29,773

7.1.4. The distribution of staff according to grade among the various organs is given in Table 3. Most of the posts shown under the heading "General Secretariat" belong to services which in fact work for all the organs of the Union (about 60%), or are posts in the Technical Co-operation Department (about 20%).

TABLE 3

*Distribution of staff according to grade*

Grade	General Secretariat		I.F.R.B.		C.C.I.T.T.		C.C.I.R.		Totals	
Elected officials	1		5		1		1		8	
	P	FT	P	FT	P	FT	P	FT	P	FT
D.1	2	—	—	—	1	—	1	—	4	—
P.5	4	—	—	—	2	—	1	—	7	—
P.4	7	2	7	—	1	—	4	—	19	2
P.3	22	4	14	1	4	—	4	—	44	5
P.2	9	2	10	—	5	—	—	—	24	2
P.1	5	1	4	—	3	—	1	—	13	1
G.7	5	1	5	—	—	—	—	—	10	1
G.6	15	—	9	—	2	1	2	—	28	1
G.5	26	1	20	—	6	—	4	1	56	2
G.4	33	1	24	—	2	—	3	—	62	1
G.3	29	3	17	—	1	—	1	—	48	3
G.2	30	3	5	1	—	—	—	—	35	4
G.1	13	1	—	—	—	—	—	—	13	1
	200	19	115	2	27	1	21	1	363	23
Total	220		122		29		23		394	

(P = Permanent; FT = Fixed-term).

*Note:* The grades shown in the above table are those of the 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.

7.1.5 Table 4 gives the geographical distribution at the end of 1967 of I.T.U. elected officials and staff in the following categories: senior counsellors and professional category (excluding languages staff), together with staff occupying posts of a technical nature in grades G.7, G.6 and G.5 (the principle of geographical distribution does not apply to other posts in the General Service category). Wherever changes have taken place, the figure for 1966 appears between brackets next to the new figure. The number of nationalities represented was 37 in 1967 (for 125 persons) as compared with 35 (for 124) in 1966.



TABLE 4

*Geographical distribution on 31 December 1967*

Country	Elected officials	D.1	P.5	P.4	P.3	P.2	P.1	G.7	G.6	G.5	Total
Afghanistan . . . . .					1 (-)	(1)					1
Argentine Rep. . . . .	1			1	1						3
Australia (Commonwealth of)					1						1
Belgium . . . . .					1			1 (-)	(1)		2
Bielorussian S.S.R. . .				1							1
Bulgaria (People's Rep. of) . . . . .						1 (-)					1 (-)
Canada . . . . .							1				1
China . . . . .	(1)			1	1						2 (3)
Korea (Rep. of) . . . .							1				1
Denmark . . . . .					1						1
Spain . . . . .					1	3	1	1			6
U.S.A. . . . .	1	1			1						3
France . . . . .	2	1 (2)	3	2	4 (3)	3	(1)	(1)	2	1 (-)	18 (19)
Greece . . . . .						1 (-)					1 (-)
India (Rep. of) . . . .	(1)	1	1			2 (1)					4
Iran . . . . .						1					1
Iraq (Rep. of) . . . . .						1 (-)					1 (-)
Italy . . . . .				1	2 (1)	(1)	1				4
Japan . . . . .	1 (-)				2 (1)	1 (2)					4 (3)
Morocco (Kingdom of)	1 (-)			1 (-)							2 (-)
Mexico . . . . .						1					1
Norway . . . . .					1				1		2
New Zealand . . . . .				1							1
Pakistan . . . . .	(1)				1						1 (2)
Paraguay . . . . .					1						1
Netherlands (Kingdom of the) . . . . .							1		1 (-)		2 (1)
Poland (People's Rep. of) . . . . .	(1)				1						1 (2)
United Arab Rep. . . .						1 (-)	(1)				1
Fed. Rep. of Germany				1	2	1	1		1		6
U.K. of Gt. Britain and N. Ireland . . . .	(1)	1 (-)	1 (2)	2	3 (4)	1	1	1			10 (12)
Sweden . . . . .					1	1					2
Switzerland (Conf. of)			1	3	10 (9)	4 (5)	7	2	3		30
Czechoslovak Soc. Rep.			1		1 (-)	(1)					2
Tunisia . . . . .	1										1
Turkey . . . . .				1							1
U.S.S.R. . . . .	1			1 (-)	1 (-)	1					4 (2)
Yugoslavia (F.S.R. of)					1						1
	<u>8(13)</u>	<u>4</u>	<u>7 (8)</u>	<u>16(14)</u>	<u>39(33)</u>	<u>23</u>	<u>14(16)</u>	<u>5</u>	<u>8</u>	<u>1 (-)</u>	<u>125 (124)</u>

7.1.6 On 31 December 1967 the Union had administrative responsibility for 164 Technical Cooperation experts of 27 different nationalities (7 of which were not represented among Union headquarters staff). During the year the contracts of 23 experts came to an end and 56 new contracts were awarded. Experts' contracts represented a total of 1821 months in 1967.

## 7.2 FINANCIAL MATTERS

In accordance with Article 10, number 146, of the Convention and Article 46 of the I.T.U. Financial Regulations, the Secretary-General prepares an annual Financial Operating Report containing all necessary information on the financial administration and the accounting results of the past year. After approval by the Administrative Council, the Report is sent to the Members and Associate Members. Nevertheless, to give an idea of the credits allocated to the different activities of the Union, the budget for 1967, including additional credits, is reproduced in Annex 2 hereto.

In accordance with the provisions of Article 16 of the Convention, Montreux, 1965, and Articles 2 and 6 of the I.T.U. Financial Regulations, the I.T.U. budget comprises, on the one hand, recurrent expenditure appertaining to the Administrative Council, the General Secretariat, the International Frequency Registration Board, the Secretariats of the International Consultative Committees and the Union's laboratories and technical equipment and, on the other, expenditure on plenipotentiary conferences, world administrative conferences and all meetings of the International Consultative Committees.

Additional Protocol I to the International Telecommunication Convention, Montreux, 1965, fixes the limits within which the Administrative Council is authorized to draw up the annual budget of the Union. For 1967, these limits were set at 18,125,000 Swiss francs for recurrent expenditure and 2,815,000 Swiss francs for expenditure on conferences and meetings. However, paragraph 5 of this same Additional Protocol authorizes the Administrative Council to exceed these limits to take account of increases in the salary scales, pensions contributions or allowances including post adjustments established by the United Nations for application to its staff employed in Geneva, and fluctuations in the exchange rate between the Swiss franc and the United States dollar which would involve additional expenses for the Union. The Administrative Council is also authorized to exceed the limits set for conferences and meetings if the excess expenditure can be compensated by credits accrued from a previous year or taken in advance from a future year.

At its 21st Session, 1966, by Resolution No. 576, the Administrative Council approved the budgets for 1967 amounting to:

18,593,600 Sw. frs. for recurrent expenditure, of which

17,742,600 Sw. frs. are within the limit of expenditure

851,000 Sw. frs. are outside the limit,

2,611,000 Sw. frs. for conferences and meetings, of which

2,313,600 Sw. frs. are within the limit of expenditure,

109,000 Sw. frs. are outside the limit and

188,400 Sw. frs. are covered by unused credits from 1966,

130,000 Sw. frs. for the preparation of the draft I.T.U. Charter,

35,000 Sw. frs. for expenses covered by the renewal fund for simultaneous interpretation and sound recording equipment and by the C.C.I.T.T. Reserve Account,

1,943,300 Sw. frs. for the special account for Technical Cooperation administrative expenses

1,941,800 Sw. frs. for the supplementary publications budget.

By the same Resolution, the Administrative Council authorized the Secretary-General to fix the contributory unit on the basis of the classification chosen by Members and Associate Members under the terms of Additional Protocol II to the Montreux Convention. According to this Additional Protocol, Members and Associate Members were to inform the Secretary-General before 1 July 1966 of the class of contribution they had chosen from the table of classes of contribution shown in No. 212 of the Convention. Once the Members and Associate Members of the Union had made their free choice, the amount of the contributory unit was fixed at 43,200 Swiss francs on the basis of 470½ contributory units.

Finally, in accordance with Article 16, No. 230, of the Convention, Montreux, 1965, the Administrative Council fixed a figure of 5,000 Swiss francs for 1967 as the annual unit of contribution towards defraying the expenses of meetings of the International Consultative Committees payable by the recognized private operating agencies, scientific and industrial organizations and international organizations not exempt from contributions.

At its 22nd Session, by Resolution No. 603, the Administrative Council authorized the inclusion of additional credits in the 1967 budget. In accordance with that Resolution, the 1967 budget was drawn up for the following amounts:

19,069,400 Sw. frs. for recurrent expenses, of which

18,076,400 Sw. frs. are within the limit of expenditure  
993,000 Sw. frs. are outside the limit,

3,121,000 Sw. frs. for conferences and meetings, of which

2,172,400 Sw. frs. are within the limit of expenditure,  
129,000 Sw. frs. are outside the limit and  
819,600 Sw. frs. are covered by unused credits of 1966,

130,000 Sw. frs. for the preparation of the draft I.T.U. Charter,

35,000 Sw. frs. for expenses covered by the renewal fund for simultaneous interpretation and sound recording equipment and by the C.C.I.T.T. Reserve Account,

1,977,400 Sw. frs. for the special account for Technical Cooperation administrative expenses, and

1,941,800 Sw. frs. for the supplementary publications budget.

By its Resolution No. 533, the Administrative Council instructed the Secretary-General to introduce changes in the class of post adjustment paid to staff members in the Professional category and above as and when they were implemented by the United Nations. As the United Nations in Geneva had been paying the post adjustment at the Class 2 rate since 1 November 1967, a similar change was introduced for I.T.U. staff members.

By its Resolution No. 505, the Administrative Council authorized the Secretary-General to adjust the basic salary scales for staff in the General Service category as and when these adjustments were put into force by the United Nations for the staff of the European Office. As these salary scales were changed by the United Nations and the specialized agencies in Geneva retroactively on 1 January 1967, the salary scales for I.T.U. staff in the General Service category were likewise changed on the same date.

To allow for these two changes, the I.T.U. budget was once more adjusted and additional credits totalling 148,400 Swiss francs for the budget of the Union and 15,230 Swiss francs for the Technical Cooperation special accounts budget were added. The I.T.U. budget for 1967 for recurrent expenditure thus amounts to 19,217,800 Swiss francs and for the Technical Cooperation special accounts budget to 1,992,630 Swiss francs.

At its 22nd Session, by Resolution No. 604, the Administrative Council of the Union also approved the following budget for 1968:

19,442,400 Sw. frs. for recurrent expenditure,  
 3,100,000 Sw. frs. for conferences and meetings,  
 230,000 Sw. frs. for the preparation of the draft I.T.U. Charter,  
 35,000 Sw. frs. for expenses covered by the renewal fund for simultaneous interpretation and sound recording equipment and by the C.C.I.T.T. Reserve Account,  
 2,616,400 Sw. frs. for the special account for Technical Cooperation administrative expenses, and  
 2,576,500 Sw. frs. for the supplementary publications budget.

By the same Resolution, the Administrative Council fixed the amount of the contributory unit at 45,600 Swiss francs on the basis of 471½ units. By Resolution No. 604 the Administrative Council also decided to fix the annual unit of contribution towards defraying the expenses of meetings of the C.C.I.R. or the C.C.I.T.T. for recognized private operating agencies, scientific or industrial organizations and international organizations not exempt on a basis of reciprocity at 5,000 Swiss francs for 1968.

*Classification of the Members and Associate Members of the Union for the apportionment of Union expenditure in 1967*

In accordance with Article 16 and Additional Protocol I to the International Telecommunication Convention, Montreux, 1965, each Member or Associate Member was to inform the Secretary-General before 1 July 1966 of the class of contribution it had chosen from the table of classes of contribution. Following this consultation, the 129 Members of the I.T.U. at that date (there were no Associate Members) had stated that they would participate to a total of 470½ contributory units to the expenses of the Union. This represented a reduction of 86½ units on the number of contributory units applicable under the regime of the Geneva Convention, 1959.

During 1967, at the request of the Administrative Council, the Secretary-General wrote to all the Members of the Union which had reduced their class of contribution when the International Telecommunication Convention, Montreux, 1965, came into force, requesting them to reconsider the possibility of choosing a class of contribution more closely related to their economic resources and to increase their participation in the expenses of the Union. Unfortunately this request did not meet with the hoped-for response and no request was made to the Secretary-General to increase the number of units of contribution.

At the end of 1967 the Union had 133 Members (no Associate Members) contributing on the basis of a total of 472½ units.

*Cash resources*

The liquid asset position of the Union was very satisfactory in 1967. It was not necessary to seek an advance from the Government of the Swiss Confederation and it was possible to continue making short-term investments throughout the year.

*Contributions in arrears*

Total amounts in arrears on 31 December 1967 with corresponding amounts for the two previous years:

31 December 1965 . . . . .	4,044,118.81 Sw. frs.
31 December 1966 . . . . .	4,392,596.50 Sw. frs.
31 December 1967 . . . . .	5,739,456.66 Sw. frs.

As already pointed out in previous years, the situation concerning monies owed to the Union continues to deteriorate, despite the efforts made by the Secretary-General to obtain settlement of accounts in arrears or at least to come to some arrangement with the debtors whereby the longest-standing debts are settled by annual instalments.

Annex 6 to this Report shows the situation of the debtors to the Union on 31 December 1967.

*I.T.U. Staff Superannuation and Benevolent Funds and membership of the United Nations Joint Staff Pension Fund*

The following table shows the distribution of members among the various funds on 31 December 1967.

	Working staff	Retired staff	Widow's Pensions	Orphan's Pensions
<i>Provident Fund</i> . . . . .	8	18	2	—
<i>Reserve and Complement Fund.</i> . . . .	—	11	3	3
<i>U.N. Joint Fund</i>				
Union staff:				
Full members . . . . .	387	17	6	—
Associate members . . . . .	2	—	—	—
Technical Cooperation experts:				
Full members . . . . .	103	—	1	—
Associate members . . . . .	53	—	—	—
<i>Total</i> . . . . .	553	46	12	3

The Management Report of the I.T.U. S.S. & B. Funds, which constitutes the second part of the Financial Operating Report for 1967, gives full information on the activities of the Management Board of the S.S. & B. Funds.

## 8. RELATIONS WITH THE UNITED NATIONS AND OTHER INTERNATIONAL ORGANIZATIONS

### UNITED NATIONS

#### *General*

Apart from attendance at meetings of the General Assembly and of the Economic and Social Council (ECOSOC)\* and participation in the work of the Administrative Committee on Coordination (A.C.C.), the Union has continued to cooperate with the Consultative Committee on Administrative Questions (C.C.A.Q.), the International Civil Service Advisory Board (I.C.S.A.B.) and the Consultative Committee on Public Information (C.C.P.I.).

The Union has also closely followed the work of the United Nations in the technical field, particularly as regards the peaceful uses of outer space and the application of science and technology to development.

The participation of the Union in the United Nations Development Programme is described in detail in Section 6 of this Report.

#### *The peaceful uses of outer space*

The I.T.U., as the specialized agency of the United Nations responsible for telecommunication matters of every kind, has to pay special attention to international cooperation in the peaceful uses of outer space, particularly in view of the extremely rapid developments which are taking place in this field. In pursuance of General Assembly Resolution No. 2130 (XX), the Administrative Council, at its 22nd Session, prepared a Sixth Report for presentation to ECOSOC and to the United Nations Committee on the Peaceful Uses of Outer Space. It is of interest to note that in Resolution No. 2260 (XXII), the General Assembly expressed its appreciation of the progress made by the I.T.U. in the study of technical problems and the technical assistance rendered during the planning and testing of the Experimental Satellite Communications Earth Station at Ahmedabad, India, and requested that a progress report should be submitted to the Committee on the Peaceful Uses of Outer Space in 1968.

The Union has continued to participate in the work of the Scientific and Technical and Legal Sub-Committees of the United Nations Committee on the Peaceful Uses of Outer Space and of the A.C.C. Inter-Agency Working Group on Programmes and Activities Relating to the Peaceful Uses of Outer Space.

It has also undertaken to submit a background document to the United Nations Conference on the Exploration and Peaceful Uses of Outer Space, to be held in Vienna in August 1968.

#### *The application of science and technology to development*

In accordance with Administrative Council Resolution No. 598, the text of which was reproduced in last year's report, the I.T.U. is following with attention the work of the Advisory Committee on Science and Technology created by ECOSOC at its 36th Session.

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\*) At the request of the Economic and Social Council, the attention of the Council and of Members of the Union is drawn to Resolution No. 1281 (XLIII), the text of which appears in Annex 7 to the present Report.

In fulfilment of ECOSOC Resolution No. 1083 (XXXIX), the International Consultative Committees are studying ways and means of accelerating the transfer to developing countries of scientific knowledge and technological experience now available in the field of telecommunications.

#### COOPERATION WITH THE REGIONAL ECONOMIC COMMISSIONS

Cooperative arrangements with the Economic Commission for Asia and the Far East have now been working satisfactorily for some nine years. Two I.T.U. Regional Experts are collaborating closely with E.C.A.F.E. and representatives from I.T.U. Headquarters also participate actively in the meetings of the Transport and Communications Committee and of the Telecommunications Sub-Committee of E.C.A.F.E.

During 1967, the two I.T.U. Experts explored the possibilities of developing the regional telecommunications network and were able to propose routes which would provide the countries of the region with sufficient telecommunication facilities. Following the adoption of these routes by the Transport and Communications Committee of E.C.A.F.E., the Experts will now concentrate on the preparation of pre-investment and feasibility studies with a view to enabling the countries involved to obtain the necessary financial assistance.

The I.T.U. has also continued to cooperate closely with the Economic Commission for Africa. In accordance with a Memorandum of Understanding signed in 1963, three I.T.U. Experts stationed in Addis Ababa are working in close collaboration with their colleagues in the E.C.A. One of their main preoccupations in 1967 was the question of telecommunication training, and a series of missions was undertaken to discuss the establishment of multi-national training projects in various regions of Africa.

As far as the development of telecommunication networks is concerned, the I.T.U. has followed with great interest the recommendations of the various sessions of the Economic Commission for Africa and in particular the recommendations made at the Commission's 8th Session in Lagos that an advisory service for telecommunications should be set up by the Executive Secretary in cooperation with the I.T.U. and other interested bodies. This question was the subject of correspondence between the I.T.U. and the E.C.A. in 1967, and it was further considered at meetings held during 1967 between the I.B.R.D., the A.D.B., the U.N.D.P. and the E.C.A. Following these activities it was generally agreed that steps should be taken to set up some machinery to assist African Administrations to pursue the implementation of the Addis Ababa Plan established in February 1967. Towards the end of the year a draft project for submission to the Special Fund by interested African Governments was drawn up by the E.C.A. Secretariat and examined in I.T.U. Headquarters. It was agreed in December 1967 that a meeting should be held between the Secretary-General of the I.T.U. and the Executive Secretary of the E.C.A. in early January 1968 to revise the terms of this project and to formulate a request to the Special Fund of the U.N.D.P. for the allocation of about US\$ 2,000,000 to enable the I.T.U. to carry out pre-investment surveys of projects in the telecommunications field designed to serve as a basis for an intra-African telecommunications network.

#### RELATIONS WITH THE SPECIALIZED AGENCIES

The I.T.U. has continued to maintain close relations with the agencies of a technical nature which have a particular interest in telecommunications, i.e. the International Civil Aviation Organization, the World Meteorological Organization, the Inter-Governmental Maritime Consultative Organization, the Universal Postal Union and the United Nations Educational, Scientific and Cultural Organization.

As regards the latter, the I.T.U. has collaborated in the work of the Advisory Panel of Experts on Space Communications and an expert from the C.C.I.R. joined the UNESCO mission to India in connection with a pilot project for the use of satellites for educational purposes.

The I.T.U. has also cooperated with the Oceanographic Commission of UNESCO as regards the use of frequencies for the collection of oceanographic data.

#### RELATIONS WITH OTHER INTERNATIONAL ORGANIZATIONS

Apart from the specialized agencies, a number of international organizations have maintained close cooperation with the Union. Among these, special mention should be made of the following:

- International Broadcasting and Television Organization (O.I.R.T.)
- European Broadcasting Union (E.B.U.)
- Danube Commission
- International Radio-Maritime Committee (C.I.R.M.)
- International Scientific Radio Union (U.R.S.I.)
- International Electrotechnical Commission (I.E.C.)
- International Organization for Standardization (I.S.O.)
- Committee on Space Research (COSPAR)
- International Council of Scientific Unions (I.C.S.U.)
- International Astronomical Union (I.A.U.)
- Arab Telecommunication Union
- European Conference of Posts and Telecommunications (C.E.P.T.)
- African and Malagasy Postal and Telecommunications Union (U.A.M.P.T.).

\* \* \*

A list of meetings of the United Nations and other international organizations at which the Union was represented appears in Annex 4 to this Report.



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ANNEX 1

**POSITION ON 31 DECEMBER 1967  
OF MEMBER COUNTRIES IN RELATION TO THE ACTS OF THE UNION**

Table I. *Montreux Acts (1965) and Regulations annexed thereto:*

- International Telecommunication Convention, Montreux, 1965;
- Optional Additional Protocol to the International Telecommunication Convention, Montreux, 1965, on the Compulsory Settlement of Disputes;
- Radio Regulations and Additional Radio Regulations (A.R.C. Geneva, 1959);
- Partial Revision of the Radio Regulations (E.A.R.C. Geneva, 1963) (space);
- Partial Revision of the Radio Regulations (E.A.R.C. Geneva, 1966) (aeronautical);
- Partial Revisions of the Radio Regulations and of the Additional Radio Regulations (W.A.R.C., Geneva, 1967) (maritime);
- Telegraph and Telephone Regulations (Geneva, 1958).

Table II. *African Regional Agreements:*

- 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);
- Regional Agreement concerning the use of frequencies by the broadcasting service in the medium frequency band in the African Broadcasting Area (Geneva, 1966).

Table III. *American Regional Agreements:*

- Inter-American Radio Agreement (FIAR) (Washington, 1949);
- North-American Regional Broadcasting Agreement (NARBA) (Washington, 1950).

Table IV. *European Regional Conventions, Arrangements and Agreements:*

- European Broadcasting Convention (Copenhagen, 1948);
- European Regional Convention for the Maritime Mobile Radio Service (Copenhagen, 1948);
- Regional Arrangement relative to Maritime Radiobeacons in the European Area of Region 1 (Paris, 1951);
- Regional Agreement Concerning the Establishment of an International VHF Radio-telephone Mobile Service for Rhine Navigation (Brussels, 1957);
- Regional Agreement for the Use of Frequencies in the Bands 68-73 Mc/s and 76-87.5 Mc/s 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).

Tables V.1 to V.4. *Special Agreements:*

- Special Regional Agreement Concerning the Use of the 100-104 Mc/s Band by the Broadcasting Service (1962);
- Special Agreement for Use of the 582-606 Mc/s Band for Radionavigation Purposes (Brussels, 1962);
- Special Agreement in Connection with the Use of VHF and UHF in Fixed and Mobile Services in Frontier Areas (Brussels, 1962);
- Special Agreement Concerning the Use of Frequencies for Additional low-power Television Transmitters operating in the high-frequency Range (Band IV, 472-582 Mc/s and Band V, 582-960 Mc/s) in the Frontier Areas (Karlsruhe, 1966).

Table I.

## POSITION ON

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.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc. *	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat	Opt. Add. Protocol **	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Afghanistan . . . . .	½	S <sup>1)</sup>		S	
Albania (People's Republic of) . . . . .	½	—		—	
Algeria (Algerian Democratic and Po- pular Republic) . . . . .	3	S <sup>1)</sup>		—	
Saudi Arabia (Kingdom of) . . . . .	1	S <sup>1)</sup>		—	
Argentine Republic . . . . .	15	S <sup>1)</sup>	17. V. 1967	—	
Australia (Commonwealth of) . . . . .	18	S <sup>1)</sup>	25. I. 1967	S	25. I. 1967
Austria . . . . .	1	S <sup>1)</sup>		S	
Barbados . . . . .	½	A	16. VIII. 1967	—	
Belgium . . . . .	5	S <sup>1)</sup>		S	
Bielorussian Soviet Socialist Republic . . . . .	1	S <sup>1)</sup>		—	
Burma (Union of) . . . . .	1	S <sup>1)</sup>		S	
Bolivia . . . . .	3	S <sup>1)</sup>		S	
Brazil . . . . .	5	S <sup>1)</sup>		S	
Bulgaria (People's Republic of) . . . . .	1	S <sup>1)</sup>		—	
Burundi (Republic of) <sup>17)</sup> . . . . .	½	—		—	
Cambodia (Kingdom of) . . . . .	1	—		—	
Cameroon (Federal Republic of) . . . . .	½	S <sup>1)</sup>		—	
Canada . . . . .	18	S <sup>1)</sup>	31. VIII. 1966 <sup>2)</sup>	S	30. I. 1967
Central African Republic . . . . .	½	S <sup>1)</sup>	15. VIII. 1966	S	15. VIII. 1966
Ceylon . . . . .	1	S	13. I. 1967	—	
Chile . . . . .	3	S <sup>1)</sup>		—	
China . . . . .	15	S <sup>1)</sup>		—	

<sup>1)</sup> Convention, Final Protocol, Additional Protocols.

<sup>2)</sup> Optional Additional Protocol on the Compulsory Settlement of Disputes.

## Convention, Regulations

31 DECEMBER, 1967

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)	Partial Revision E.A.R.C. Geneva (1963) (space)	Partial Revision E.A.R.C. Geneva (1966) (aeronautical)	Partial Revision W.A.R.C. Geneva (1967) (maritime)					A.R.C. Geneva (1959)	Partial Revision W.A.R.C. Geneva (1967) (maritime)			Telegraph Regulations	Telephone Regulations		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
S		—		—		—		S		—		—		—	
S	<sup>5)</sup>	—		—		—		S	<sup>5)</sup>	—		—	A	—	A
—	A <sup>4)</sup>	S	A	S		S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S		—		S		—		S		—		S		S	
S	A <sup>24)</sup>	S	A <sup>3)</sup>	S	A	S		S	A <sup>24)</sup>	S		—	A <sup>27)</sup>	—	A <sup>27)</sup>
S	A	S	A	S		S		S	A	S		S	A	S	A
S	A	S	A	—	A	S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A	S		S	A	S		S	A <sup>3)</sup>	S	A
S	<sup>1)</sup>	S	A	—		—		S	<sup>1)</sup>	—		S	A	S	A
S	A	—		—		—		S	A	—		S	A	S	A
S		—		—		—		S		—		—		—	
S	A	—		S		S		S	A	S		—	A	—	A
S	<sup>1)</sup>	S		S	A <sup>12)</sup>	S		S	<sup>1)</sup>	S		S	A	S	A
—	A <sup>4)</sup>	—	A	—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	—		—		S	A	—		—	A	—	A
—	A	—	A	—		S		—	A	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A <sup>3)</sup>	S	A	S		S	A <sup>3)</sup>	S		S	A	—	<sup>1)</sup>
—	A	—	A	—		—		—	A	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A <sup>4)</sup>	—	A <sup>4)</sup>	—		S		S	A <sup>4)</sup>	S		S	A <sup>4)</sup>	S	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—		S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A	S		S	A	S		S	A	S	A

Table I.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc.	Date on which the instrument of ratifi- cation or accession was deposited with the General Secretariat	Opt. Add. Protocol **	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Cyprus (Republic of) . . . . .	½	S <sup>1)</sup>		S	
Vatican City State . . . . .	½	S		S	
Colombia (Republic of) . . . . .	3	S <sup>1)</sup>		—	
Congo (Democratic Republic of the) . .	1	S <sup>1)</sup>		S	
Congo (Republic of the) (Brazzaville) .	½	S <sup>1)</sup>	21. XII. 1966	S	
Korea (Republic of) . . . . .	1	S <sup>1)</sup>	14. III. 1967	S	14. III. 1967
Costa Rica . . . . .	½	S <sup>1)</sup>		S	
Ivory Coast (Republic of the) . . . . .	1	S <sup>1)</sup>		S	
Cuba . . . . .	1	S <sup>1)</sup>		—	
Dahomey (Republic of) . . . . .	½	S <sup>1)</sup>	10. XI. 1967	—	
Denmark . . . . .	5	S <sup>1)</sup>	9. XI. 1966	A	9. XI. 1966
Dominican Republic . . . . .	3	—		—	
El Salvador (Republic of) . . . . .	3	—		—	
Group of Territories represented by the French Overseas Post and Telecom- munication Agency <sup>33)</sup> . . . . .	1	S	29. V. 1967	S	
Ecuador . . . . .	1	S <sup>1)</sup>		—	
Spain . . . . .	3	S <sup>1)</sup>	6. VI. 1967	—	
United States of America . . . . .	30	S <sup>1)</sup>	29. V. 1967 <sup>2)</sup>	—	
Ethiopia . . . . .	1	S <sup>1)</sup>	29. VII. 1967	—	
Finland . . . . .	3	S <sup>1)</sup>	3. II. 1967	S	22. VI. 1967
France . . . . .	30	S	29. V. 1967	—	
Gabon Republic . . . . .	½	S <sup>1)</sup>		S	
Ghana . . . . .	1	S <sup>1)</sup>		S	
Greece . . . . .	1	S <sup>1)</sup>		S	
Guatemala . . . . .	1	S <sup>1)</sup>		S	
Guinea (Republic of) . . . . .	½	S <sup>1)</sup>	3. X. 1966	—	

\*) Convention, Final Protocol, Additional Protocols.

\*\*) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Convention, Regulations (cont.)

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)	Partial Revision E.A.R.C. Geneva (1963) (space)	Partial Revision E.A.R.C. Geneva (1968) (aeronautical)	Partial Revision W.A.R.C. Geneva (1967) (maritime)					A.R.C. Geneva (1959)	Partial Revision W.A.R.C. Geneva (1967) (maritime)			Telegraph Regulations	Telephone Regulations		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
—	A	S	A	—		S		—	A	S		—	A	—	A
S	A	S	A	—		—		S	A	—		—	A	—	A
S		S		S		S		S		S		S		S	
—	A <sup>4)</sup>	S	A	S		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A <sup>4)</sup>	—		—		—	A	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	—		S		S	A	S		S	A	S	A
S		—		—		—		S		—		—		—	
—	A <sup>30)</sup>	—	A	—		S		—	A <sup>30)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	<sup>1)</sup>	S		S		S		S	<sup>1)</sup>	—		—	<sup>1)</sup>	—	<sup>1)</sup>
—	A	—	A	—	A <sup>4)</sup>	—		—	A	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A	S		S	A	S		S	A	S	A
S		—		—		—		S		—		—	A	—	A
S		—		—		—		S	<sup>5)</sup>	—		S		S	<sup>5)</sup>
S	A	S	A	S	A	S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	—		—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S		S		S	A	S		S	A	S	A
S	A <sup>25)</sup>	S	A	S	A	S		—	<sup>1)</sup>	—		S	A <sup>23)</sup>	—	<sup>1)</sup>
S	A	S	A	S	A <sup>4)</sup>	S		S	A	S		S	A	S	A
S	A	S	A	—		S		S	A	S		S	A	S	A
S	A	S	A	S	A	S		S	A	S		S	A <sup>3)</sup>	S	A
—	A	—	A	—		—		—	A	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S		S		S	A	S		—	A	—	A
S	A	S	A	—		S		S	A	S		S	A	S	A
—	A <sup>31)</sup>	—		—		—		—	A <sup>31)</sup>	—		—	A	—	A
—	A <sup>4)</sup>	—	A	—	A	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>

Table I.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc.	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat	Opt. Add. Protocol **	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Guyana . . . . .	1/2	A	8. III. 1967	—	
Haiti (Republic of) . . . . .	1	S		S	
Upper Volta (Republic of) . . . . .	1/2	S <sup>1)</sup>		—	
Honduras (Republic of) . . . . .	1/2	—		—	
Hungarian People's Republic . . . . .	1	S <sup>1)</sup>		—	
India (Republic of) . . . . .	13	S <sup>1)</sup>	1. XII. 1967	—	
Indonesia (Republic of) . . . . .	1	S <sup>1)</sup>		—	
Iran . . . . .	1	S <sup>1)</sup>		—	
Iraq (Republic of) . . . . .	1	S <sup>1)</sup>		—	
Ireland . . . . .	3	S	17. V. 1967	—	
Iceland . . . . .	1/2	S <sup>1)</sup>	8. III. 1967	—	
Israel (State of) . . . . .	1	S <sup>1)</sup>		—	
Italy . . . . .	10	S <sup>1)</sup>		—	
Jamaica . . . . .	1	S <sup>1)</sup>		—	
Japan . . . . .	20	S	30. VIII. 1967	S	30. VIII. 1967
Jordan (Hashemite Kingdom of) . . . . .	1/2	S <sup>1)</sup>	1. III. 1967	—	
Kenya . . . . .	1/2	S <sup>1)</sup>		—	
Kuwait (State of) . . . . .	1	S <sup>1)</sup>		—	
Laos (Kingdom of) . . . . .	1/2	S	27. IX. 1967	—	
Lesotho (Kingdom of) . . . . .	1/2	A	26. V. 1967	—	
Lebanon . . . . .	1/2	S <sup>1)</sup>	10. I. 1967	—	
Liberia (Republic of) . . . . .	1	S <sup>1)</sup>		—	
Libya (Kingdom of) . . . . .	1/2	—		—	
Liechtenstein (Principality of) . . . . .	1/2	S <sup>1)</sup>	12. XII. 1967	S	12. XII. 1967
Luxembourg . . . . .	1/2	S <sup>1)</sup>		S	
Malaysia . . . . .	3	S <sup>1)</sup>		—	

\*) Convention, Final Protocol, Additional Protocols.

\*\*) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Convention, Regulations (cont.)

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)	Partial Revision E.A.R.C. Geneva (1963) (space)	Partial Revision E.A.R.C. Geneva (1966) (aeronautical)	Partial Revision W.A.R.C. Geneva (1967) (maritime)					A.R.C. Geneva (1959)	Partial Revision W.A.R.C. Geneva (1967) (maritime)			Telegraph Regulations	Telephone Regulations		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—		S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	—	—	—	—		—		—	—	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A	—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	—	—	—	—		—		—	—	—		—	—	—	—
S	<sup>1)</sup>	S	S	S		S		S	<sup>1)</sup>	S		S	A	S	A
S	A	S	A	S	A	S		S	A	S		S	A	S	A <sup>26)</sup>
S	A	S		S		S		S	A	S		S	A	S	A
S	A	—	—	—		—		S	A	—		S	A	S	A
S	—	—	—	—		—		S	—	—		—	—	—	—
S	A	S	A	S	A	S		S	A	S		S	A	S	A
S	A	S	A	—	A	S		S	A	S		S	A	S	A
S	A	S	A	—		S		S	A	S		S	A	S	A
S	A <sup>21)</sup>	S	A	S	A	S		S	A <sup>21)</sup>	S		S	A <sup>21)</sup>	S	A <sup>21)</sup>
—	A <sup>4)</sup>	S	A <sup>20)</sup>	S		S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A	S		S	A	S		S	A	S	A
S	A	—	A <sup>4)</sup>	—		S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	S	A	—	A	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S		S		S	A	S		—	A	—	A
—	A	—	A	—	A <sup>4)</sup>	—		—	A	—		—	A	—	A
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	—		—		S	A	—		S	A	S	A
—	A	S		—		S		—	A	S		—	A	—	A
S	—	—	—	—		—		S	—	—		S	—	S	—
—	A <sup>4)</sup>	S	A <sup>4)</sup>	—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A	—		S	A	—		S	A <sup>3)</sup>	S	A
S	A	S	A	S	A	S		S	A	S		S	A	S	A

Table I.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc.*	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat	Opt. Add. Protocol**	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Malawi . . . . .	½	S <sup>1)</sup>		A	16. XII. 1966
Maldives Islands . . . . .	½	A	28. II. 1967	—	
Malagasy Republic . . . . .	1	S <sup>1)</sup>	18. VIII. 1967	S	
Mali (Republic of) . . . . .	½	S <sup>1)</sup>		—	
Malta . . . . .	½	S <sup>1)</sup>		S	
Morocco (Kingdom of) . . . . .	1	S <sup>1)</sup>		—	
Mauritania (Islamic Republic of) . . . . .	½	S <sup>1)</sup>		S	
Mexico . . . . .	5	S <sup>1)</sup>	2. XI. 1967	S	
Monaco . . . . .	½	S		S	
Mongolian People's Republic . . . . .	½	S <sup>1)</sup>		S	
Nepal . . . . .	½	S <sup>1)</sup>	1. VII. 1967 <sup>2)</sup>	—	
Nicaragua . . . . .	1	S <sup>1)</sup>		S	
Niger (Republic of the) . . . . .	½	S <sup>1)</sup>	22. VI. 1967	—	
Nigeria (Federal Republic of) . . . . .	2	S <sup>1)</sup>	21. I. 1967	—	
Norway . . . . .	5	S <sup>1)</sup>		—	
New Zealand . . . . .	5	S <sup>1)</sup>	13. IV. 1967 <sup>14)</sup>	—	
Uganda . . . . .	½	S <sup>1)</sup>	1. IV. 1967	—	
Pakistan . . . . .	3	S <sup>1)</sup>	1. VI. 1967 <sup>2)</sup>	—	
Panama . . . . .	½	S <sup>1)</sup>		S	
Paraguay . . . . .	1	S <sup>1)</sup>	8. IX. 1967	S	
Netherlands (Kingdom of the) . . . . .	8	S <sup>1)</sup>	27. XII. 1966 <sup>19)</sup>	S	
Peru . . . . .	2	S <sup>1)</sup>	1. III. 1967	—	
Philippines (Republic of the) . . . . .	1	S <sup>1)</sup>		S	
Poland (People's Republic of) . . . . .	3	S <sup>1)</sup>		—	
Portugal . . . . .	3	S <sup>1)</sup>		—	
Spanish Provinces in Africa . . . . .	1	S	6. VI. 1967	—	

\*) Convention, Final Protocol, Additional Protocols.

\*\*) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Convention, Regulations (cont.)

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)	Partial Revision E.A.R.C. Geneva (1963) (space)	Partial Revision E.A.R.C. Geneva (1966) (aeronautical)	Partial Revision W.A.R.C. Geneva (1967) (maritime)					A.R.C. Geneva (1959)	Partial Revision W.A.R.C. Geneva (1967) (maritime)			Telegraph Regulations	Telephone Regulations		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
—	A <sup>4)</sup>	—	A	—	—	—	—	—	A <sup>4)</sup>	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—	—	—	—	—	A <sup>4)</sup>	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A	—	A	—	—	—	A <sup>4)</sup>	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A	—	—	—	—	—	A	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A <sup>4)</sup>	S	—	S	—	—	A <sup>4)</sup>	S	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A <sup>3)</sup>	S	A	—	—	—	—	S	A <sup>3)</sup>	—	—	S	A	S	A
—	A <sup>4)</sup>	—	—	—	—	—	—	—	A <sup>4)</sup>	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	A	S	A <sup>4)</sup>	S	—	S	A	S	—	S	A	S	A
S	A	S	—	—	—	S	—	S	A	S	—	S	A	S	A
—	1)	—	—	—	—	—	—	—	1)	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	—	A <sup>4)</sup>	—	A <sup>4)</sup>	—	—	S	A	—	—	—	A	—	A
S	—	—	—	—	—	—	—	S	—	—	—	—	—	—	—
—	A	—	A <sup>4)</sup>	—	—	—	—	—	A	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A	—	—	—	—	—	A	—	—	—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	S	—	S	—	S	—	S	A	S	—	S	A	S	A
S	A	S	A	S	A	S	—	S	A	S	—	S	A <sup>3)</sup>	S	A
S	1)	—	1)	—	1)	—	—	S	1)	—	—	—	1)	—	1)
S	—	S	—	—	—	—	—	S	1)	—	—	—	1)	—	1)
S	1)	S	—	S	—	S	—	S	1)	S	—	S	A	S	A
S	A	S	A	S	—	S	—	S	A	S	—	S	A	S	A
—	A	S	A	—	—	—	—	—	A	—	—	—	A	—	A

Table I.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc.	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat	Opt. Add. Protocol **	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Portuguese Oversea Provinces . . . . .	3	S		—	
Syrian Arab Republic . . . . .	1	S <sup>1)</sup>		—	
United Arab Republic . . . . .	5	S <sup>1)</sup>		—	
Federal Republic of Germany . . . . .	20	S <sup>1)</sup>		—	
Ukrainian Soviet Socialist Republic . .	3	S <sup>1)</sup>		—	
Somali Republic . . . . .	1	S <sup>1)</sup>		—	
Rhodesia . . . . .	1	— <sup>11)</sup>	— <sup>11)</sup>	— <sup>11)</sup>	— <sup>11)</sup>
Roumania (Socialist Republic of) . . .	1	S <sup>1)</sup>		—	
United Kingdom of Great Britain and Northern Ireland, the Channel Islands and the Isle of Man . . . . .	30	S <sup>1)</sup>	4. I. 1967 <sup>15)</sup>	S	4. I. 1967 <sup>15)</sup>
Rwanda (Republic of) . . . . .	½	S <sup>1)</sup>		S	
Senegal (Republic of the) . . . . .	1	S <sup>1)</sup>	5. VI. 1967	S	12. XII. 1967
Sierra Leone . . . . .	½	S <sup>1)</sup>		—	
Singapore (Republic of) <sup>16)</sup> . . . . .	1	S <sup>1)</sup>	23. XI. 1967	A	23. XI. 1967
Sudan (Republic of the) . . . . .	1	S <sup>1)</sup>		—	
South Africa (Republic of) <sup>18)</sup> . . . . .	8	A	11. XI. 1966	—	
Sweden . . . . .	10	S <sup>1)</sup>		—	
Switzerland (Confederation of) . . . . .	10	S <sup>1)</sup>	5. I. 1967	S	5. I. 1967
Tanzania (United Republic of) . . . . .	½	S <sup>1)</sup>	7. X. 1967	—	
Chad (Republic of the) . . . . .	½	S <sup>1)</sup>		S	
Czechoslovak Socialist Republic . . . . .	3	S <sup>1)</sup>		—	
Territories of the United States of America	25	S <sup>1)</sup>	29. V. 1967 <sup>2)</sup>	—	
Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible <sup>22)</sup>	1	S		S	
Thailand . . . . .	2	S <sup>1)</sup>		S	

\*) Convention, Final Protocol, Additional Protocols.

\*\*) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Convention, Regulations (cont.)

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)	Partial Revision E.A.R.C. Geneva (1963) (space)	Partial Revision E.A.R.C. Geneva (1966) (aeronautical)	Partial Revision W.A.R.C. Geneva (1967) (maritime)					A.R.C. Geneva (1959)	Partial Revision W.A.R.C. Geneva (1967) (maritime)			Telegraph Regulations	Telephone Regulations		
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
S	A	—	A	S		S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	—		—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S		S		—		—		S		—		S	A	S	A
S	A <sup>23)</sup>	S	A <sup>32)</sup>	S		S		S	A <sup>23)</sup>	S		S	A <sup>3)</sup>	S	A
S	<sup>1)</sup>	S	A	—		—		S	<sup>1)</sup>	—		S	A	S	A
—	A <sup>4)</sup>	—		—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A	—		—		—	A	—		S	A	S	
S	<sup>1)</sup>	S		S		S		S	<sup>1)</sup>	S		S	A	S	A
S	A	S	A	S	A	S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	—	A	—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A	—		S		—	A	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A	—		—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A <sup>4)</sup>	S	A <sup>3)</sup>	S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	—		—		—		S	A	—		S	A	S	A
S	A	S	A	S		S		S	A	S		S	A	S	<sup>5)</sup>
S	A	S	A	S		S		S	A	S		S	A <sup>29)</sup>	S	A
S	A	S	A	S		S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	S	A	—	A	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A	—	A	—		S		—	A	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	<sup>1)</sup>	S		S		S		S	<sup>1)</sup>	S		S	A	S	A
—	A <sup>25)</sup>	S	A	<sup>13)</sup>	A	S		—	<sup>1)</sup>	—		—	A <sup>28)</sup>	—	<sup>1)</sup>
S	A	S	A	S	A	—		S	A	—		—	A	—	A
S	A	—	A	S		—		S	A	—		—	A	—	A

Table I.

Country or group of territories (In the alphabetical order of the French version of the country names)	CONVENTION, etc.				
	Plenipotentiary Conference, Montreux, 1965				
	Class of contribution No. of units	Convention, etc. *	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat	Opt. Add. Protocol **	Date on which the instrument of rati- fication or accession was deposited with the General Secretariat
1	2	3	4	5	6
Togolese Republic . . . . .	1/2	S <sup>1)</sup>	8. VIII. 1967	S	
Trinidad and Tobago . . . . .	1	S <sup>1)</sup>	13. XII. 1967	S	
Tunisia . . . . .	2	S <sup>1)</sup>	1. IV. 1967	—	
Turkey . . . . .	2	S <sup>1)</sup>		—	
Union of Soviet Socialist Republics . . .	30	S <sup>1)</sup>		—	
Uruguay (Oriental Republic of) . . . .	1	—		—	
Venezuela (Republic of) . . . . .	3	S <sup>1)</sup>		—	
Viet-Nam (Republic of) . . . . .	1	—		—	
Yemen . . . . .	1	—		—	
Yugoslavia (Federal Socialist Republic of) . . . . .	1	S <sup>1)</sup>	22. XII. 1967	—	
Zambia (Republic of) . . . . .	1	S <sup>1)</sup>	13. XII. 1967	S	

\*) Convention, Final Protocol, Additional Protocols.  
\*\*) Optional Additional Protocol on the Compulsory Settlement of Disputes.

Convention, Regulations (end)

ADMINISTRATIVE REGULATIONS															
Administrative Radio Conferences												Administrative Telegraph and Telephone Conference			
Radio Regulations								Additional Radio Regulations				Geneva (1958)			
A.R.C. Geneva (1959)		Partial Revision E.A.R.C. Geneva (1963) (space)		Partial Revision E.A.R.C. Geneva (1966) (aeronautical)		Partial Revision W.A.R.C. Geneva (1967) (maritime)		A.R.C. Geneva (1959)		Partial Revision W.A.R.C. Geneva (1967) (maritime)		Telegraph Regulations		Telephone Regulations	
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
—	A <sup>4)</sup>	—	A	—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	S		—	A <sup>4)</sup>	—	A <sup>4)</sup>
—	A <sup>4)</sup>	—	A <sup>4)</sup>	—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>
S	A	—	A	—		S		S	A	S		S	A	S	A
S		—		—		S		S		S		S	A	S	A
S	<sup>1)</sup>	S	A	S		S		S	<sup>1)</sup>	S		S	A	S	A
S		—		—		—		S		—		—		—	
S	<sup>1)</sup>	—	<sup>1)</sup>	S	<sup>1)</sup>	S		S	<sup>1)</sup>	S		S	<sup>1)</sup>	S	<sup>1)</sup>
—	A	—	A	—		S		—	A	S		S	A	S	A
—		—		—		—		—		—		—		—	
S	A	S	A	S	A	S		S	A	S		S	A	S	A
—	A <sup>4)</sup>	—	A	—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—		—	A <sup>4)</sup>	—	A <sup>4)</sup>

1) See the statement or statements appearing in the Final Protocol annexed to the International Telecommunication Convention (Montreux, 1965).  
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 acceded to the International Telecommunication Convention (Geneva, 1959) or ratified the International Telecommunication Convention (Montreux, 1965) or acceded thereto.  
5) See the statement or statements appearing in the Final Protocol annexed to the International Telecommunication Convention (Geneva, 1959).  
6)-10)  
11) See Administrative Council Resolution No. 599.  
12) See Notification No. 1000.  
13) The signature on behalf of the United States of America is valid also for the Territories of the United States of America.  
14) The Government of New Zealand declared that this ratification also applies to the Cook Islands, Niue and the Tokelau Islands pursuant to Article 20 of the Convention.

15) The Government of the United Kingdom declared, under the provisions of paragraph 1 of Article 20, that the application of the Convention as well as of the Optional Additional Protocol is extended to the Channel Islands and the Isle of Man.  
16) Formerly: Singapore.  
17) Formerly: Burundi (Kingdom of).  
18) See Administrative Council Resolution No. 619.  
19) The Government of the Kingdom of the Netherlands declared that the Convention was ratified on behalf of the Kingdom in Europe, of Surinam and of the Netherlands Antilles.  
20) In approving the partial Revision of the Radio Regulations, the Government of Jamaica reaffirmed the reservation entered by its delegation at the ninth Plenary Meeting of the Conference, i.e.:  
"The Jamaican Delegation declares that it reserves the right of the Jamaican Government to take any action it deems necessary to safeguard its interests, should Members or Associate Members in any way fail to comply with the requirements of the Radio Regulations of the Administrative Radio Conference, Geneva, 1959, as added to and amended by the Extraordinary Administrative Radio Conference, Geneva, 1963, or should reservations by other countries jeopardize its telecommunication services."

21) The Italian Administration declared that Italy, by ratifying the International Telecommunication Convention (Geneva, 1959) on 7 November 1962 (the instrument of ratification being deposited with the General Secretariat on 28 December 1962), had, in accordance with No. 193 of the Convention, approved *ipso facto* the Administrative Regulations annexed thereto which were in force on that date, i.e. the Telegraph and Telephone Regulations (Geneva, 1958), which came into force on 1 January 1960, and the Radio Regulations (Geneva, 1959) which came into force on 1 May 1961.  
22) The list of the territories forming this Member is given below (Notification No. 967):  
Aden and Protectorate of South Arabia e)  
Antigua  
Bahamas  
Barbados a)  
Basutoland b)  
Bechuanaland Protectorate c)  
Bermuda  
British Antarctic Territory (South Orkney Islands, South Shetland Islands and Graham Land)  
British Guiana d)  
British Honduras  
Brunei (Protected State)  
Cayman Islands  
Dominica  
Falkland Islands (Colony and Dependencies, including South Georgia and the South Sandwich Islands)  
Fiji (including Pitcairn Island)  
Gibraltar

Grenada  
Hongkong  
Mauritius  
Montserrat  
St. Christopher, Nevis and Anguilla  
St. Helena (including Ascension Island and Tristan da Cunha)  
St. Lucia  
St. Vincent  
Seychelles  
Swaziland  
Tonga (Protected State)  
Turks and Caicos Islands  
British Virgin Islands  
Western Pacific High Commission Territories:  
British Solomon Islands Protectorate  
Gilbert and Ellice Islands Colony (including the Phoenix and Northern Islands Group)  
The Southern Line Islands  
New Hebrides (Condominium).  
a) Now an independent State, Member of the I.T.U.  
b) Now an independent State Member of the I.T.U. known as the Kingdom of Lesotho.  
c) Now an independent State known as Botswana.  
d) Now an independent State Member of the I.T.U. known as Guyana.  
e) Now an independent State known as the People's Republic of Southern Yemen.  
(Note by the General Secretariat: For up to date information on the composition of this Member, see Notification No. 1004.)



<sup>23)</sup> See Notifications Nos. 855, 876 and 880.

<sup>24)</sup> In approving these Regulations, the Argentine Government declared that the Argentine Administration, in its relations with other Administrations, will not accept any provisions or obligations of the said Radio Regulations, its Appendices and Resolutions or the Additional Radio Regulations which the corresponding Administrations have not accepted or have accepted subject to reservations.

<sup>25)</sup> In a note the United States Embassy in Berne declared that "the deposit of the instrument of ratification of the Radio Regulations (Geneva, 1959) and Additional Protocol thereto, constitutes notifications of approval by the United States of America, including all territories under the jurisdiction of the United States of America." (*Notification No. 878.*)

<sup>26)</sup> In a letter dated 23 December, 1964, the Indian Administration announced that it has approved the Telephone Regulations (Geneva, 1958), while reserving the right not to comply with the following provisions of those Regulations in running its services:

1. Article 16, paragraph 1 (validity of bookings);
2. Article 19, paragraph 3 (operating principles);
3. Article 24, paragraphs 1 and 2 (limitation of the duration of calls);
4. Article 35 (charging for calls booked with special facilities);
5. Article 36, paragraphs 2 and 3 (charges for booking changes).

(*Notification No. 883.*)

<sup>27)</sup> In approving these Regulations, the Argentine Administration declares that, in its relations with other Administrations, it will not apply the provisions and obligations of the said Regulations, Appendices and Resolutions which those Administrations, by formulating reservations, have not accepted or have not agreed to apply.

<sup>28)</sup> In a note, the United States Embassy in Berne declared that "the deposit of the instrument of ratification of the Telegraph Regulations (Geneva, 1958) and the Final Protocol to those Regulations constitutes the notification of approval by the United States of America, including all territories under the jurisdiction of the United States of America."

The United States Embassy declared furthermore:

"It should be noted that the ratification by the United States of America of the Regulations and Final Protocol is made subject to the declarations as set forth in the instrument of ratification. The declarations contained in the text of the instrument of ratification replace and are in lieu of the declarations which appear "For the United States of America" in the said Final Protocol."

(*Note by the General Secretariat: the text of this instrument is reproduced in Notification No. 829.*)

<sup>29)</sup> In approving the Telegraph Regulations (Geneva, 1958), the Swedish Government reserves the right, notwithstanding Article 8, paragraph 5 (Nos. 49 and 50) of the said Regulations, to apply an overall rate per word, including the Danish transit charge, for telegrams the normal routing of which passes through Denmark.

<sup>30)</sup> In approving the Radio Regulations and the Additional Radio Regulations, the Republic of the Ivory Coast, referring to Article 9 of the Regulations and to the procedure defined in Article 10, reserved the right to take any measures necessary for the development and proper operation of its broadcasting service, should the procedure in question fail to give it satisfaction. (*Notification No. 908.*)

<sup>31)</sup> See Notification No. 911.

<sup>32)</sup> See Notification No. 977.

<sup>33)</sup> Comprising the following territories:

Comoro Islands,  
New Caledonia and Dependencies,  
French Polynesia,  
St. Pierre and Miquelon,  
French Territory of the Afars and Issas,  
French Southern and Antarctic Territories,  
Wallis and Futuna.

This ratification also applies to the Anglo-French Condominium of the New Hebrides.

**Table II. African Regional Agreements**

**Cols. 2 and 3:** 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);

**Cols. 4 and 5:** Regional Agreement concerning the use of frequencies by the broadcasting service in the medium frequency band in the African Broadcasting Area (Geneva, 1966).

The letter S means that the Agreement has been signed and the letter A means approval of the Agreement or accession to it.

Country or group of territories	Broadcasting Agreement VHF/UHF (Geneva, 1963)		Broadcasting Agreement MF (Geneva, 1966)	
	2	3	4	5
Algeria (Algerian Democratic and Popular Republic) . . . . .	—		S	
Burundi (Republic of) . . . . .	—		S	
Cameroon (Federal Republic of) . . . . .	S		S	
Central African Republic . . . . .	—		S	
Congo (Democratic Republic of the) . . . . .	S		S	
Congo (Republic of the) (Brazzaville) . . . . .	S		S	
Ivory Coast (Republic of the) . . . . .	S		S	
Dahomey (Republic of) . . . . .	S		S	
Group of Territories represented by the French Overseas Post and Telecommunication Agency <sup>1)</sup> . . . . .	S	A	S	
Spain . . . . .	S	A	S	
Ethiopia . . . . .	S	A	S	
France <sup>2)</sup> . . . . .	S	A	S	
Gabon Republic . . . . .	S		S	A
Ghana . . . . .	S		S	
Guinea (Republic of) . . . . .	S		S	
Upper Volta (Republic of) . . . . .	S		S	
Kenya . . . . .	S	A	S	A
Liberia (Republic of) . . . . .	S		S	
Libya (Kingdom of) . . . . .	S		—	
Malawi . . . . .	—		S	
Malagasy Republic . . . . .	S		S	

Country or group of territories	Broadcasting Agreement VHF/UHF (Geneva, 1963)		Broadcasting Agreement MF (Geneva, 1966)	
	2	3	4	5
Mali (Republic of) . . . . .	S		S	
Morocco (Kingdom of) . . . . .	—		S	
Mauritania (Islamic Republic of) . . . . .	S		S	
Niger (Republic of the) . . . . .	S		S	
Nigeria (Federal Republic of) . . . . .	S	A	S	
Uganda . . . . .	S	A	S	A
Spanish Provinces in Africa . . . . .	S	A	S	
Portuguese Oversea Provinces . . . . .	S	A	S	
United Arab Republic . . . . .	—	A	S	
Somali Republic . . . . .	S		—	
Rhodesia . . . . .	S <sup>3)</sup>	A	—	
Rwanda (Republic of) . . . . .	S		S	
Senegal (Republic of the) . . . . .	S	A	S	
Sierra Leone . . . . .	S	A	—	
Sudan (Republic of the) . . . . .	—		—	
South Africa (Republic of) <sup>4)</sup> . . . . .	S	A	—	
Tanzania (United Republic of) . . . . .	S	A	S	A
Chad (Republic of the) . . . . .	S		S	
Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible . . . . .	S		S	
Togolese Republic . . . . .	S		S	
Zambia (Republic of) . . . . .	—		S	

<sup>1)</sup> With respect to French Somaliland (*new denomination: French Territory of the Afars and Issas*) and the Comoro Islands.

<sup>2)</sup> With respect to the Department of Reunion.

<sup>3)</sup> The Agreement was signed on behalf of the Federation of Rhodesia and Nyasaland.

<sup>4)</sup> See Administrative Council Resolution No. 619.

**Table III. American Regional Agreements**

The letter S means that the Agreement has been signed; the letter R means that the Agreement has been ratified; the letter A means acceptance of the Agreement or accession thereto.

Country or territories	Inter-American Radio Agreement (FIAR) (Washington, 1949)		North-American Regional Broadcasting Agreement (NARBA) (Washington, 1950)	
	2	3	4	5
Argentina Republic. . . . .	S		—	
Bolivia . . . . .	S		—	
Brazil . . . . .	S		—	
Canada . . . . .	S		S	R
Chile . . . . .	S		—	
Colombia (Republic of) . . . . .	S		—	
Costa Rica . . . . .	S	A	—	
Cuba . . . . .	S		S	R
Dominican Republic . . . . .	S	A	S	R
El Salvador (Republic of) . . . . .	S		—	
Ecuador . . . . .	S		—	
United States of America . . . . .	S	A	S	R

Country or territories	Inter-American Radio Agreement (FIAR) (Washington, 1949)		North-American Regional Broadcasting Agreement (NARBA) (Washington, 1950)	
	2	3	4	5
Guatemala . . . . .	S		—	
Haiti (Republic of) . . . . .	—	A	—	
Honduras (Republic of) . . . . .	S	A	—	
Mexico . . . . .	S	A	—	
Nicaragua . . . . .	S	A	—	
Panama . . . . .	S		—	
Paraguay . . . . .	—	A	—	
United Kingdom of Great Britain and Northern Ireland . . . . .	—		S*)	R**)
Uruguay (Oriental Republic of) . . . . .	S		—	
Venezuela (Republic of) . . . . .	S		—	

\*) For the Territories in the North-American Region (the Bahamas and Jamaica).

\*\*) For the Bahamas only.

**Table IV. European Regional Conventions, Arrangements and Agreements**

The letter S means that the Convention, Agreement or Arrangement has been signed; the letter R means that the Convention has been ratified; the letter A means that the Agreement has been approved or acceded to; in column 7, it means that the Agreement has been approved.

Country or group of territories	European Broadcasting Convention (Copenhagen, 1948)		European Regional Convention for the maritime mobile radio service (Copenhagen, 1948)		Regional Arrangement relative to Maritime Radiobeacons in the European Area of Region 1 (Paris, 1951)		Regional Agreement for Rhine Navigation (Brussels, 1957) <sup>*)</sup>		Regional Agreement in the bands 68-73 Mc/s and 76-87.5 Mc/s (Geneva, 1960) <sup>**)</sup>		Regional Agreement for the European Broadcasting Area (Stockholm, 1961)	
1	2	3	4	5	6	7	8	9	10	11	12	13
Albania (People's Republic of) . . . . .	S	R	—	—	—	—	—	—	S	—	—	—
Algeria (Algerian Democratic and Popular Republic) . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Austria . . . . .	—	—	—	—	—	—	—	—	S	A	S	A
Belgium . . . . .	S	R	S	R	S	A	S	A	—	—	S	A
Bielorussian Soviet Socialist Republic . . . . .	S	R	—	—	—	—	—	—	S	—	S	A <sup>5)</sup>
Bulgaria (People's Republic of) . . . . .	S	R	—	1)	—	—	—	—	S	—	S	—
Cyprus (Republic of) . . . . .	—	—	—	—	—	—	—	—	—	—	S	A
Vatican City State . . . . .	S	R	—	—	—	—	—	—	—	—	S	—
Denmark . . . . .	S	R	S	R	S	A	—	—	S	A	S	—
Spain . . . . .	—	—	—	—	S	—	—	—	—	—	S	A <sup>2)</sup>
Finland . . . . .	S	R	—	—	—	—	—	—	—	—	S	A
France . . . . .	S	R	S	R	S	A	S	A	S	A	S	A
Greece . . . . .	S	R	S	R	—	—	—	—	S	—	S	—
Hungarian People's Republic . . . . .	S	R	—	—	—	—	—	—	S	A	S	—
Iraq (Republic of) . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Ireland . . . . .	S	R	S	R	—	A	—	—	—	—	S	A
Iceland . . . . .	—	—	S	R	—	—	—	—	—	—	S	—
Israel (State of) . . . . .	—	—	—	—	—	—	—	—	—	—	S	—
Italy . . . . .	S	R	S	R	S	A	—	—	S	A	S	A
Jordan (Hashemite Kingdom of) . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Lebanon . . . . .	—	—	—	—	—	—	—	—	—	—	S	—
Libya (Kingdom of) . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Liechtenstein (Principality of) . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Luxembourg . . . . .	—	—	—	—	—	—	—	A	—	—	S	—
Malta . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Morocco (Kingdom of) . . . . .	S	R	S	R	S	A	—	—	—	—	S	A
Monaco . . . . .	S	R	S	R	S	A	—	—	—	—	S	—
Norway . . . . .	S	R	S	R	S	A	—	A	S	A	S	—
Netherlands (Kingdom of the) . . . . .	S	R	S	R	S	A	S	A	—	—	S	A
Poland (People's Republic of) . . . . .	S	R	—	—	—	—	—	—	S	—	S	—
Portugal . . . . .	S	—	S	—	S	—	—	—	—	—	S	A
Portuguese Oversea Provinces . . . . .	—	—	—	—	S	—	—	—	—	—	—	—
Syrian Arab Republic . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
United Arab Republic . . . . .	—	—	—	—	—	—	—	—	—	—	—	—
Federal Republic of Germany . . . . .	—	—	—	—	—	—	S	A	S	A	S	A <sup>6)</sup>
Ukrainian Soviet Socialist Republic . . . . .	S	R	—	—	—	—	—	—	S	A	S	A <sup>5)</sup>
Roumania (Socialist Republic of) . . . . .	S	R	—	—	—	—	—	—	S	A	S	—
United Kingdom of Great Britain and Northern Ireland . . . . .	S	R	S	R	S <sup>4)</sup>	A	—	—	—	—	S	A
Sweden . . . . .	—	—	S	R	S	—	—	—	S	A	S	—
Switzerland (Confederation of) . . . . .	S	R	—	—	—	—	S	A	S	A	S	A
Czechoslovak Socialist Republic . . . . .	S	R	—	—	—	—	—	—	S	A	S	—
Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible . . . . .	—	—	—	—	—	—	—	—	—	—	S	A
Tunisia . . . . .	S	R	S	R	S	A	—	—	—	—	—	—
Turkey . . . . .	—	—	S	—	S	A	—	—	S	—	S	—
Union of Soviet Socialist Republics . . . . .	S	R	—	3)	—	—	—	—	S	A	S	A <sup>5)</sup>
Yugoslavia (Federal Socialist Republic of) . . . . .	S	R	—	—	—	—	—	—	S	—	S	A

\*) Regional Agreement concerning the establishment of an International VHF Radiotelephone Mobile Service for Rhine Navigation (Brussels, 1957).

\*\*) Regional Agreement for the use of frequencies in the bands 68-73 Mc/s and 76-87.5 Mc/s by the broadcasting service on the one hand and by the fixed and mobile services on the other (Geneva, 1960).

<sup>1)</sup> The People's Republic of Bulgaria has given notice that its coast stations use the frequencies assigned to them in the Copenhagen Plan.

<sup>2)</sup> 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.

<sup>3)</sup> The Union of Soviet Socialist Republics has given notice that its coast stations use the frequencies assigned to them in the Copenhagen Plan.

<sup>4)</sup> With the declaration that the signatures are valid also for the Channel Islands and the Isle of Man.

<sup>5)</sup> Considering that, when the plans for the assignment of frequencies to television stations in the 645-960 Mc/s band were established at the Stockholm Conference in 1961, the requirements of the air radionavigation services of the USSR, the Ukrainian SSR and the Bielorussian 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 Bielorussian 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 Bielorussian SSR.

<sup>6)</sup> 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 Mc/s (Annex 2, Chapter 2, of the Agreement), the frequencies 224.25/229.75 Mc/s 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 Mc/s in accordance with Article 5 of the Radio Regulations, Geneva, 1959.

Harmful interference to stations operating in the frequency band 223-235 Mc/s, 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."

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## **Tables V.1 to V.4. Special Agreements**

### **V.1. Special Regional Agreement concerning the use of the 100-104 Mc/s band by the broadcasting service (1962)**

This Agreement was concluded between the following Administrations: Austria, *Italy*, *Switzerland (Confederation of)*, *Yugoslavia (Federal Socialist Republic of)*.

The countries mentioned in italics have approved the Agreement.

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### **V.2. Special Agreement for use of the 582-606 Mc/s band for radionavigation purposes (Brussels, 1962)**

This Agreement was concluded between the following Administrations: Belgium, Denmark, France, Netherlands (Kingdom of the), Federal Republic of Germany, United Kingdom of Great Britain and Northern Ireland and Switzerland (Confederation of).

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**V.3. Special Agreement in connection with the use of VHF and UHF  
in fixed and mobile services in frontier areas  
(Brussels, 1963)**

This Agreement was concluded between the Administrations of Belgium, Netherlands and the Federal Republic of Germany.

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**V.4. Special Agreement concerning the use of frequencies for additional low-power television  
transmitters operating in the high-frequency range (Band IV, 472-582 Mc/s  
and Band V, 582-960 Mc/s) in the frontier areas  
(Karlsruhe, 1966)**

This Agreement was concluded between the following Administrations: Austria, Belgium, France, Italy, Luxembourg, Netherlands (Kingdom of the) and the Federal Republic of Germany.  
*This Agreement was approved without reservation by all these Administrations.*

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ANNEX 2

**BUDGET FOR 1967**

SUMMARY OF ESTIMATED EXPENDITURE IN 1967

EXPENDITURE	Expenditure 1966	Budget 1967	Additional credits 1967	Additional credits under Res. Nos. 505 and 533	Budget 1967 including additional credits
Swiss francs					
<b>I. BUDGET OF THE UNION</b>					
<i>Sect. 1. Administrative Council.</i>	459,475	446,500	—	—	446,500
2. General Secretariat . . .	4,810,547	5,439,100	—77,500	62,900	5,424,500
3. I.F.R.B. . . . .	4,387,548	3,997,700	47,700	47,400	4,092,800
4. C.C.I.R. . . . .	825,869	906,400	5,700	9,100	921,200
5. C.C.I.T.T. . . . .	1,093,332	1,157,100	6,500	10,400	1,174,000
6. Common expenditure . . .	6,684,742	6,646,800	493,400	18,600	7,158,800
	18,261,513	18,593,600	475,800	148,400	19,217,800
Prep. of draft Constitutional Charter . . . . .	—	130,000	—	—	130,000
Seminar. . . . .	18,394	—	30,000	—	30,000
<i>Sect. 7. I.T.U. conf. under No. 208 of the Convention:</i>					
— E.A.R.C. Aeronautical Ser- vice . . . . .	813,863	—	—	—	—
— World Admin. Marit. Ra- dio Conf. . . . .	—	1,050,000	—	—	1,050,000
<i>Sect. 8. C.C.I. meetings under No. 209 of the Convention:</i>					
— C.C.I.R. . . . .	1,602,271	180,000	—	—	180,000
— C.C.I.T.T. . . . .	1,036,628	1,381,000	480,000	—	1,861,000
	21,732,669	21,334,600	985,800	148,400	22,468,800
<i>Sect. 9. Regional confs. under No. 210 of the Convention:</i>					
— African Broadcasting Conf.	394,338	—	—	—	—
Expenditure on fitting out C.C.I.T.T. Laboratory . . .	3,183	20,000	—	—	20,000
Expenditure on maintenance and renewal of simult. interpreta- tion and sound reproduction equipment . . . . .	13,005	15,000	—	—	15,000
	22,143,195	21,369,600	985,800	148,400	22,503,800
Transfer to I.T.U. Reserve Account . . . . .	1,163,395	—	—	—	—
	23,306,590	21,369,600	985,800	148,400	22,503,800
<b>II. TECHNICAL COOPERATION SPECIAL ACCOUNTS BUDGET</b>					
<i>Sect. 11. Tech. Coop. admin. costs . . . . .</i>	1,725,897	1,943,300	34,100	15,230	1,992,630
Carried forward to the following year . . . . .	990,036	—	—	—	—
	2,715,933	1,943,300	34,100	15,230	1,992,630
<b>III. SUPPLEMENTARY PUBLICATIONS BUDGET</b>					
Total expenditure . . . . .	2,938,277	1,911,800	—	—	1,911,800
Excess income . . . . .	10,902	30,000	—	—	30,000
	2,949,179	1,941,800	—	—	1,941,800

# SUMMARY OF ESTIMATED INCOME IN 1967

INCOME	Income 1966	Budget 1967	Additional credits 1967	Additional credits under Res. Nos. 505 and 533	Budget 1967 including additional credits
Swiss francs					
<b>I. BUDGET OF THE UNION</b>					
<i>Sect. 31. Contributions:</i>					
— Contribs. of Members and Associate Members of the Union to exp. for the current year . . . . .	21,723,000	20,325,600	—	—	20,325,600
— Contribs. of private operating agencies and scientific or industrial organizations to expenses of conferences and meetings under Sections 7 and 8:					
— E.A.R.C. Aeronautical Service . . . . .	—	—	—	—	—
— World Admin. Marit. Radio Conf. . . . .	—	—	—	—	—
— C.C.I.R. . . . .	212,000	270,000	—	—	270,000
— C.C.I.T.T. . . . .	326,000	402,500	—	—	402,500
— Staff detached to regional confs. . . . .	40,109	—	—	—	—
— Sundry income . . . . .	94,955	16,500	—	—	16,500
	22,396,064	21,014,600	—	—	21,014,600
<i>Sect. 31. Contribs. of Members and Associate Members of the Union to expenses of regional confs.:</i>					
— African Broadcasting Conf. Withdrawal from C.C.I.T.T. Reserve Account for fitting out C.C.I.T.T. Laboratory. . . . .	394,338	—	—	—	—
Withdrawal from the simult. interpretation equip. renewal fund for the maint. and renewal of simult. interpret. and sound reproduc. equip. . . . .	3,183	20,000	—	—	20,000
	13,005	15,000	—	—	15,000
	22,806,590	21,049,600	—	—	21,049,600
Withdrawal from the I.T.U. Reserve Account . . . . .	500,000	320,000	985,800	148,400	1,454,200
	23,306,590	21,369,600	985,800	148,400	22,503,800
<b>II. TECHNICAL COOPERATION SPECIAL ACCOUNTS BUDGET</b>					
<i>Sect. 32. Contribs. to techn. coop. admin. costs and sums brought forward from previous years . . . . .</i>	2,715,933	1,943,300	34,100	15,230	1,992,630
<b>III. SUPPLEMENTARY PUBLICATIONS BUDGET</b>					
Total income . . . . .	2,949,179	1,941,800	—	—	1,941,800
Excess expenditure . . . . .	—	—	—	—	—
	2,949,179	1,941,800	—	—	1,941,800



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# ANNEX 3

## LIST OF PUBLICATIONS ISSUED BY THE UNION IN 1967

1.	12 Notifications (Nos. 990 to 1001) in three languages		
2.	11 Telegraph and Telephone Division Circulars (Nos. 1439 to 1449) in three languages		
3.	13 Radio Division Circulars (Nos. 873 to 885) in three languages.		
			No. of copies
4.	Supplement No. 2 to the Volume of Resolutions and Decisions of the Administrative Council, 22nd Session 1967 . . . . .	F	600
		E	750
		S	300
5.	Financial Operating Report for 1966 . . . . .	F	450
		E	500
		S	250
6.	Report on the Activities of the Union, 1966 . . . . .	F	600
		E	700
		S	300
7.	Report to the Economic and Social Council on the activities of the Union in 1966.	F	450
		E	700
		S	250
8.	Portrait of E.C. Lenz . . . . .	F	400
		E	400
		S	130
9.	Telecommunication Journal, 12 numbers . . . . .	F	1,550
		E	2,450
		S	650
10.	I.T.U. information folder . . . . .	F	7,000
		E	15,000
		S	3,000
11.	Operational Bulletin, Nos. 13 to 24 . . . . .	F	500
		E	600
		S	150
12.	List of Addresses, 1st edition, Supplements 6 to 8, trilingual . . . . .		1,300
13.	Table of Elementary Rates, Table B, 3rd edition, 1966, trilingual . . . . .		900
14.	Routing table for offices taking part in the Gentex Service, 3rd edition, 1967, trilingual . . . . .		1,000
15.	List of Point-to-Point Radio Telegraph Channels, 1967, trilingual . . . . .		1,350
16.	List of Telegraph Offices, 22nd edition, 1965: Supplements 4 to 7, trilingual . . . . .		20,000
17.	List of international telephone routes, 7th edition, 1967, trilingual . . . . .		1,000

		No. of copies
18.	List of destination indicators for the message retransmission network, 1st edition, 1966, trilingual . . . . .	1,050
19.	General Telegraph Statistics, 1965, trilingual . . . . .	700
20.	General Telephone Statistics, 1965, trilingual. . . . .	760
21.	List of Coast Stations, 3rd edition, 1966, and Supplement 1, trilingual . . . .	30,500
22.	List of Ship Stations, 7th edition, 1966, trilingual. . . . .	21,000
23.	List of Radiodetermination and Special Service Stations, 3rd edition, 1966:	
	Supplement 2 . . . . .	F 2,600 E 19,300
24.	Alphabetical List of call signs of stations used by the maritime mobile service, 3rd edition, 1966:	
	Supplements 3 to 6, multilingual . . . . .	22,400
25.	Alphabetical list of call signs of stations other than amateur stations, experimental stations and stations of the maritime mobile service, 2nd edition, 1965:	
	Supplements 6 to 9, multilingual . . . . .	4,000
26.	General Radio Statistics, 1966, trilingual . . . . .	740
27.	Final Acts of the African LF/MF Broadcasting Conference, Geneva, 1966 . . .	F 500 E 650 S 200
28.	Blue Book, IIIrd Plenary Assembly of the C.C.I.T.T., Geneva, 1964:	
	Volume IV . . . . .	S 300
	Volume VI . . . . .	S 300
	Volume VII . . . . .	S 300
	Volume VIII . . . . .	S 300
29.	Red Book IIIrd Plenary Assembly of the C.C.I.T.T., Geneva, 1964:	
	Volume V — V bis . . . . .	S 300
30.	General Plan for the Development of the International Network in the Region Europe and Mediterranean Basin, 1965-1968 (Paris, 1966), trilingual . . .	1,100
31.	General Plan for the Development of the International Network in the Region Asia and Oceania, 1965-1970 (Melbourne, 1966), trilingual . . . . .	800
32.	General Plan for the Development of the International Network in Africa, 1965-1970 (Addis Ababa, 1967), trilingual . . . . .	850
33.	Documents of the XIth Plenary Assembly of the C.C.I.R., Oslo, 1966:	
	Volume I . . . . .	F 1,200 E 3,500
	Volume II . . . . .	F 1,200 E 3,250
	Volume III . . . . .	F 1,200 E 3,500
	Volume IV, Parts 1 and 2 . . . . .	F 1,200 E 3,250
	Volume V . . . . .	F 1,200 E 3,500

		No. of copies
34.	Manual on high-frequency directional antennae, 1966 . . . . .	F 1,000 S 400
35.	International Frequency List, 3rd edition, 1965 :	
	Preface: Supplement No. 7, trilingual . . . . .	2,030
	Volume I: Supplement No. 7, multilingual . . . . .	1,800
	Volume II: Supplement No. 7, multilingual . . . . .	1,800
	Volume III: Supplement No. 7, multilingual . . . . .	1,750
	Volume IV <i>a</i> ): Supplement No. 7, multilingual . . . . .	1,400
	Volume IV <i>b</i> ): Supplement No. 7, multilingual . . . . .	1,350
	Volume IV <i>c</i> ): Supplement No. 7, multilingual . . . . .	1,200
	Volume IV <i>d</i> ): Supplement No. 7, multilingual . . . . .	1,150
36.	International Frequency List, 4th edition, 1967:	
	Preface and Supplements Nos. 1 and 2, trilingual . . . . .	2,030
	Volume I and Supplements Nos. 1 and 2, multilingual . . . . .	1,900
	Volume II and Supplements Nos. 1 and 2, multilingual . . . . .	1,900
	Volume III and Supplements Nos. 1 and 2, multilingual . . . . .	1,900
	Volume IV <i>a</i> ) and Supplements Nos. 1 and 2, multilingual . . . . .	1,500
	Volume IV <i>b</i> ) and Supplements Nos. 1 and 2, multilingual . . . . .	1,450
	Volume IV <i>c</i> ) and Supplements Nos. 1 and 2, multilingual . . . . .	1,300
	Volume IV <i>d</i> ) and Supplements Nos. 1 and 2, multilingual . . . . .	1,250
37.	List of fixed stations operating international circuits, 3rd edition, 1965:	
	Supplement No. 7, trilingual . . . . .	1,500
38.	List of fixed stations operating international circuits, 4th edition, 1967, and Supplements Nos. 1 and 2, trilingual . . . . .	1,600
39.	List of broadcasting stations operating in bands below 5950 kc/s, 4th edition, 1967, and Supplement No. 1, trilingual . . . . .	1,250
40.	List of space and radioastronomy service stations, 1st edition, 1966, and Supple- ment No. 1, trilingual . . . . .	1,150
41.	I.F.R.B. Weekly Circulars, Parts I, II, III and Special, Nos. 735 to 785, tri- lingual . . . . .	550
42.	I.F.R.B. Weekly Circulars, Part IV, Nos. 735 to 785, trilingual . . . . .	550
43.	Monthly summaries of monitoring information received by the I.F.R.B., Nos. 125 to 136, trilingual . . . . .	550
44.	Summaries of monitoring information received by the I.F.R.B. on the use by broadcasting stations of the exclusive high frequency broadcasting bands, Nos. 16 to 21, trilingual . . . . .	450
45.	Tentative high frequency broadcasting schedules, May 1967, September 1967, November 1967, March 1968, trilingual . . . . .	560
46.	High frequency broadcasting schedules, May 1966, September 1966, tri- lingual . . . . .	550

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## ANNEX 4

### CONFERENCES AND MEETINGS AT WHICH THE UNION WAS REPRESENTED IN 1967

#### A. UNITED NATIONS

1. 35th Session of the Consultative Committee on Public Information, New York, 6 — 10 February.
2. 8th Session of the Economic Commission for Africa, Lagos, 13 — 25 February.
3. Administrative Committee on Coordination Sub-Committee on Education and Training, Geneva, 14 — 17 February.
4. 28th Session of the Consultative Committee on Administrative Questions, New York, 1 — 14 March.
5. 4th Session of the A.C.C. Inter-Agency Working Group on Programmes and Activities Relating to the Peaceful Uses of Outer Space, Geneva, 9 — 10 March.
6. 23rd Session of the Economic Commission for Asia and the Far East, Tokyo, 3 — 17 April.
7. 43rd Session of the Administrative Committee on Coordination, Geneva, 5 — 6 April.
8. Economic Commission for Asia and the Far East: 3rd Session of the Working Party of Telecommunication Experts, Bangkok, 7 — 12 June.
9. 6th Session of the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space, Geneva, June.
10. International Civil Service Advisory Board, Geneva, 28 June — 12 July.
11. 43rd Session of the Economic and Social Council, Geneva, July.
12. 5th Session of the Scientific and Technical Sub-Committee of the Committee on the Peaceful Uses of Outer Space, New York, August.
13. Conference on the Standardization of Geographical Names, Geneva, 4 — 22 September.
14. 22nd Session of the General Assembly, New York, September.
15. United Nations Joint Staff Pension Fund Standing Committee, New York, 10 — 11 October.
16. 44th Session of the Administrative Committee on Coordination, New York, 18 — 19 October.
17. Economic Commission for Africa: 5th Session of the Conference of African Statisticians, Addis Ababa, 30 October — 10 November.

#### B. SPECIALIZED AGENCIES

##### *United Nations Educational, Scientific and Cultural Organization (UNESCO)*

18. Meeting of the Advisory Panel on Space Communications, Paris, 23 March.
19. 5th Session of the Intergovernmental Oceanographic Commission, Paris, 19 — 28 October.

20. Meeting of Governmental Experts to Review the Application of the Agreements on the Importation of Educational, Scientific and Cultural Materials, Geneva, 20 — 29 November.
21. Meeting of the Advisory Panel on Space Communications, Paris, 13 — 15 December.

*World Meteorological Organization (W.M.O.)*

22. 5th Session of the World Meteorological Congress, Geneva, 3 — 28 April.
23. Informal Planning Meeting on Maritime Telecommunications, Geneva, 11 — 15 September.
24. 7th Session of the Working Group on Meteorological Transmissions of W.M.O. Regional Association VI (Europe), Geneva, 25 — 31 October.
25. 5th Session of the Working Group on Meteorological Telecommunications of Regional Association I (Africa), Geneva, 1 — 8 December.

*Inter-Governmental Maritime Consultative Organization (I.M.C.O.)*

26. 15th Session of the Maritime Safety Committee, London, 27 February — 10 March.
27. 3rd Session of the Sub-Committee on Radiocommunications, London, 5 — 9 June.

*International Civil Aviation Organization (I.C.A.O.)*

28. 3rd Regional Air Navigation Conference South America/South Atlantic, Buenos Aires, September.

C. INTERNATIONAL ORGANIZATIONS

*International Radio-Maritime Committee (C.I.R.M.)*

29. 41st Meeting of the Technical Committee, Naples, 13 — 15 June.
30. 42nd Meeting of the Technical Committee, London, 14 — 15 December.

*Danube Commission*

31. Meeting of Experts of the Countries of the Danube on Radiocommunication Questions, Budapest, March.

*International Standardization Organization (I.S.O.)*

32. Meeting of the Sub-Committee "Character Sets and Coding" of Committee 97, Paris 13 — 16 March.

*International Radio and Television Organization (O.I.R.T.)*

33. Meeting of Study Group III (Television) of the Technical Commission, Warsaw, 17 — 26 January.
34. XIXth Session of the Technical Commission, Bucharest, 3 — 11 October.

*International Special Committee on Radio Interference (C.I.S.P.R.)*

- 35. Meetings of Working Groups and the Steering Committee, Oslo, 3 — 14 April.
- 36. Meeting of the Plenary Assembly, Stresa, 26 August — 7 September.

*European Broadcasting Union (E.B.U.)*

- 37. 19th Meeting of the Technical Committee, Amsterdam, 19 — 21 April.

*French Institute of Electrical and Electronic Engineers*

- 38. International Conference on Electronics and Space, Paris, 10 — 15 April.

*Centre d'Etudes et de Recherches sur les Organisations  
et les Relations Internationales*

- 39. Colloquium on International Organizations and Relations, Nice, 6 — 8 April.

*International Scientific Radio Union (U.R.S.I.)*

- 40. Meeting of Commission I, Brussels, 19 — 21 September.

*Nachrichtentechnische Gesellschaft (N.T.G.)*

- 41. Meetings of Committees 14 “ Propagation of Waves ” and 17 “ Electroacoustics ”, Düsseldorf, 28 — 30 November.

*European Conference of Posts and Telecommunications (C.E.P.T.)*

- 42. Vth Ordinary Session of the Plenary Assembly, Rome, 10 — 20 April.

*International Council of Scientific Unions (I.C.S.U.)*

- 43. Meeting of the Inter-Union Commission on Frequency Allocations for Radio Astronomy and Space Science, Washington, 5 — 9 June.

*International Astronomical Union (I.A.U.)*

- 44. Meeting of the General Assembly, Prague, 22 — 31 August.



*International Electrotechnical Commission (I.E.C.)*

- 45. Meeting of the Sub-Committee 12A/Working Group 4, Turin, 14 — 17 March.
- 46. Meeting of Working Group 2, Baden, 22 — 25 May.
- 47. XXXIInd General Meeting, Prague, 11 — 25 July.

*British Council of the European Movement*

- 48. Conference on European Cooperation in Telecommunications, London, 15 — 16 June.

*Business International*

- 49. Round Table, Geneva, 10 — 14 July.

*Ministry of Foreign Affairs of Malaysia*

- 50. Meeting of Senior Officials of South East Asian Countries on Transport and Communications, Kuala Lumpur, 4 — 9 September.

*International Union of Geodesy and Geophysics*

- 51. 14th General Assembly, St. Gall, 25 September — 7 October.

*Arab Telecommunication Union*

- 52. 9th Congress of the Arab Telecommunication Union, Rabat, 2 — 18 September.

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*Note:* Invitations were received to a considerable number of other meetings, the agenda of which did not, in the opinion of the Coordination Committee, justify I.T.U. representation.

## ANNEX 5

### **TECHNICAL ASSISTANCE UNDER I.T.U. AUSPICES IN 1967**

TABLE 1

## EXPERTS ENGAGED IN I.T.U. TECHNICAL ASSISTANCE PROGRAMME DURING 1967

(in the alphabetical order of the official French names of the countries)

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
1. AFRICA				
Algeria (Special Fund)	Albert L. Claveyrolas (France)	Project Manager	9.12.1967	Assisting the Ministry of Communications to establish a "National School for Telecommunication Studies" in which training courses are provided for medium and higher level technicians.
	Wieslaw Fijalkowski (Poland)	Project Manager	25. 4.1964 (31. 1.1968)	
	Robert Béchet (France)	Instructor in transmission	9. 9.1965	
	Serge Bégaud (France)	Instructor in automatic telephony	2. 6.1965	
	Abdelhak Benkirane (Morocco)	Instructor in radiocommunications	1. 9.1965 31. 8.1967	
	Paul Chatard (France)	Instructor in VHF and microwaveradiolinks	9. 9.1965	
	Raymond Chollet (France)	Instructor in telegraphy	22. 9.1966	
	Joseph Fabijanski (Poland)	Instructor in transmission	28. 9.1966 16. 8.1967	
	Jean-François Gross (Switzerland)	Instructor in electricity and electronics	22. 9.1966	
Central African Republic (Technical Assistance)	Henri Cocoz (France)	Instructor on line communications	9.11.1965	Teaches cable jointing and installation of overhead lines. Basic instruction in telephony.
Congo (Kinshasa) (Technical Assistance)	Jaques Crettol (Switzerland)	Organization and administration expert	31. 7.1966 31. 8.1967	Assisted the Secretary-General and the Technical Director of the P.N.T. Department to reorganize national and international telephone operations.
	Gabriel Tedros (Ethiopia)	Chief of the Mission	30. 6.1964 31.12.1967	Was Chief of Mission, in charge of all I.T.U. activities in the Congo and acted as chief adviser to the Government in telecommunication matters.
(Funds-in-Trust)	Gaston Auneveux (France)	Radiocommunications expert	29.12.1966 28.12.1967	Studied traffic questions and revised the organization of the operations department. Established and inspected the work of the Frequency and Management Bureau and the monitoring station.
	Roger Beroldy (France)	Telegraph and telephone tariff expert	16. 2.1967 31.12.1967	Assisted the Director of Operations to prepare traffic procedures and documentation and made arrangements for the opening of telecommunication circuits as required.
	Giovanni Cali (Italy)	Telephone exchange technician	4. 5.1966	Studies problems connected with the international and automatic telephone exchange projects and assists the Chief of Telephone Planning in his routine duties.
	Gabre M. Gabre-Selassie (Ethiopia)	Radio maintenance expert	5. 2.1965 30. 9.1967	Acted as adviser to the Director of Technical Services, performed planning work and prepared specifications and tender documents for radio equipment. Participated in an advisory capacity in the work of the P.T.T. Department.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Congo (Kinshasa) (cont.) (Funds-in-Trust) (cont.)	Aurel Hostens (Belgium)	Automatic telegraphy expert	1. 1.1966	Advises the Assistant Director in charge of telegraphy in the planning and operation of telex, teleprinter and telegraph operations. Supervises installations of telegraph equipment and performs planning work in this field.
	Amrit L. Kumar (India)	Radio maintenance expert	1. 1.1962	Performs installation duties on radio equipment in the receiving and transmitting stations in Kinshasa.
	Jules Marquet (Belgium)	Radio maintenance expert	15. 1.1963	Performs installation and maintenance work on radio equipment; trains local staff in the receiving and transmitting stations in Kinshasa, and also local technicians.
	Terence A. A. Marshall (United Kingdom)	Technical adviser to the Regional Director of Telecommunications, Lubumbashi	7. 8.1967	Acts as technical adviser to the Regional Director of Telecommunications in Lubumbashi.
	Charles Maurer (Switzerland)	Automatic telephony expert	14. 7.1964 31.12.1967	Maintained automatic telephony installations in Kinshasa and trained local technicians.
	Jean Piloyan (France)	Radio maintenance expert	10. 5.1965	Was responsible for maintenance of radio equipment in Bukawu until local difficulties necessitated his transfer to Kinshasa. Carries out maintenance duties at the radio transmitting station in Kinshasa.
	Etienne Rey (France)	Cable expert	27. 9.1963	Undertook the responsibility for the maintenance of local cable networks in Kinshasa and studies projects for new cable networks.

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Congo (Kinshasa) (cont.) (Funds-in-Trust) (cont.)	Fritz G. Schmid (Switzerland)	Radio maintenance expert	19. 7.1965 31.12.1967	Performed maintenance, testing and training duties in the radio laboratory and supervised the repair of test instruments and the construction of specialised items of radio equipment.
	Roland Scott-Jackson (United Kingdom)	English teacher	1. 1.1966 30. 6.1967	Gave English language instruction to pupils in the National School of Telecommunications.
	Gottfried W. Wollboldt (F.R. of Germany)	Technical adviser to Regional Director of Telecommunications, Luluabourg	5. 5.1967	Acts as technical adviser to the Regional Director of Telecommunications in Luluabourg and supervises the establishment of telecommunications facilities in adjacent towns.
(Special Fund)	Donald V. Kyle (Canada)	Project Manager	12. 1.1967	Assisting the Ministry of Communications to establish a National Telecommunication School for the training of all classes of telecommunication personnel.
	Honorato Garcia (Spain)	Instructor in radio	16.11.1967	
	Jacques Gavan (Israel)	Instructor in radio-communications	1. 1.1966 7. 9.1967	
	Louis J. Le Saos (France)	Instructor in electronics	16. 3.1967	
	Pier L. Luppi (Italy)	Instructor in transmission	27. 2.1967	
	Bernard Pain (France)	Instructor in telegraphy	5. 3.1967	
	Ellioth A. Pierre (Haiti)	Instructor in telephony	1. 1.1966	

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Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Dahomey (Technical Assistance)	Jean Monfort (France)	Expert in vocational training in overhead and underground line communications	15. 3.1966 14. 5.1967	Carried out training courses in Cotonou at the National School of Telecommunications and trained technicians in the installation and maintenance of underground cable and aerial lines. Undertook a special mission to examine telecommunication training needs in several countries of West Africa.
Gambia (Technical Assistance)	Cecil A. Wiltshire (Guyana)	Telecommunication training expert	14. 8.1965	Trains local technicians in the operation and maintenance of junction radio and automatic telephony equipment.
Ghana (Technical Assistance)	Stuart A. Downing (United Kingdom)	OPAS Officer (Writing of telecommunication maintenance instructions)	5. 6.1967	Performs operational and executive duties in the Ghana Public Service.
	Carl G. Dragstedt (Sweden)	Telecommunication Engineer (OPAS)	1. 5.1967	Performs operational and executive duties in the Ghana Public Service.
	Ronald L. Howe (United Kingdom)	Tariff and traffic adviser, telephones	9. 9.1965	Advises the Ghana Government on the installation planning of subscriber trunk dialling services and related traffic problems.
(Special Fund)	Derk E. Luten (Netherlands)	Project Manager	8.10.1964	

Ghana ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	Hermannus Brunnekreef (Netherlands)	Instructor in telephony	25. 2.1965	Assisting the Department of Posts and Telecommunications to further develop its Telecommunication Engineering School in which are trained all grades of telecommunication technical staff. The school has actually existed since 1949.
	Jan Elshout (Netherlands)	Associate expert — training in radio	11. 7.1967	
	Bart Graaff (Netherlands)	Instructor in HF radio, VHF and microwave	20. 3.1965 11. 7.1967	
	Ernst P. Heutelbach (F.R. of Germany)	Instructor in telegraphy	1. 8.1967	
	Johan A.J. Schneider (Netherlands)	Instructor in transmission and carrier	17.12.1965	
	Alex H. van Assum (Netherlands)	Instructor in HF radio, VHF and microwave	25. 6.1967	
	Christianus P. van Vucht (Netherlands)	Instructor in lines and cables	1. 4.1965	
Liberia (Technical Assistance)	Dieter E. Köhn (F.R. of Germany)	Microwave technician	6.12.1965 5.12.1967	Carried out maintenance of Liberian microwave systems and made recommendations for a suitable maintenance organization.
	Arasurampet R. Ramathan (India)	Telecommunication training expert	30. 6.1964	Advises the Government on training in the telecommunications field and gives instruction in basic telecommunication theory to pupils at the telecommunications school.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Liberia ( <i>cont.</i> ) (Technical Assistance) ( <i>cont.</i> )	Sean E. Rohan (Ireland)	Telephone maintenance adviser	12. 7.1966 11. 7.1967	Advised the Government on the maintenance and organization of the automatic telephone system and drew up procedures for its operation.
Libya (Technical Assistance)  (Funds-in-Trust)	Michelangelo Correnti (Italy)	Expert for the establishment of a telephone and telegraph traffic section (OPAS)	23.10.1967	Performs operational and executive duties as an official in the Libyan Government Service.
	Guido Foffani (Italy)	Planning engineer — telephony (OPAS)	1.11.1966 30. 4.1967	Performs operational and executive duties as an official in the Libyan Government Service.
	Nefissa Sehili (Mrs.) (Tunisia)	Telephone operator training	5.11.1965 5.11.1967	Trained telephone operators at main centres throughout Libya and established procedures for national and international telephone operations.
	Alan Irwin (United Kingdom)	Planning engineer, long distance circuits (OPAS)	8.11.1965	Performs operational and executive duties as an official in the Libyan Government Service.
	Robert Lehmann (F.R. of Germany)	Planning engineer in cable networks (OPAS)	14. 2.1966	Performs operational and executive duties as an official in the Libyan Government Service.
	Joseph Rodgers (United Kingdom)	Planning engineer Switching (OPAS)	6.12.1965	Performs operational and executive duties as an official in the Libyan Government Service.

Madagascar (Special Fund)	Louis Léon (France)	Project Manager	1. 7.1964	Assisting the Department of Posts, Telegraphs and Telephones to establish a National Institute of Telecommunications and Posts and in particular to develop the training of all grades of telecommunication personnel.
	Michel Branle (France)	Instructor in telephony	23. 4.1965	
	Jean Félix (France)	Instructor in telegraphy	19. 3.1965	
	Joseph A. Logan (Canada)	Instructor in meteorological electronics	9. 6.1967 13.12.1967	
	Jean J. Pinatel (France)	Instructor in telecommunication operations	3. 1.1967	
	Lucien Pourreau (France)	Instructor in long distance lines	4. 3.1966	
Mauritius (Technical Assistance)	Kamalakar D. Vaidya (India)	Telecommunication adviser	4. 1.1967	Acts as adviser to the Minister of Communications on all telecommunication matters in Mauritius, particularly in respect of telephone network planning.
Nigeria (Technical Assistance)	David R. Thomas (United Kingdom)	Telecommunication officer (traffic) (OPAS)	1. 6.1966	Trains traffic officers in the telecommunications school in Kaduna (Northern Nigeria)
United Arab Republic (Technical Assistance)	George W. Adams (United Kingdom)	Expert in commercial relations	19. 4.1966 18. 1.1967	Studied and reported to the Government on the organization of commercial procedures related to the introduction of a computerised accounting system.
Somali Republic (Technical Assistance)	Boris Sizov (U.S.S.R.)	Telecommunication adviser	11.12.1964 31.12.1967	Advised the Government on the planning of telephone networks and overhauled small telephone exchanges and cable networks in Mogadiscio.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Rwanda (Technical Assistance)	Joan Alex Blokland (Netherlands)	Training expert	3.12.1966	Trains technicians in the installation, maintenance and operation of small automatic telephony exchanges and teaches basic telecommunication theory in the Telecommunications School.
Sierra Leone (Technical Assistance)	Kenneth A. Lees (United Kingdom)	Telecommunication instructor (OPAS)	26. 4.1964	Performs operational and executive duties as part of the Sierra Leone Government Service.
Sudan (Technical Assistance)	Frank G. E. Ievers (United Kingdom)	Telecommunication adviser	17.10.1966 16. 2.1967	Prepared a report on the reorganization of the Telecommunication Administration for consideration by the Sudan Government.
(Special Fund)	P. S. M. Sundaram (India)	Project Manager	10.12.1962	Assisting the Department of Posts and Telegraphs to establish a Telecommunication Training Centre for all classes of telecommunication personnel.
	P. R. Desikachar (India)	Instructor in radiocommunications	14. 2.1966	
	Mervyn A. Gale (United Kingdom)	Instructor in telegraphy	8.12.1963	
	Leonard S. Scammell (United Kingdom)	Instructor in automatic telephony	5.8.1963	
Chad (Technical Assistance)	Albert Bouchet (France)	Professor in general radio techniques	25.4.1964	Teaches classes of supervisory technicians the theory of radio, electricity and electronics.

Chad ( <i>cont.</i> ) (Technical Assistance) ( <i>cont.</i> )	Yves Heurtin (France)	Instructor in practical radio	26.10.1964	Devises and carries out experiments in the radio laboratory. Gives practical workshop instruction.
Africa (Regional Project) (Technical Assistance)	Dennis Breary (United Kingdom)	Regional Telecommunication adviser	29. 3.1966 30. 6.1967	Performed duties of an advisory nature in Africa on the instructions of I.T.U. Headquarters.
	Masafumi Kinoshita (Japan)	Regional Telecommunication adviser	28. 3.1966	Acts as Chief of the I.T.U. Mission with the E.C.A. in Addis Ababa and supervises the work of other regional telecommunication advisers.
	Stanislas Sierakowski (Belgium)	Regional Telecommunication adviser	1. 9.1966	Performs duties of an advisory nature in Africa on the instructions of I.T.U. Headquarters.
	Frank Norman (Australia)	Project Manager (Ethiopia)	1. 7.1965	Assisting the Imperial Board of Telecommunications of Ethiopia and the Ministry of Posts and Telecommunications of the Ivory Coast to establish an H.F. radio link between Addis Ababa and Abidjan with associated telephone and telegraph terminal and telex switching equipment, and to train the personnel needed for its operation and maintenance.
(Special Fund)	Hisao Abe (Japan)	Automatic telegraphy expert (Ethiopia)	1.10.1967	
	Charles Guilhou (France)	Expert in cable laying (Ivory Coast)	14. 9.1967	
	Norman E. Marshall (United Kingdom)	Radiocommunication expert (Ethiopia)	19. 3.1967	

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Africa (Regional Project) ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	Bruno E. Meixner (F.R. of Germany) Maurice R. Ravarit (France)	Automatic telegraphy expert (Ethiopia) Automatic telegraphy expert (Ivory Coast)	15. 3.1967 2. 5.1967	
2. AMERICAS				
Argentina (Technical Assistance)	Philip S. Allen (United States)	Expert on maintenance of long distance networks and equipment	16.11.1967	Reviewing the organization of the maintenance procedures for long distance networks (coaxial cables — microwave). Also advising on further requirements for maintenance of switching centres.
Bolivia (Technical Assistance)	Konrad W. Bernath (Switzerland)	Expert on television systems	8. 5.1967 7. 7.1967 and 5. 9.1967 28. 9.1967	Advised on the selection of technical personnel and financial aspects for the introduction of television in Bolivia. Reviewed technical specifications for TV equipment. Assisted on technical examination of tenders.
	José I. Caicoya de Rato (Spain)	Telecommunication adviser	28. 6.1967	Advising on general telecommunication problems. Mainly concerned with the organization of ENTEL and its relationship with the national private companies. Assisting in planning of circuits with neighbouring countries.

Brazil (Technical Assistance)	Raymond Métayer (France)	Telecommunication systems planning expert	4. 1.1967 (3. 1.1968)	Advised SUDENE on telecommunication problems, including training. Assisted in the assessment of training needs in the North-East area of Brazil.
Chile (Technical Assistance)	Lothar Diehl (Fed. Rep. Germany)	Expert in switching and automatic transmission in the telex service.	31. 7.1967	Assisting in and supervising the installation of a group of telex centres. Elaborating the second phase of the telex network extension plan.
Colombia (Special Fund)	Ingemar Norberg (Sweden) José L. Colon (United States)	Project Manager  Instructor in propagation	25. 9.1965  13. 7.1966	1) Assisting the Empresa Nacional de Telecomunicaciones to develop further its Technological Institute for Electronics and Communications for the training of telecommunication technicians. 2) Assisting the University of Cauca to: a) develop further its Faculty of Electronic and Telecommunication Engineering; and b) establish a Centre of Applied Research in Electronics and Telecommunications.
	José E. Cordero (United States)	Instructor in transmission and carrier equipment	20.11.1965	
	Joel J. Ewen (United States)	Instructor in switching	3. 2.1966 1. 3.1967	



Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Colombia ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	John A. Mossop (United States)	Instructor in telephony	26.11.1965	Assisted in preparation of technical specifications for regional microwave network. Assisted Costa Rica, Nicaragua and Panama in the solution of specific transmission problems of their national networks. Attended COMTELCA meetings.
	Artème Nicolazzi (France)	Instructor in transmission and associated equipment	1. 4.1966	
	Hector Rivera (United States)	Instructor in telegraphy	3. 3.1967	
Costa Rica (Technical Assistance)	Christopher McGrane <sup>1)</sup> (Ireland)	Microwave expert	4. 6.1965	
			31.12.1967	
Dominican Republic (Technical Assistance)	Benjamin Brok <sup>1)</sup> (United States)	Expert in telegraph and telephone exchange equipment	13. 2.1964	Supplying assistance to Dominican Republic, Surinam, Barbados, Dominica and Antigua in the modernization and expansion of switching centres.
El Salvador (Technical Assistance)	Alexander B. MacLennan <sup>1)</sup> (United Kingdom)	Expert in microwave transmission systems	3. 2.1964	Coordinator of the team of I.T.U. experts in Central America. Assisting COMTELCA and Guatemala, San Salvador and Honduras in the field of transmission. Adviser to the Coordinator of CITEL for Central America.

Ecuador (Technical Assistance)	Lothar Diehl (Fed. Rep. Germany)	Expert in training	1.10.1966 17. 3.1967	Gave courses on operation and maintenance of equipment for automatic error correction in radio telegraphy. Also made a survey of the existing telegraph facilities and recommended some improvements in the telex service.
Guatemala (Technical Assistance)	Hirokazu Shimada <sup>1)</sup> (Japan)	Expert in telegraph and telephone exchange equipment	14.12.1967	Assisting COMTELCA in preparing technical specifications for the switching equipment for the Central American microwave network. Also assisting Central American countries in specific switching problems.
Guyana (Technical Assistance)	John H. Wagstaff (United Kingdom)	General Manager of the Telecommunication Corporation (OPAS)	8. 6.1965	Assuming the tasks of General Director of the Telecommunication Administration of Guyana, recently reorganized as a Corporation.
Honduras (Technical Assistance)	Lars E. G. Gustafsson <sup>1)</sup> (Sweden)	Expert in organization and operation of telecommunication services and tariffs	2.10.1967	Assisting COMTELCA in studying a tariff system for the new Central American network. Also assisting Central American countries in the field of national tariffs and administrative reorganization.
Jamaica (Technical Assistance)	Patrick J. O'Sullivan (Ireland)	Senior lecturer, Telecommunication Engineering (OPAS)	7. 8.1967	Giving telecommunication courses at the National College of Sciences and Arts at Kingston.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Nicaragua (Technical Assistance)	Friedrich Thoms <sup>1)</sup> (Fed. Rep. Germany)	Transmission expert	9.11.1967	Assisting COMTELCA in the field of microwave transmission. Also assisting Costa Rica, Nicaragua and Panama in solving specific transmission problems concerning their national networks. Has replaced Mr. McGrane.
Paraguay (Technical Assistance)	Horst Schaetzke (Fed. Rep. Germany)	Automatic telephone equipment expert	7.11.1966	Assisting in the installation of new switching equipment. Undertaking a complete reorganization of maintenance procedures. Also training in maintenance.
(Special Fund)	Eberhard D. Schmidt (Fed. Rep. Germany) Herbert E. Faenrich (Fed. Rep. Germany)	Project Manager Telegraphy expert	20. 1.1965 27. 1.1967 4.10.1965 3. 1.1967	Assisting the Administración Nacional de Telecomunicaciones to prepare a long-term development plan for the national telecommunication network.
St. Kitts (Technical Assistance)	Roy N. Chisholm (Canada)	Telephone line plant OPAS officer	11. 2.1967	Supervising installation of a new telephone network in the island.
Trinidad (Technical Assistance)	Johannes Marsman <sup>2)</sup> (Netherlands)	Expert in organization and administration	13. 1.1966	Assisting all Caribbean countries and territories in the field of tariff and administration. Redrafting telecommunication laws and reviewing legal aspects of concessions to private operating companies. Study of training problems.

Uruguay (Technical Assistance)	Juan A. Autelli (Argentina)	Expert in telecommunications policy	15.11.1965 31.12.1967	Assisted the authorities of CIDE in reorganization studies of the telecommunications in the country. Advised on the creation and the structure of a Ministry of Posts and Telecommunications. Prepared a plan for the integration of telecommunication services.
Venezuela (Funds-in-Trust)	James S. Harrington (Australia)	Traffic engineer	6.10.1967	Member of the Australian mission in charge of traffic problems. Advises on the establishment of basic principles of traffic engineering.
	Raymond W. Lawry (Australia)	Open wire expert	22. 9.1966 5.10.1967	Member of the Australian mission. In addition to his tasks as adviser on open wire systems, Mr. Lawry acted as Resident Coordinator of the mission.
	William R. M. Pryde (Australia)	Adviser in switching practices and maintenance	13. 9.1967	Member of the Australian mission in charge of switching and maintenance practices of local and long distance telephone equipment.
(Special Fund)	Jan Deketh (Netherlands)	Project Manager	1. 1.1964	Assisting the Ministry of Communications to establish a Telecommunication Training Centre, initially for high level technicians, but ultimately for all classes of telecommunication personnel.
	Jorge Mareggiani (Argentina)	Instructor in electrical measurements and power equipment	7. 9.1964	
	Claude Moussac (France)	Instructor in theory and practice of transmission	16. 4.1966	

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Venezuela ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	Oscar G. Platter (Italy)	Instructor in telegraphy	11. 3.1966	
	Humberto Ruiz (Peru)	Instructor in radio equipment and radio systems	8. 9.1964	
	Kaare Welle (Norway)	Instructor in telephone switching equipment and traffic	14. 6.1967	
	Norman Wilson (Canada)	Instructor in external plant	26.11.1966 25.11.1967	
Latin America (Regional Project) (Technical Assistance)	Caesar F. Fiore (United States)	Expert in telecommunications	25. 3.1962 31. 5.1967	Regional expert for Latin America. In charge of the coordination of all I.T.U. technical assistance activities in Central America and the Caribbean.
	Irwin S. Henderson (Canada)	Expert in switching, numbering and signalling attached to CITEL	4.10.1967	Regional expert, temporarily attached to the Inter-American Development Bank (IDB) in Washington to assist in the study of a standardized signalling system for the Inter-American Telecommunication Network.

- 1) On request, assisting other Central American countries.  
2) On request, assisting other countries in the Caribbean Area.

3. ASIA AND THE FAR EAST				
Afghanistan (Technical Assistance)	Alfred K. Højbjerg (Denmark)	Expert on telegraph terminal equipment and teleprinters	10. 3.1966 31.12.1967	Advised on the operation and maintenance of teleprinters.
	Bernward Kupitz (Fed. Rep. of Germany)	Carrier and line transmission expert	27. 7.1967	Assisting in the installation of new carrier and line transmission equipment and putting into operation of new routes.
	Hermann Sauermilch (Fed. Rep. of Germany)	Telecommunication adviser	8. 9.1958	Assisting the P.T.T. in various planning matters and giving advice in different fields.
(Special Fund)	Anatoli J. Udin (U.S.S.R.)	Project Manager	13. 4.1965	Assisting the Ministry of Communications to establish a Telecommunication Training Centre for maintenance technicians.
	Roland Carnefur (Sweden)	Instructor in transmission and carrier systems	1.10.1967	
	Joseph Kennedy (Ireland)	Instructor in telephony	31. 8.1965	
	Eckhard Pense (Fed. Rep. of Germany)	Instructor in telegraphy	15. 5.1967	
	Bjorn Sandnes (Norway)	Instructor in transmission and carrier systems	28. 8.1966 27.10.1967	
	Kurt Scherrer (Switzerland)	Instructor in radio	1. 8.1965	
	Konrad Thiesemann (Fed. Rep. of Germany)	Instructor in outside plant	27. 3.1966	

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Saudi Arabia (Technical Assistance)	Natarajan Ganapathy (India)	Microwave expert	1.11.1966	Advising on the microwave project to interconnect all main towns of Saudi Arabia.
	Abdul Khaliq (Pakistan)	Expert on telephone exchanges	1. 1.1964 30. 6.1967	Advised on installation and operation of new telephone exchanges.
	Mukkavalli L. Sastry (India)	Broadcasting adviser	5. 2.1965	Advising on all broadcasting matters, especially on the planning and installation of high power long-wave and short-wave transmitters.
Korea (Special Fund)	Syed Abdul Sathar (Pakistan)	Telecommunication programmer	9.11.1963	Advising and assisting on long-term planning for the whole country.
	Louis L. Thomas (United States)	Project Manager	10. 2.1963	Assisting the Ministry of Communications to establish a Telecommunication Training Centre for all grades of telecommunication technical staff.
	Klaus Deutrich (Fed. Rep. of Germany)	Instructor in automatic telephony	3. 1.1964 2. 1.1967	
	Erich Ehricke (Fed. Rep. of Germany)	Instructor in automatic telephony	16. 3.1967	
	Amos L. O'Donnell (Australia)	Instructor in VHF and microwave	14.11.1963 13.11.1967	
	John W. Willmot (United Kingdom)	Instructor in telegraphy	4. 5.1964	

India (Special Fund)	Albert L. Horley (United States)	Chief training expert in satellite communication earth station equipment and satellite communication technology	19. 9.1967	Assisting the Atomic Energy Department of the Government of India to establish a training and experimental station for satellite communications.
	Karl E. Eriksson (Sweden)	Instructor in antennae and associated tracking equipment	27. 9.1967	
	Philip A. Rubin (United States)	Satellite communication expert	2. 7.1967 19. 7.1967	
Iran (Technical Assistance)	Fumio Kagawa (Japan)	Expert on switching and transmission techniques	31.12.1966	Mainly concerned with training and establishment of the syllabus for various courses.
	Michel G. Montmaneix (France)	Expert on telecommunication training	4. 6.1967 3. 9.1967	Assisted the P.T.T. in the preparation of a Special Fund request for a training centre.
Iraq (Technical Assistance)	René Delort (United States)	Long distance carrier telephony and underground cables expert	27. 7.1965 30. 6.1967	Established a long-term development plan for trunk lines for Iraq.
	Brian F. Crutcher (Australia)	Instructor in outside plant; Project Manager	27. 4.1964 30. 9.1965 1.10.1965	Assisting the Ministry of Communications to establish a Telecommunication Training Centre to provide courses for all classes of telecommunication personnel.
	Johan F. Bos (Netherlands)	Associate expert — General Telecommunications	30. 1.1967	

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Iraq (cont.) (Special Fund) (cont.)	Kjell Haug (Norway)	Instructor in telegraphy	1. 6.1966	
	David Holland (United Kingdom)	Instructor in outside plant	31. 5.1966	
	John B. King (United Kingdom)	Instructor in traffic	15. 6.1964	
	Joseph M. Meehan (Ireland)	Instructor in revenue, accounting and stores	4. 8.1965 31.12.1967	
	Takuya Nagasawa (Japan)	Instructor in transmission and carrier	13. 7.1965	
	Karl-Heinz Pophal (Fed. Rep. Germany)	Instructor in radio	1. 8.1966	
	Eivind Rønnestad (Norway)	General telecommunication engineering expert	3. 1.1967	
	Nagnath T. Taskar (India)	Instructor in telephone switching systems	1. 5.1966	
Israel (Technical Assistance)	Veikko A. Johansson (Finland)	Transmission expert	16. 4.1967 22.10.1967	Advised on transmission matters and the improvement of transmission techniques for the trunk network in Israel.
Jordan (Technical Assistance)	Petr P. Bazhan (U.S.S.R.)	Telephone cable network and line transmission expert	10. 1.1966	Advising on planning of new lines, upgrading of existing lines and maintenance procedures.
	Mohd. S. K. Durrani (Pakistan)	Radiocommunication operation expert	31. 8.1966	Advising on operational procedures for radio service.

Jordan (cont.) (Technical Assistance) (cont.)	Ernst Hondong (Fed. Rep. Germany)	Radio and carrier network expert	30.10.1965	Advising and assisting on improving radio receiving and transmitting stations.
	Subbiah Sankara Raman (India)	Telephone and telex expert	7.12.1965	Advising on general planning of telephone and telex network. Establishing operational procedures.
Kuwait (Funds-in-Trust)	Austin F. Burke (Ireland)	Police Telecommunication Planning Engineer (OPAS)	6. 1.1967	Planning of a police radio network.
	Norio Numata (Japan)	Police Radiocommunication Maintenance Engineer (OPAS)	18. 2.1967 3. 6.1967	No activity. Post was withdrawn by Kuwait.
	Shaikh A. Raheem (Pakistan)	Senior Radiocommunication Engineer (OPAS)	2.11.1966	Responsible for all matters concerning radio circuits.
	Chaudhry M. Sadiq (Pakistan)	Senior Telecommunication Engineer (Telephone) (OPAS)	23. 7.1967	Responsible for all telephone matters.
	Shawkat S. Sawwaf (Syria)	Telecommunication adviser	19. 7.1967	Advising and assisting on various telecommunication matters as general adviser.
	M.M. Siddiqi (Pakistan)	Expert in Stores Organization (Purchasing and Supplies Officer)	19. 7.1967	Advising on and establishing new stores organization and procedures.
	Dennis Smith (United Kingdom)	Telecommunication adviser	5. 9.1966 4. 3.1967	Advised and assisted on various telecommunication matters as general adviser.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Kuwait ( <i>cont.</i> ) (Funds-in-Trust) ( <i>cont.</i> )	Leonid Vakhtanov (U.S.S.R.)	Expert in establishment of a training centre in maintenance, repair and installation of telecommunication equipment	18. 7.1965	Advising on establishment of National Telecommunication Training Centre.
Lebanon (Technical Assistance)	André Lamazouade (France)	Deputy Inspector in Chief, training of personnel (1st 2yrs OPAS)	1. 1.1965 31.12.1967	Improved the techniques and operational procedures of the telegraphic service. Creation of a telex service, professional training and revision of administrative procedures.
Malaysia (Technical Assistance)	Jack C. Whybourne (Australia)	National dialling system planning expert	12. 4.1967	Assisting the P.T.T. in establishing subscriber trunk dialling for the country and advising on planning and specifications for new switching equipment.
(Special Fund)	Colin W. C. Richards (United Kingdom) Dennis W. Berry (United Kingdom)	Project Manager  Instructor in line plant, subscriber's apparatus and switching	24. 9.1962  24.10.1967	Assisting the Telecommunication Department of the Government of Malaysia to develop further its training programme, to establish a new national training centre replacing one opened during the early 1950's, and to establish provincial training centres in Sabah and Sarawak.

Malaysia ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	John M. Broderick (United Kingdom) Clarence L. Canute (Australia) Robert M. Johnsen (Norway)	Instructor in telecommunication traffic Instructor in transmission Instructor in radio	12.12.1967 8. 6.1963 28. 7.1964	
	John P. Killeen (Australia) Bruce R. Muir (United Kingdom)	Instructor in line plant Instructor in telecommunication switching	8. 6.1963 15. 6.1966	
	Olav Olsen (Norway)	Instructor in telegraphy	2. 5.1966	
Mongolia (Technical Assistance)	Illarion S. Aturov (U.S.S.R.)	Telecommunication engineer — economist	10. 1.1966 9. 7.1967	Assisted in the establishment of regulations for the different P.T.T. Departments and instructed counterparts on economical matters.
Philippines (Special Fund)	William B. Jago (United Kingdom) Ryuzaburo Inano (Japan)	Project Manager Instructor in radio	30. 1.1963 6. 7.1964	Assisting the Bureau of Telecommunications to establish a Telecommunication Training Centre for telecommunication engineers and technicians.
	Yoshizo Ito (Japan) John H. Johnson (United Kingdom)	Instructor in automatic telephone switching Instructor in transmission and carrier communications	6. 6.1966 30. 9.1964	
	Oystein Linge (Norway) Tatsuro Matsuhashi (Japan)	Instructor in radio systems engineering Instructor in lines and cables	15. 8.1966 11. 1.1964 10. 1.1967	

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Philippines ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	Edward L. Wright (Australia)	Instructor in telecommunication organization and administration	1. 6.1966	
	Lennart Ygland (Sweden)	Instructor in telecommunication traffic and system engineering	20. 2.1966	
Syrian Arab Republic (Technical Assistance)  (Special Fund)	Marcel Mauboussin (France)	Expert on accounting	20. 7.1966 19. 1.1967	Advised on the establishment of a new centralized accounting system.
	Günter H. Lampe (Fed. Rep. Germany)	Telecommunication training adviser	20.10.1966 19. 1.1967 and 6. 2.1967 19. 2.1967	Assisted the Syrian Government to prepare a request for UNDP (Special Fund) assistance in the establishment of a Telecommunication Training Centre.
Thailand (Technical Assistance)  (Special Fund)	Klaus H. Kock (Fed. Rep. Germany)	Expert in national telephone network	1.11.1967	Revising plan for telephone development established by T.O.T.
	James J. Senyard (Australia)	Expert in telephone exchange and local plant operation	29.11.1967	Advising on operation and maintenance of telephone exchanges and local plant.
	R. Seshasayee (India)	Instructor in transmission and carrier systems	14.12.1964 30. 6.1967	
	Paul Dubois (Australia)	Project Manager Project Manager	1. 7.1967 20. 2.1964 30. 6.1967	

Thailand ( <i>cont.</i> ) (Special Fund) ( <i>cont.</i> )	Osmo S. Alho (Finland)	Instructor in HF and VHF radio	1. 3.1967	Assisting the Telecommunication Project Administration Office (in which are represented both the Telephone Organization of Thailand and the Post and Telegraph Department) to establish a new Telecommunication Training Centre and also a Telecommunication Test and Development Centre.
	Wilfred A. Bergeron (United States)	Instructor in radio	30. 1.1965	
	Arthur H. Hounslow (United Kingdom)	Instructor in telephone traffic	21.10.1965	
	Olaf S. Linder (Sweden)	Instructor in telephone switching systems	18. 1.1965	
	Malcolm MacLeod (New Zealand)	Instructor in external plant	9. 1.1965	
	Gösta A. Myrenfors (Sweden)	Instructor in telecommunication estimating, costing and stores accounting	15. 8.1966	
	Kazuo Takeuchi (Japan)	Instructor in telegraphy	5. 9.1966	
Yemen (Technical Assistance)	Igorj M. Pavlichev (U.S.S.R.)	Telecommunication adviser	1. 9.1966	Advising on planning of telecommunication services, installation and maintenance as General Adviser.
Asia and the Far East (Regional Project) (Technical Assistance)	Jun-Ichiro Nagai (Japan)	Regional radio-communication expert	22.11.1966	In cooperation with senior regional expert making surveys and giving advice on radio matters to countries of E.C.A.F.E. region.

Country or Region of Assignment	Name (Nationality)	Speciality and/or Title	Starting and closing date of mission	Brief description of work; Remarks
Asia and the Far East (Regional Project) (Technical Assistance) (cont.)	Kaliyanpur V. Pai (India)	Senior telecommunica- tion expert	9.12.1961	Member of I.T.U./E.C.A.F.E. unit. Preparing surveys for individual countries. Dealing with all regional projects.
4. EUROPE				
Malta (Technical Assistance)	Klaus J. Peters (Fed. Rep. Germany)	Radio technology expert	24.11.1966 23. 6.1967	In cooperation with Mr. Wittbrodt assisted in the establishment of a monitoring station and its operatio- nal procedures.
	Jürgen H. Wittbrodt (Fed. Rep. Germany)	Radio technology expert	26.10.1966 25. 5.1967	Advised on frequency management and operational procedures of a monitoring station in cooperation with Mr. Peters.
Turkey (Special Fund)	Edward W. Collett (United Kingdom)	Project Manager	6.11.1967	Assisting the Turkish PTT Administra- tion to establish a new Telecommu- nication Training Centre for the training of all classes of telecommu- nication staff.

TABLE 2  
FELLOWSHIPS DEALT WITH IN 1967

Country	Progr. sector	Year of award	Implemented in	Man/ Months in 1967	Host country(ies)	Field of study
1. AFRICA						
Cameroon	TA	1966	1966/67	1/5	Israel	Transistors in electronics
	TA	1967	1967/68	4/42	Nigeria	Telecommunications engineering
Central African Republic	TA	1967	1967/68/69	4/8	Madagascar	Electromechanical installations
	TA	1967	1967/68	1/1	France	Telecommunications techniques
Congo (Kinshasa)	TA	1966	1967	5/16	U.K.	Telephone operation
Congo (Brazzaville)	TA	1966	1966/67	1/7	France	Radio
	TA	1963	1963/64/65/66/67	1/10	France	Radio
	TA	1967 *)	1968	1/—	France	Radio
	TA	1966	1966/67/68	1/12	France	Radio relay links
	TA	1967	1967/68	2/8	France	Radio relay links
	TA	1966	1966/67	1/10	France	Long-distance lines
	TA	1967	1967/68	1/2	France	Long-distance lines
	TA	1967 *)	1968/69	1/—	France	Telecommunications practice
	TA	1965	1965/66/67	1/12	France	Telecommunications practice
	TA	1967	1967/68/69	2/4	Madagascar	Telecommunications practice
	TA	1967	1967/68	2/6	France	Switching
Ivory Coast	SF	1967	1967/68	2/6	Germany, Switzerland	Telegraphy
	SF	1967	1967/68	1/2	France	Radio
	SF	1967	1968	1/—	France, Switzerland	Telecommunications operation



Country	Progr. sector	Year of award	Implemented in	Man/ Months in 1967	Host country(ies)	Field of study
Dahomey	TA	1967	1967/68	2/8	France	Switching
	TA	1966	1967/68	1/1	France	Telegraphy
	TA	1967	1967	1/1	Netherlands	Telex
	TA	1967	1967/68	1/4	France	Radio
Ethiopia	SF	1967	1967/68	1/2	Japan	HF
	SF	1967	1968	1/—	U.K., Germany	Radio terminals
	SF	1967	1967/68	2/10	Japan	Telex exchanges
	SF	1967	1967	1/4	Germany	Teleprinter maintenance
Gabon	TA	1967 *)	1968	1/—	France	Radio
Gambia	TA	1967	1967	1/1	Netherlands	Telex
Ghana	TA	1966	1966/67	2/10	Israel	Transistors in electronics
Upper Volta	TA	1967	1967/68/69	2/6	Madagascar	Long distance lines
	TA	1967	1967/68/69	2/6	Madagascar	Telegraphy
	TA	1967	1967/68/69	1/3	Madagascar	Switching
	TA	1967	1967/68/69	1/3	Madagascar	Telecommunication systems operation
	TA	1967	1967/68/69	1/3	Madagascar	Radio
Kenya — Uganda Tanzania (East African Community)	TA	1966	1967/68	1/10	U.K.	Traffic
	TA	1966	1966/67/68	2/24	U.K.	Telephony, telegraphy
	TA	1966	1966/67	2/10	Israel	Transistors in electronics
	TA	1967	1967	2/24	U.K.	Traffic

Liberia	TA	1967	1967	1/1	Netherlands	Telex
	TA	1967 *)	1968/69	1/—	Sweden, Ireland	Telecommunications engineering
	TA	1967 *)	1968/69	1/—	U.K.	Telephone practice
	TA	1966	1968/69	1/—	U.K., Canada, U.S.A.	Telecommunications techniques
	TA	1966	1966/67	1/5	Sweden, Ireland	Telephony
Libya	FT	1965	1965/66/67	1/6	U.K.	Telecommunication techniques
Malawi	TA	1967	1967	5/25	Kenya	Telecommunications engineering
	TA	1966	1966/67/68	4/24	Kenya	Telecommunications engineering
	TA	1966	1966/67	2/16	Kenya	Telecommunications engineering
	TA	1966	1966/67	1/5	Israel	Transistors in electronics
	TA	1967	1967/68/69	3/27	Kenya	Telecommunications engineering
Madagascar	SF	1967	1967/68/69	1/3	France	Transmission, long-distance lines
	SF	1965	1965/66/67	1/7	France	Telecommunications engineering
	SF	1967	1967/68/69	2/6	France	Telecommunications engineering
	SF	1967	1967	1/6	France	Telephone and telegraph operation
Niger	TA	1967	1968	1/—	France	Telegraphy
	TA	1966	1966/67/68	1/12	France	Telecommunications engineering
	TA	1965	1965/66/67/68	1/12	France	Telecommunications engineering
Nigeria	TA	1966	1966/67	1/5	Israel	Transistors in electronics
United Arab Republic	TA	1967	1967/68	2/10	Austria	Telex equipment
	TA	1967 *)	1968	1/—	Italy	Telex equipment
	TA	1966	1968	6/—	U.K.	Accounting
	TA	1965	1967	1/6	Italy	Microwave
Somali Republic	TA	1966	1967/68/69	1/9	Yugoslavia	Telecommunications engineering

Country	Progr. sector	Year of award	Implemented in	Man/Months in 1967	Host country(ies)	Field of study
Sierra Leone	TA	1966	1966/67	2/10	Israel	Transistors in electronics
Sudan	TA	1967	1967/68	1/1	U.K.	Radio
	TA	1967	1968	1/—	U.K.	Automatic telephony
	TA	1966	1966/67/68	1/12	U.S.A.	Electronics in Radio
	SF	1965	1965/66/67	1/11	U.K.	Telecommunications engineering
	SF	1966	1967/68/69	1/9	U.K., Germany	Telegraphy
	SF	1966	1966/67/68	1/12	U.K., Sweden, Germany Netherlands	Telephony
Togo	TA	1966	1966/67	1/5	France	Radio
	TA	1966	1966/67	1/10	France	Telephony and telegraphy
	TA	1967	1967/68/69	1/2	Madagascar	Telecommunications engineering
Tunisia	TA	1966	1966/67	3/16	France	Local telephone networks
	TA	1967	1967/68	1/1	France	Telex
	TA	1967 *)	1968	2/—	France	Switching
	TA	1967	1967/68	1/1	France	Telephone lines
	TA	1967	1967/68	1/1	France	Telephony
	TA	1967	1967/68	2/2	France, Italy	VHF, Radio relay links
	TA	1967	1967	2/8	France, Belgium	Telecommunications accounting

2. AMERICAS						
Argentina	TA	1966	1966/67	1/1	Spain, Italy	Statistics, rules (traffic)
	TA	1966	1967	1/6	France	Telegraph systems
	TA	1966	1967	1/6	U.K., France	Telegraph exchanges
Chile	TA	1966	1967	1/1	France, Italy	Telecommunications training, TV operation
	TA	1966	1966/67	1/2	Germany	Telephony
	TA	1967	1967/68	1/3	France	Telex
	TA	1967 *)	1968	1/—	U.K.	Economics in telecommunications
Costa Rica	TA	1966	1967/68	1/5	U.S.A.	Telephone networks
Mexico	TA	1966	1967/68	1/6	U.K.	Microwaves
	TA	1967	1967	2/20	Chile	Planning
	TA	1966	1967	2/16	U.S.A.	Radio propagation
	TA	1966	1967	1/6	France, U.K.	Carrier systems
Panama	TA	1966	1967	1/3	Norway, Germany, U.S.A.	Open wire systems
Paraguay	TA	1967	1967/68	1/3	Mexico	Telecommunications engineering
	SF	1966	1967	1/7	Germany, Austria, Switzerland	Telecommunication techniques
	SF	1966	1966/67/68	2/24	Germany	Telecommunication techniques
Surinam	TA	1967 *)	1968	1/—	U.S.A.	Telecommunications management

Country	Progr. sector	Year of award	Implemented in	Man/Months in 1967	Host country(ies)	Field of study
Venezuela	F.T. F.T. F.T. F.T. F.T. SF SF  SF SF	1967 1967 1967 1967 1966 1966 1966  1966 1967	1967 1968 1967 1967 1967 1966/67 1966/67  1966/67 1967/68	1/2 1/— 1/4 1/2 1/3 1/3 1/4  1/3 1/4	Australia Australia Australia Australia Australia U.S.A. Netherlands, Germany, Italy U.K., Germany, Italy, France, Italy, Germany, U.K.	Telecommunications administration Open wire lines Outside plants Long distance switching equipment Transmission Radio Telegraph transmission and switching Power plants Transmission
3. ASIA AND THE FAR EAST						
Afghanistan	TA	1966	1966/67	1/8	Germany	Telegraphy
Cambodia	TA	1967	1967/68	1/4	France	Telephone operation
	TA	1967	1968	1/—	France	Transmitters and receivers
China	TA	1967	1968/69	1/—	U.S.A.	Subscriber trunk dialling
	TA	1967	1968	1/—	U.S.A., U.K.	Satellite communications
	TA	1967	1968	1/—	U.S.A.	Cost control
Korea	TA	1966	1966/67	1/5	U.S.A.	Frequency management
	TA	1967 *)	1968	1/—	U.K.	Management of telecoms. facilities

Korea (cont.)	SF	1966	1967	1/8	Australia, Malaysia	Power plants
	SF	1966	1966/67	1/2	Germany	Telegraphy
	SF	1965	1966/67	1/3	Germany, U.S.A., Malaysia	Telephony, toll exchanges
	SF	1966	1966/67	1/2	Japan	Telephone traffic
	SF	1966	1966/67	1/5	U.S.A.	Traffic, toll exchanges
	SF	1966	1966/67	1/2	Japan	Transmission and carrier
	SF	1966	1966/67	1/7	U.K.	Telegraphy
	SF	1965	1966/67	1/3	Canada	Outside plants
	SF	1967	1967/68	1/4	U.S.A.	VHF, microwaves
	SF	1967	1968	1/—	Japan, Malaysia	Telecommunications training
	SF	1967	1967/68	1/4	U.S.A.	Radio
India	TA	1967	1967/68	1/1	U.S.A., U.K., Germany	Satellite earth stations
	TA	1967	1967/68	1/1	Italy U.S.A.	International and intercontinental telephone and telex operations
	TA	1966	1967	1/4	Japan	VHF and FM
	TA	1966	1967	1/4	Japan	TV services
Indonesia	TA	1967 *)	1968	1/—	Japan	Radio
	TA	1967 *)	1968	1/—	Japan, Malaysia	Training methods
	TA	1967 *)	1968	1/—	Australia	Outside plants
	TA	1967 *)	1968	1/—	Japan	Telegraphy
	TA	1967 *)	1968	1/—	Japan	Telegraph transmission
	TA	1967 *)	1968	1/—	Japan	Organisation of stores
Iran	TA	1966	1966/67	2/10	Israel	Transistors in electronics
	TA	1967	1968/69	1/—	U.K.	Telephone transmission, multiplex telegraphy

Country	Progr. sector	Year of award	Implemented in	Man/ Months in 1967	Host country(ies)	Field of study
Iraq	SF	1967	1968	1/—	Pakistan, Malaysia, Japan, Australia	Telecommunications training
	SF	1966	1967	1/6	U.K., Sweden	Telecommunications networks
	SF	1966	1967	1/6	U.K.	Traffic.
	SF	1966	1967	1/6	U.K.	Telephone equipment
	SF	1966	1967	1/6	U.K.	Radio
Israel	TA	1966	1967	2/8	U.K., Germany	Satellite communications
	TA	1966	1967	1/6	U.K., Germany	HF communications
	TA	1966	1967/68	1/1	U.K., Germany, Italy	Satellite communications
	TA	1967	1967/68	1/2	U.K., Switzerland	Electronic exchanges
	TA	1967	1967/68	1/2	U.S.A., U.K., Sweden, Italy	Telegraph, telex, data transmission
Jordan	TA	1966	1966/67	1/6	U.K., Netherlands, Italy	Radio terminals
	TA	1966	1967/68	1/6	U.K.	Radio terminals
	TA	1967	1967	2/2	Netherlands	Telex
Kuwait	FT	1967	1967	1/6	U.S.A.	Microwave and troposcatter
Laos	TA	1965	1966/67	1/2	France	Cables and lines
	TA	1965	1966/67	2/18	France	Radio
	TA	1967	1967/68	1/3	Thailand	Telephone lines
	TA	1962	1963/64/65/66/67	1/6	France	Telephony
Malaysia	TA	1967	1967/68	1/3	U.K.	Measurements and standards
	TA	1967	1967/68	1/5	U.K., Sweden, Germany, India	International teleph. and telegraph traffic

Malaysia (cont.)	SF	1967	1967/68	1/9	U.K., Netherlands, Germany, Sweden, Denmark, U.S.A., Austria, Japan	Switching
	SF	1967	1967/68	1/9	U.K., Netherlands, Germany, U.S.A., Japan	Transmission
Mongolia	TA	1966	1966/67	1/3	U.S.S.R.	Radio broadcasting
	TA	1966	1966/67	1/3	U.S.S.R.	Radio relay links
Philippines	TA	1966	1966/67	1/5	Israel	Transistors in electronics
	SF	1965	1966/67	1/1	Japan	Switching
	SF	1966	1966/67	2/2	Belgium, Netherlands, U.K., Greece	Carrier and transmission
	SF	1967	1968	1/—	Australia	Traffic and system engineering
	SF	1967	1967/68	1/8	U.S.A.	Microwaves and troposcatter
Thailand	TA	1966	1966/67	1/5	Israel	Transistors in electronics
	TA	1967 *)	1968	2/—	I.T.U. Headquarters, Japan	Frequency management
	SF	1966	1967	1/8	Australia	Telephony, switching
	SF	1967	1967/68	1/2	Germany, U.K.	Microwaves
	SF	1967	1968	1/—	U.S.A.	Transmission
	SF	1966	1968	1/—	Japan	Telephony, switching
	SF	1966	1968	1/—	Japan, Hong Kong, Malaysia	Outside plants
	SF	1967	1967/68	1/3	Australia, Japan	Training methods
	SF	1967	1967	1/7	U.K., Germany, Malaysia	Transmission, carrier
Tonga	TA	1967 *)	1968/69	1/—	U.K.	Radio equipment maintenance

Country	Progr. sector	Year of award	Implemented in	Man/ Months in 1967	Host country(ies)	Field of study
<b>4. EUROPE</b>						
Bulgaria	TA	1966	1967	1/5	France	Colour TV
	TA	1966	1967	1/6	France	Automatic telegraph exchanges
	TA	1966	1967	2/12	Austria, Sweden	Electronic exchanges
	TA	1966	1967	1/2	France	Computers in telecommunications
	TA	1967	1967/68	1/5	Germany	TV (design; construction, technology)
	TA	1966	1967	1/3	Germany	Inter-urban telephony
	TA	1967	1967	1/6	Italy	Telephone systems
	TA	1966	1967	2/4	Germany	Transistorized equipment
Cyprus	TA	1966	1966/67	2/10	Israel	Transistors in electronics
Greece	TA	1966	1966/67	1/1	U.S.A.	Radio relay links
	TA	1967 *)	1968	1/—	U.K.	Telegraphy
	TA	1967 *)	1968	1/—	U.K.	Telephone administration
	TA	1966	1967	1/2	France	Telephone operation
	TA	1966	1967	1/2	France	Telegraph operation
Hungary	TA	1966	1967	2/3	Sweden	Telephone networks
	TA	1967	1967	1/1	I.T.U. Headquarters	Radio
Poland	TA	1967	1967	1/4	Sweden	Crossbar exchanges
	TA	1967	1967	1/4	Sweden	Telephone service organization
	TA	1967 *)	1968	1/—	U.K.	Multichannel systems
	TA	1967 *)	1968	1/—	France	Telephone cables
	TA	1966	1967/68	1/2	Austria	Carrier systems, amplifiers

Poland (cont.)	TA	1966	1968	1/—	France	Colour TV
	TA	1966	1967	1/3	Sweden	Maintenance of telecoms. links
	TA	1966	1967	1/8	Sweden	FM broadcasting
Roumania	TA	1965	1966/67	1/1	France	Radio and TV
	TA	1967	1968	1/—	France	Protection of telecoms. lines
	TA	1967	1967/68	1/2	France	Protection of telecoms. lines
	TA	1966	1967/68	1/4	France	Radio and TV equipment
	TA	1967	1967/68	1/1	France	HF carrier systems
Turkey	TA	1966	1967	1/6	Italy	Microwave
	TA	1966	1966/67	1/2	Germany, U.K., Malaysia	Training methods
	TA	1966	1966/67	1/2	U.S.A.	Telegraph networks
	TA	1966	1967	1/6	Italy	Telephone networks
	TA	1966	1967	1/5	Germany, Netherlands, Sweden	Telegraph networks
Yugoslavia	TA	1965	1966/67	1/2	I.T.U. Headquarters, U.K., Sweden	Radio services
	TA	1966	1966/67	1/1	Poland, Czechoslovakia	Measuring instruments
	TA	1964	1966/67	1/11	U.S.A.	Speech analysis and synthesis
	TA	1967 *)	1968	1/—	U.K.	Data transmission
	TA	1967 *)	1968	1/—	U.K.	Radio relay links

\*) Award not finalized at 31 December 1967.

TABLE 3

*Projects approved by the U.N. Special Fund (S.F.) for which I.T.U. is Executing Agency as on 31.12.1967*  
(in the order of the dates of approval of projects)

Country	Description of Project	Date of Approval by S.F.	Duration in years	Assistance being provided by S.F.			Estimated Project Costs		
				No. experts man/months	No. fellowships man/months	Value of equipment	Special Fund Allocation	Government counterpart contribution	Total
1	2	3	4	5	6	7	8	9	10
<i>Approved Projects in operation :</i>									
Malaysia	Telecommunication Training Centre, Kuala-Lumpur. . . . .	May 1961	5	6/312	6/72	300,000	896,100	2,431,500	3,327,600
Philippines	Telecommunication Training Institute, Manila . . . . .	May 1961	5	9/336	11/72	300,000	968,600	662,700	1,631,300
Iraq	Telecommunication Training Centre, Baghdad . . . . .	Jan. 1962	5	9/312	9/78	300,000	909,700	2,065,000	2,974,700
Sudan	Post and Telegraph Training Centre, Khartoum. . . . .	Jan. 1962	5	4/192	7/78	100,000	486,900	1,450,000	1,936,900
Korea	Telecommunication Training Centre, Seoul . . . . .	May 1962	5	10/348	19/152	450,000	1,288,600	1,003,000	2,291,600
Venezuela	Training Centre for Telecommunications, Caracas . . . . .	Jan. 1963	4	6/336	8/90	250,000	1,110,100	3,768,000	4,878,100
Thailand	Telecommunications Training Test and Development Centre, Bangkok	Jun. 1963	5	9/348	9/96	300,000	1,133,500	1,225,000	2,358,500

1	2	3	4	5	6	7	8	9	10
Afghanistan	Telecommunications Training Centre, Kabul . . . . .	Jan. 1964	5	6/252	4/48	200,000	766,800	443,000	1,219,800
Algeria	National School for Telecommunication Studies, Algiers . . . . .	Jan. 1964	5	11/348	15/168	200,000	901,000	4,432,000	5,333,000
Colombia	Electronics and Telecommunications Training and Research, Popayan and Bogota . . . . .	Jan. 1964	5	7/336	10/240	385,000	1,220,350	3,630,000	4,850,300
Ghana	Telecommunication Training Centre, Accra . . . . .	Jan. 1964	5	8/360	8/90	250,000	1,100,100	1,773,000	2,873,100
Madagascar	National Institute of Telecommunications and Post, Antanetibé . .	Jan. 1964	5	5/216	12/132	200,000	766,100	1,577,000	2,343,100
India	Centre for Research and Training on the Use of Satellite Communications, Ahmedabad . . . . .	Jun. 1964	4	7/34	4/12	480,000	620,500	412,000	1,032,500
Paraguay	Telecommunication Survey . . . .	Jun. 1964	2	8/96	4/48	88,000	333,600	70,000	403,600
Regional: Ethiopia and Ivory Coast	Pilot Telecommunication Circuit, Addis Ababa, Abidjan . . . . .	Jun. 1965	2	8/114	10/54	451,000	784,900	278,000	1,062,900
Congo (Kinshasa)	National School of Telecommunications, Kinshasa . . . . .	Jan. 1966	6	9/552	11/156	250,000	1,800,900	2,874,000	4,674,900

1	2	3	4	5	6	7	8	9	10
<i>New Projects approved during 1967</i>									
Saudi Arabia	Telecommunications and Broadcasting Training Centre, Jeddah . .	Jan. 1967	5	11/372	12/144	50,000	1,081,400	3,810,000	4,891,400
Chile	Telecommunications Training Centre, Santiago . . . . .	Jan. 1967	5	8/324	9/126	300,000	1,152,100	1,258,000	2,410,100
Malaysia	Telecommunications Training Centres (Phase II) . . . . .	Jan. 1967	3	9/270	—	29,000	683,600	677,000	1,360,600
Turkey	National Telecommunications Training Centre, Ankara . . . . .	Jan. 1967	5	10/420	15/180	325,000	1,432,300	3,059,000	4,491,300

ANNEX 6

SITUATION OF THE DEBTORS TO THE UNION ON 31 DECEMBER 1967

	Balances due for arrears	Relating to the years
	Swiss francs	
Argentine Republic . . . . .	360,785.36	1960-1966
Bolivia . . . . .	1,141,130.10	1949-1966
Brazil . . . . .	833,785.15	1966
Chile . . . . .	459,542.15	1960-1966
Colombia (Republic of) . . . . .	45,565.32	1963-1966
Costa Rica . . . . .	194,610.50	1958-1966
Dominican Republic . . . . .	480,804.65	1959-1966
El Salvador (Republic of) . . . . .	672,893.20	1961-1966
Ecuador . . . . .	105,867.25	1959-1966
Haiti (Republic of) . . . . .	298,225.75	1955-1966
Honduras (Republic of) . . . . .	134,787.67	1962-1966
Indonesia (Republic of) . . . . .	45,776.05	1964-1966
Liberia (Republic of) . . . . .	34,504.35	1963-1966
Mali (Republic of) . . . . .	19,937.93	1962-1966
Mauritania (Islamic Republic of) . . . . .	23,707.85	1963-1966
Nepal . . . . .	48,471.07	1962-1966
Nicaragua . . . . .	10,828.55	1962-1966
Panama . . . . .	174,366.92	1962-1966
Uruguay (Oriental Republic of) . . . . .	169,333.91	1960-1966
Yemen . . . . .	148,305.95	1961-1966
Cuban Tel. Co. . . . .	15,858.35	1960
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	5,419,088.03	
Other debtors . . . . .	320,368.63	
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	5,739,456.66	
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ANNEX 7

**RESOLUTION ADOPTED BY THE ECONOMIC AND SOCIAL COUNCIL**

**1281 (XLIII). NATIONAL COORDINATION AND COORDINATION  
OF STATISTICAL QUESTIONNAIRES**

The Economic and Social Council,

*Having considered* the report of the Committee for Programme and Coordination on the second part of its first session,

I

**NATIONAL COORDINATION**

*Noting* particularly the suggestion that the Council make appropriate recommendations to Member Governments and to the organizations concerned on the question of "national coordination",

*Noting further* the comment of the Administrative Committee on Coordination in its thirty-third report to the Council "that some of the problems encountered in the field of coordination have arisen, at least in part, because of the difficulty of reconciling decisions taken by inter-governmental bodies",

*Recalling* its previous resolutions 590 A II (XX) of 5 August 1955, 630 A II (XXII) of 9 August, 1956, 694 B (XXVI) of 31 July 1958 and General Assembly resolution 125 (II) of 20 November 1947 concerning the continuing need for coordination on the national level and the increasing importance for Member Governments to take measures to ensure it,

*Recalling further* that in its resolution 125 (II) the General Assembly called "upon members to take measures to ensure on the national level a coordinated policy of their delegations to the United Nations and to the different specialized agencies in order that full cooperation may be achieved between the Organization and the specialized agencies",

*Considering* that, despite the attention given by Governments to improvement of coordination on the national level of their position and participation in the United Nations, its subsidiary bodies, the specialized agencies and the International Atomic Energy Agency, more intensive efforts are still required to this end,

1. *Urges again* that Governments of States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency continue to take the further steps necessary to ensure that positions taken by their national delegations to meetings of the various organizations are coordinated in order to avoid the possibility of conflicting decisions being taken on the same or similar subjects in different organizations;
2. *Suggests* to such Governments of States Members, as have not already done so, to consider the possibility of establishing a central governmental machinery charged with the responsibility of coordinating at the national level their participation in organizations within the United Nations system;

3. *Recommends* to the Secretary-General of the United Nations that he make special efforts to ensure the implementation of rule 80\*) of the rules of procedure of the Council; and
4. *Requests* the Secretary-General furthermore to indicate to the Council and its subsidiary bodies before the adoption of any proposal under consideration the extent to which the proposal is already covered by existing projects or documentation, or falls more properly within the terms of reference of another organization;
5. *Invites* the executive heads of the specialized agencies and the International Atomic Energy Agency in the implementation of those of their rules which correspond to rule 80\*), similarly to inform their respective organs;
6. *Requests* the Secretary-General of the United Nations and the executive heads of the specialized agencies and the International Atomic Energy Agency to bring this resolution to the attention of all their member Governments and of their executive bodies and General Conferences.

## II

### COORDINATION OF STATISTICAL QUESTIONNAIRES

*Noting* the recommendation of the Committee for Programme and Coordination in its report on the second part of its first session that the Council take steps to ensure that, in keeping with past practice, all questionnaires emanating from United Nations bodies should be approved by the United Nations Statistical Office whenever they involve the provision of statistical data;

1. *Requests* the Secretary-General to take the necessary steps to this end in so far as the United Nations Secretariat is concerned;
2. *Recommends* to the subsidiary bodies of the Council that when proposing the collection of statistical data from Member States, they take the necessary steps to ensure that the procedure is implemented; and
3. *Calls* the attention of the competent organs of the United Nations Conference on Trade and Development and the United Nations Industrial Development Organization to this procedure.

1507th plenary meeting,  
4 August 1967.

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\*) Article 80

1. Where an item proposed for the provisional agenda or the supplementary list of items for a session contains a proposal for new activities to be undertaken by the United Nations relating to matters which are of direct concern to one or more specialized agencies, the Secretary-General shall enter into consultation with the agency or agencies concerned and report to the Council on the means of achieving coordinated use of the resources of the respective agencies.
2. Where a proposal put forward in the course of a meeting for new activities to be undertaken by the United Nations relates to matters which are of direct concern to one or more specialized agencies, the Secretary-General shall, after such consultation as may be possible with the representatives at the meeting of the other agency or agencies concerned, draw the attention of the meeting to these implications of the proposal.
3. Before deciding on proposals referred to above, the Council shall satisfy itself that adequate consultations have taken place with the agencies concerned.