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

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union activities

Visits by the Permanent Representatives of Sudan and China

The following Permanent Representatives recently paid visits to Mr. M. Mili, Secretary-General of the Union:

— 5 November 1975

Mr. Ali Ahmed Sahlooh, recently appointed Permanent Representative of the Democratic Republic of the Sudan at the United Nations Office in Geneva and the specialized agencies in Switzerland;



Mr. A. A. Sahlooh



Mr. A. Chih-Yuan

— 6 November 1975

Mr. An Chih-Yuan, recently appointed Permanent Representative of the People's Republic of China at the United Nations Office in Geneva and the other international organizations in Switzerland.

New Chairman and Vice-Chairman of the IFRB

The new Chairman and Vice-Chairman of the International Frequency Registration Board (IFRB) took up their duties on 1 January 1976.

The Chairman is Mr. Alexandre N. Gromov, Vice-Chairman from July to December 1975, who succeeds Mr. Abderrazak Berrada. The Vice-Chairman is Mr. Francis Gerard Perrin.



Mr. A. N. Gromov



Mr. F. G. Perrin

Mr. Gromov was elected to the Board in 1971; he is a radiocommunication engineer. From 1963 to 1965 he was scientific collaborator at the Leningrad Scientific Research Institute of Radio Interference and Chief of a section in the same Institute from 1965 to 1968. From 1968 to 1971 he was Chief Inspector, State Inspectorate on Radio Frequencies for the North-Western Area of the USSR (Leningrad). Mr. Gromov was Chairman of the IFRB in 1974.

Mr. Perrin was elected to the Board in 1974. He was formerly Director, International Arrangements, in the Canadian Department of Communications. In that post he was responsible for Canada's participation in ITU conferences and meetings. He took part in both the Montreux (1965) and the Malaga-Torremolinos (1973) Plenipotentiary Conferences and in numerous world administrative conferences. Mr. Perrin was a delegate to the Administrative Council of the ITU from 1968 to 1973.

Second session of the Regional Administrative Conference for LF/MF Broadcasting*

The first working days of the second session of the Regional Administrative Conference for LF/MF Broadcasting were mainly devoted to plenary meetings during which there was a thorough examination of the information received from the ITU Member countries and of the work done by the Union between the first session of the Conference, which took place in Geneva in October 1974, and this second and final session.

During these plenary meetings some questions relating to the organization of the Conference and some basic technical problems were also discussed.

On Friday morning, 10 October 1975, the work of the Technical Committees began, namely Committees 4 and 5, whose terms of reference were as follows:

■ Committee 4—Planning

Terms of reference:

to establish, on the basis of agreed technical criteria, frequency assign-

* A report on the opening of this Conference was published in the *Telecommunication Journal*, November 1975, Vol. 42, page 650. A detailed article on the results of the Conference, written by Mr. Derek C. Rose, the Chairman, will be published shortly.

ment plans (to be associated with the Regional Agreement) for broadcasting stations in Regions 1 and 3 in the LF/MF bands allocated to the broadcasting service; the frequency assignment plans in the bands 150-285 kHz and 525-535 kHz shall take into account the other radio services to which, according to the Table of frequency allocations, these bands are also allocated.

■ Committee 5—Agreement

Terms of reference:

to establish a Regional Agreement concerning the use by the broadcasting service of frequencies in the LF and MF bands allocated to that Service in Regions 1 and 3, giving due consideration to the provisions of No. 47 of the International Telecommunication Convention (Malaga-Torremolinos, 1973) and the relevant provisions of the Radio Regulations; and to determine which of the data relating to a frequency assignment to be included in the plans.

Committee 4 decided to split up into Planning Groups: one for low frequencies, ten for medium frequencies and one for low-power channels, as shown below:

| Planning Groups | channels |
|-----------------|--------------------|
| 4/1 | 1-12 |
| 4/2 | 13-24 |
| 4/3 | 25-36 |
| 4/4 | 37-48 |
| 4/5 | 49-60 |
| 4/6 | 61-72 |
| 4/7 | 73-84 |
| 4/8 | 85-96 |
| 4/9 | 97-108 |
| 4/10 | 109-120 |
| 4/11-LF | 1-15 |
| LPC | low power channels |

Committee 5 set up three Working Groups whose terms of reference were as follows:

• Working Group 5A

- to determine the data relating to a frequency assignment to be included in the plans,
- to determine the technical data to be used in the application of the Agreement.

• Working Group 5B

- to establish the provisions of the Agreement relating to:
- the procedure for modifications to the plans,

- the criteria for determining whether or not a modification to the plans requires co-ordination,
- the notification of frequency assignments.

• Working Group 5C

to establish the provisions of the Agreement *excluding* those relating to:

- the procedure for modification to the plans,
- the criteria for determining whether or not a modification to the plans requires co-ordination,
- the notification of frequency assignments,
- the abrogation of the previous Convention and agreement,

but including those relating to the status and the validation of the Agreement.

The question of procedures for the subsequent modification of the plan was considered to be very important.

If such procedures were not established the plan might be excessively rigid and, after a few years, no longer adapted to the requirements of the countries concerned. On the other hand the plan should be sufficiently firm to be of value. A plan which is being continually and excessively modified is no longer a plan.

Low-power interference-free broadcasting channels

Committee 4 (Planning) introduced the concept, agreed at the first session of the Conference in 1974, of low-power channels which would provide all countries in Regions 1 and 3 with the facility to operate large numbers of low-power broadcasting transmitters without interference to one another and without interference from high-power stations. This would be done by having some frequencies reserved for low-power transmitters, higher power transmitters being confined to other frequencies.

By the third week the Conference had entered the critical phase of detailed and systematic technical examination of the requirements of different countries to determine how they could best be fitted into the channels available. This involved a large amount of detailed work, with frequent reference to radio propagation data and the specifications of the proposed transmitters and their antennae, followed by use of the ITU computer for interference calculations.

However, it was soon found that the frequency requirements submitted were so great that it was difficult to fit them all into a workable plan. In order to reduce these requirements Committee 4 created three Regional Groups whose terms of reference were:

1) to consider and make proposals for the reduction of overall requirements in their areas and to report to Committee 4 on this by 28 October 1975;

2) each Regional Group working within the framework of Committee 4 shall make recommendations intended for the Planning Groups, based on the following:

- 2.1 ways of eliminating the incompatibilities of requirements within the region discovered in the course of work;
- 2.2 the possibility of starting the planning work by taking into account the assignments already in use, subject to the principle of equal rights of all countries laid down in the report of the first session and those in the Africa Plan 1966, while at the same time taking due account of the requirements of the developing countries;
- 2.3 as the next step, to take into consideration the remaining requirements on the basis of the criteria to be determined by each Regional Group;
- 2.4 to aid the work of Planning Groups to achieve agreement on frequency requirements on the basis of a plan validity period as agreed by the Conference;
- 2.5 systematic use of techniques, as recommended by the first session of the Conference (synchronized networks, directional antennae, etc.).

The three Regional Groups were as follows:

- *Group A—Asia and Australasia*
Chairman: Mr. A. Fadami (Iran)
- *Group B—Africa*
Chairman: Mr. M. Harbi (Algeria)
- *Group C—Europe*
Chairman: Mr. K. I. Teräsvuo (Finland).

Each group worked in its own way to arrive at an optimum solution of the differing requirements of its geographical region. It was agreed to pursue discussions concerning the reduction of demand on a regional basis applying in each region the principles established by the Regional Group concerned. After intensive work by the regional groups, the delegates and the Planning Groups were able to go ahead

with the establishment of the frequency assignment plan.

The Conference closed on Friday evening, 21 November 1975, having successfully drawn up a frequency plan and an Agreement on LF and MF broadcasting in the regions concerned.

The Agreement

The Agreement consists of 14 articles and lays down the procedure for implementing the plan and its use. Article 4 of the Agreement includes a procedure whereby modifications to the plan can be made.

The Agreement will enter into force on 23 November 1978, at 00h01 GMT, and is intended to cover a period of 11 years from that date. The Agreement will, however, remain in force until it is revised by a competent conference of the Members of the ITU.

The Conference recognized that all countries large and small have equal rights, and that the needs of all countries, and in particular those of the developing countries, should be fulfilled as far as possible in the implementation of the Agreement.

The new Agreement will replace the European Broadcasting Convention (Copenhagen, 1948), and the African Broadcasting Agreement (Geneva, 1966), and will establish a plan for the remainder of Regions 1 and 3.

The plan

In order to arrive successfully at a workable plan, the Conference made full use of a number of techniques which allow a greater number of broadcasting stations to use a given band of frequencies. These techniques are as follows:

- 1) reduced bandwidths,
- 2) directional antennae,
- 3) synchronized networks,
- 4) low-power channels.

The Conference allocated three channels for use exclusively by low-power stations of not more than 1 kW. These channels will contain a total of 2535 low-power broadcasting stations.

The plan as agreed contains a total of 10 248 broadcasting stations having a total power of some 500 MW as compared with some 4400 transmitters with an overall power of 150 MW in operation at present.

A total of 119 countries from Regions 1 and 3 were represented at the Conference by 103 delegations comprising 573 delegates. Nine international organizations were also represented.

Meeting of CCITT Study Group X Working Parties



Mr. E. E. Daniels

- *Working Party No. 1*
Chairman: Mr. D. J. P. Faugeras (France)
Study of Questions 1/X and 2/X.
- *Working Party No. 2*
Chairman: Mr. E. E. Daniels (United Kingdom)
Study of Questions 3/X and 5/X.

In the absence of Mr. Faugeras who had recently retired, Mr. Daniels chaired both meetings.

In addition to the above-mentioned questions, it was agreed to study a number of additional matters if time permitted.

Question 1/X

Automatic originating and answering calls

Consideration was given to an earlier Working Party report on the adaptation of Recommendation V.11, which relates only

to dial selection, to be suitable also for keyboard selection. A preliminary report of a Rapporteurs Group under Mr. R. A. Brown (Australia) on the wider implications of this question was also considered. The meeting agreed that the DTE, rather than the DCE, would generate the selection and answer-back signals.

The need for a closer alignment with the Recommendation X.20 (start/stop data) interface rather than the Recommendation V.25 (telephony) interface; the transfer of Recommendation V.11 to the U series of recommendations, and the use of timing diagrams as the best means of presentation in Recommendation V.11 were left for further study by the Rapporteurs Group.

Question 2/X

Signalling in accordance to Recommendation U.1 (Types A and B)

The most significant points discussed under this question were:

- opinions were still divided on the expansion of service signal codes using the 4-character prefix permitted under an earlier decision. The choice between letters or figures for these could not be decided and further contributions were invited to expedite a decision on all the points at issue;
- for transit using Recommendation U.1 signalling, agreement was reached on the numbering scheme when either the Recommendation F.69 destination code would be included on both transit and terminal calls, or when a standard transit prefix digit, preferably digit "0", would be used when the destination code would apply to transit calls only;
- the retest signal, for both Recommendations U.1 and U.11, were amended to permit a measure of flexibility in the method earlier agreed.

Question 3/X

Signalling in accordance to Recommendation U.12 (Type D)

The report of a joint meeting of Study Groups VII (New networks for data transmission) and X held in November 1974 was agreed. The discussion continued on a number of main points with the following conclusions:

- the CSC code structure was increased from 7 to 7½ units to facilitate operation over transmission systems optimized for the International Alphabet No. 2 code;