

Documents of the Administrative Radio Conference (CAR-59)

(Geneva, 1959)

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 DT No. 1 875 (incomplete).

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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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Documents of the Administrative Radio Conference (Geneva, 1959)

The following DT documents are not available:

- 76 Add 1 (available in Spanish)
- **76** (page 2-31 available in French and Spanish)
- 91 (available in French)
- 96 Add 2
- 113
- 132 (available in French and Spanish)
- 169
- 257
- 325 Rev Annex 1 (page 2-5) (available in French and Spanish)
- 325 (available in French and Spanish)
- **339 Rev** (available in French)
- 345
- 355 (available in French)
- 356 (available in French)
- 362
- 363
- 428 (available in French)
- 437
- 458 (available in French)
- 471
- **524 Add 1** (available in French and Spanish)
- 559
- **567 Rev 1** (Rev 2 available in Spanish)
- 567
- 571
- **586** (Rev available in Spanish)
- 588
- 637 (available in French and Spanish)
- 660 (available in Spanish)
- 661
- 678 (available in French and Spanish)
- 694
- 763 (available in Spanish)
- 824
- 834
- 868 Rev (available in Spanish)

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

COMMITTEE 4

AGENDA

Twenty-second Meeting of Committee 4 (Frequency Allocation)
Monday, 9 November, 1959, at 15.00 hours

- 1. Consideration of the Summary Records of the Nineteenth, Twentieth and Twenty-first Meetings (Documents No. 458, No. 507 and No. 518).
- 2. Verbal reports by Chairmen of the Working Groups.
- 3. Consideration of Corrigendum No. 2 to Document No. 361 First Report by Working Group 4A to Committee 4 (No. 94a of the Radio Regulations).
- 4. Draft Resolution on the use of the frequency bands 7 100 to 7 300 kc/s amateur and broadcasting services (Document No. 477) and Proposals Nos. 5559 and 5560 of the U.S.A. (Document No. 501).
- 5. Consideration of the Report by Working Group 4 Ad Hoc R.R. 126 (Document No. 492) and Proposal No. 5557 of Turkey (Document No. 498).
- 6. Consideration of the Third and Fourth Reports by Working Group 4B to Committee 4 (Documents Nos. 457 and 521 respectively) concerning the frequency bands 325 4 000 kc/s.
- 7. Consideration of the Report by Working Group 4 Ad Hoc on future frequency allocation policy (if available).
- 8. Any other business.

Gunnar Pedersen Chairman

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 702-FES 5 novembre 1959

GROUPE SPECIAL
COMMISSION 5
AD HOC GROUP
COMMITTEE 5
GRUPO ESPECIAL
COMISSION 5

ORDRE DU JOUR

Cinquième séance du Groupe Spécial - Commission 5 Mardi 10 novembre 1959, à 9 heures

- 1. Suite des discussions portant sur le Document N° DT 645 et examen des Addendums N° 1 et 2.
- 2. Divers.

AGENDA

Fifth Meeting of the Ad Hoc Group - Committee 5 Tuesday, 10 November, 1959, at 9 a.m.

- 1. Further discussion on Document No. DT 645 and the consideration of Addendum No. 1 and Addendum No. 2.
- 2. Any other business.

ORDEN DEL DÍA

5.ª sesión del Grupo especial - Comisión 5 Martes, 10 de noviembre de 1959, a las 9 de la mañana

- 1. Continuación del debate sobre el Documento N.º DT 645 y examen de los Addenda N.ºs 1 y 2.
- 2. Otros asuntos.

Le Président The Chairman El Presidente M.N. Mirza

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 703-E 5 November, 1959

SPECIAL WORKING GROUP 5

A NEW WORDING PROPOSED BY THE BELGIAN CONGO (concerns Working Document 645, pages 2 and 3)

§ 4 Comments by Delegates about High-Frequency Broadcasting and Tropical Broadcasting:

Most delegates who have taken the floor have declared that the interference suffered by their countries' stations was attributable to spectrum congestion. That congestion prevented stations from working on free channels, caused them to change frequencies at frequentintervals, and in some cases to transmit on out-of-band frequencies. Simultaneous broadcasts on the same frequencies, they added, often in the same frequency range, did but aggravate the position.

Some delegations urged that the problem of deliberate interference might well be referred to the Plenipotentiary Conference, and emphasized how urgent it was to find some solution.

Furthermore, some countries have a peculiar problem, namely, how to cover huge territories with a strict minimum of stations. In practice, they find it exceedingly difficult to meet national requirements by setting up all the stations which, technically speaking, are required.

Many delegations asserted that in their countries broadcasting was impossible below 50 Mc/s, because atmospherics were so loud during a part of the year.

AD HOC GROUP COMMITTEE 5

NEW DRAFT RECOMMENDATION DRAWN UP BY THE BELGIAN CONGO (concerning Document No. DT 645)

Recommendations : The Ad Hoc Group recommends :

- I. with regard to high frequency broadcasting of national programmes :
 - to clear the HF broadcasting bands by applying the following principles:
 - a) forbidding the broadcasting of a single programme on several frequencies in the same band, since this practice leads to overcrowding of the spectrum, an intolerable abuse;
 - b) forbidding the use of these frequency bands when requirements may be met by the use of lower frequencies, such as those reserved for tropical broadcasting or those in the medium frequency range;
 - c) forbidding wilful interference (jamming).
 - 2) to use the bands in a suitable way:

by giving absolute priority in the 6, 7 and 9 Mc/s bands to the broadcasting of national programmes;

3) to widen as far as possible, where conditions are suitable, certain HF broadcasting bands:

in the interests of national broadcasting, time-sharing with the fixed service must be allowed, in the 6 and 7 Mc/s bands at least, whenever such a practice appears useful;

4) to provide an equitable apportionment between the needs of national and international broadcasting in the bands above 9 Mc/s.

II. with regard to the fixed service:

- 1) Administrations should do everything to reduce congestion in the HF bands, particularly by:
- a) using recent techniques to reduce the band-width necessary for each circuit;
- b) using wherever possible other means of telecommunication (cables, radio relay systems, etc.)
- c) rapidly cancelling all unused assignments in the Master Radio Frequency Record.

III. with regard to the role of the I.T.U. :

- 1) the present Conference should give the I.F.R.B. authoritative instructions to apply the above principles;
- in seeking solutions to the interference problems with which it is confronted, the I.F.R.B., when applying the procedure laid down in Article 19, will agree to take into account all relevant factors, and not only the dates of use;
- a group of experts should, within the framework of Technical Assistance, be entrusted with the task of supplying the necessary information and technical data to new and developing countries so as to enable them to choose and obtain the frequency assignments suitable for operating their services;
- 4) to solve the problem of quartz crystals, it would be useful if each Administration could have equipment for adjusting the frequency of the crystals; within the framework of Technical Assistance, the I.T.U. could advise countries which so desired with a view to acquiring the material and training the staff necessary for this work.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No DT 705-FES 5 novembre 1959

COMMISSION 7 COMMITTEE 7 COMISIÓN 7

ORDRE DU JOUR

Douzième séance - Commission 7 (Exploitation)

Lundi, 9 novembre 1959, à 15 heures - Salle D

- 1. Approbation du compte rendu de la 10ème séance (Document Nº 490).
- 2. Approbation du deuxième rapport de la Sous-Commission 7A, ainsi que des textes y annexés (Document Nº 494).
- 3. Divers.

AGENDA

Twelfth Meeting of Committee 7 (Operations Committee)

Monday, 9 November, 1959 at 3 p.m. - Room D

- 1. Approval of Summary Record of Tenth Meeting (Document No. 490).
- 2. Approval of Second Report of Sub-Committee 7A and texts therein (Document No. 494).
- 3. Any other business.

ORDEN DEL DÍA

Duodécima sesión de la Comisión 7 (Comisión de explotación)

Lunes, 9 de noviembre de 1959, a las 3 de la tarde - Sala D

- 1. Informe de la 10.ª sesión (Documento N.º 490).
- 2. Segundo informe de la Subcomisión 7A y textos anexos al mismo (Documento N.º 494).
- 3. Otros asuntos.

Le Président Chairman El Presidente

A. J. Ehnle

ADMINISTRATIVE RADIO CONTERENCE

GENEVA, 1959

SUB-COMMITTEE 7B

AGÈEDA

Twenty-first Meeting of Sub-Committee 7B (Radiotelegraph and Radiotelephone Procedure in the Mobile Services)

Wednesday, 11 November, 1959, at 3 p.m. - Room D

- 1. Approval of Summary Record of Seventeenth Meeting (Document No. 504).
- 2. Approval of Summary Record of Eighteenth Meeting (Document No. 505).
- 3. Approval of Summary Record of Mineteenth Meeting (Document No. 511).
- 4. Approval of texts in Annex to Summary Record of Mineteenth Meeting (Document No. 511).
- 5. Approval of Recommendation in Annex to Summary Record of Eighteenth Heeting (Document No. 505).
- 6. Report of Working Group 7B5.
- 7. Report of Working Group 7B6.
- 8. Report of Working Group 7B7.
- 9. Report of ad hoc Working Group Group in Phonetic Figure Table (Document No. DT 675).
- 10. Any other business.

R.M. Billington

Chairman

GENEVA, 1959

Document No. DT 707-E
5 November, 1959.

AD HOC GROUP COMMITTEE 5

SUMMARY REPORT

Third Meeting, 27 October, 1959

Agenda: Document No. DT 605

Introducing his report, <u>Mr. Carl W. Loeber</u>, Chairman of the Sub-Ad Hoc Group, observed that it was a factual statement of the results obtained by the Sub-Group and that no comment or proposals on behalf of the Group were included in the report. He informed, further, that the report will be available as Document No. DT 620 very soon. He warmly thanked the Rapporteur of the Ad Hoc Group, <u>Mr. Maqbool Ahmad</u>, for his organizational work and able assistance which made it possible to complete the work at an early date.

The <u>Chairman</u> thanked Mr. Loeber, the members of the Sub-Group, the Rapporteur of the Group and especially the delegations who presented their points of view to the Sub-Group and without whose goodwill the work of the Sub-Group would have been considerably more difficult. At the invitation of the <u>Chairman</u>, a general discussion followed in which the Delegates of <u>U.S.A.</u>, <u>Pakistan</u>, <u>U.K.</u>, <u>India</u>, <u>Belgian Congo</u> and the representatives of I.F.R.B. took part.

The <u>Delegate of U.S.A.</u> considered it advisable to prepare a draft report primarily based upon Document No. DT 620 and containing specific recommendations to Committee 5, for discussion at the next meeting of the Ad Hoc Group. This proposal was supported by the <u>Delegate of Pakistan</u> who also referred to the concern of the new and developing countries arising out of the presence of interference on their radio services as mentioned in the report.

In the opinion of the <u>Delegate of India</u>, the priority of any service was not identical with the exclusion of other services. He reiterated his conviction that an equitable distribution of the radio frequency spectrum among the countries of the world was the only possible solution to the problem under review of the group.

The <u>Delegate of Belgian Congo</u>, however, considered that the priority of any service in any band or part thereof meant the exclusion of other services from the band. He also thought that a band in the High Frequency Spectrum must be reserved for national broadcasts.

Mr. Petit, speaking on behalf of the I.F.R.B. invited the attention to the suggestion contained in paragraph iv) of answers to Question 3 d) and informed that it agreed with the view of the I.F.R.B. expressed in paragraph 2.3.3, section II, of its report to the Administrative Radio Conference. He also agreed that an international monitoring network is a sine qua non for achieving better frequency management.

In response to a question from the Chairman, Mr. Wang (I.F.R.B.) informed that during the day hours 6 Mc/s and 7 Mc/s are ordinarily used for national broadcasts only. He thought that further study of the problem was necessary before a definite answer could be given for the use of these bands exclusively for national broadcasts during evening or night hours.

The <u>Delegate of the United Kingdom</u> considered that further discussion on the report should be postponed until the copies of the report were available to everyone.

The <u>Delegate of India</u>, supporting the earlier proposal of U.S.A., suggested that the Sub-Group responsible for conducting the interviews be entrusted with the task of preparing the draft report for consideration at the next meeting. This proposal was approved and the meeting adjourned at 10.30.

Rapporteur:

Chairman:

Maqbool Ahmad

M.M. Mirza

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 6A

AGENDA

Sixteenth Meeting - Working Group 6A (Definitions)

Wednesday, 11 November, 1959 at 9 a.m. - Room C

- 1. Summary Record of the Fourteenth Meeting, Document No. 502.
- 2. Remaining terms to be defined, Document No. DT 536, Addendum No. 1.
- 3. Terms previously considered and deferred. The numbers of the terms refer to the List of Terms to be Defined, Annex to Document No. 326. The proposals relating to these terms are listed in Documents Nos. DT 69 and DT 111, and drafts of proposed definitions of some of them are contained in Document No. DT 536, as indicated by asterisks. The numbers in parenthesis refer to the Document Nos. of the Summary Records or the date on which the action to defer was taken by Working Group 6A. Nos. 10a (481), 10b (198), 16b (198), 17a (198), 17b (481), 18a (198), 18m (407), 22a (487)*, 41 (481)*, 42 (481)*, 45 (481)*, 69j (3/11)*, 69k (3/11)*, 691 (3/11)*, 69m (418), 69n (418), 69g (418). See also Nos. 18.15, 18.55, 18.60, 18.65 and 18.70 in Document No. DT 516, referred to Committee 5 in Document No. 487.
- 4. Article 1, Section VI, Operating Terms.

Proposals Nos. 31 and 279, pages 41 and 94 of the Yellow Book.

5. Other matters.

E. W. Allen

Chairman

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

ANNEX (Revised)

Chapter VII

TITLE NOC Identification of stations

Article 19

TITLE MOD Identification of stations and formation of call signs

TITLE ADD Section I. Requirement for identification

411a ADD §1. All stations are forbidden to carry out transmissions without identification or with false identification 1).

Foot- ADD 1) Considering the present state note

of the art it is recognized that
the transmission of identification
signals for certain specialized
radio systems (e.g. radiodetermination and radio relay systems) is
not always possible.

Comments

Proposal No. 4010 (adopted).

Proposal No. 4011 (not adopted)
question referred to the
Language Group of Sub-Committee 7A.
Proposal No. 4012 (adopted with
modifications to replace No. 383).

Proposal No. 4103 (adopted in the modified version given in Document No. DT 571 and with amendments to the Spanish and French texts).

Document No. DT 709-E (Rev.)
Page 2

\$2. In order that stations may be readily identified each station shall transmit its identification as frequently as practicable during the course of transmissions, including those conducted for tests, adjustments or experiments. During such transmissions, however, identification must be transmitted at least hourly, preferably within the period from 10 minutes before to 10 minutes after the hour (G.M.T.), unless to do so would cause unreasonable interruption of traffic.

ADD

411b

To meet these identification requirements, Administrations are urged to ensure that, wherever practicable, superimposed identification methods be employed in accordance with C.C.I.R. recommendations.

TITLE ADD Section II. Methols of identification

Proposal by the Drafting Group incorporating Nos. 384 and 385 and adopted by Working Group 7A4 with an amendment to the French text.

Proposal of the Drafting Group adopted.

Document No. DT 709-E (Rev.) Page 3

Proposal No. 4020 modified by the Drafting Group and replacing Nos. 428 to 433 (Proposal No. 4039). The amended text did not meet with the unanimous approval of Working Group 7A4

Proposal by the Drafting Group introducing a reference to the C.C.I.R. Recommendations, adopted after amendment of the English text. Proposal by the Drafting

Group adopted, with possibility of later examination, together with Nos. 414 and 415

The identification of a station ADD **§**3. 411c shall be either a call sign or other recognized means of identification. Such recognized means of identification may be one or more of the following necessary for complete identification : name of station, location of station operating agency, international registration number, flight identification number, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internation-

411d ADD **§**4. The identifying signal shall be transmitted by methods which in accordance with C.C.I.R. recommendations, do not necessitate the use of special terminal equipment for reception.

ally.

If superimposed identification 411e ADD **§**5. is used, the identification shall be preceded by the signal Q T T

Document No. DT 709-E (Rev.)
Page 4

411f ADD §6. When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on different frequencies, as far as practicable each station shall transmit its own identification or those of all the stations.

Proposal No. 1447, modified by the Drafting Group and adopted by Working Group 7A4.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

SUB-COMMITTEE 7A

SECOND REPORT

by Working Group 7A4 to Sub-Committee 7A

In this report the Working Group submits the outcome of its examination of:

- Document No. DT 329 containing a proposal by Committee 6 that Section V of Article 13 (identification of emissions) be transferred to Article 19, and
- International Radio Consultative Committee Recommendation No. 323 (Los Angeles, 1959) on the identification of stations, reproduced in Annex A 20 to the Secretary-General's Circular No. 775.

At the first three meetings of the Working Group there was very extensive discussion of the above documents, in which connection the following proposals were examined:

Nos. 4010 to 4016, pages 334 Rev. 1 and 334-1, in the collection Nos. 1442 to 1450, pages 348 Rev. 1 and 351 of proposals No. 5110, Document No. 63

Agreement was reached on the following points :

- the principle of transferring Section V of Article 13 to Article 19
- the title for the Article
- the new text of No. 383 of the RR, to which no reference was made in the proposal by Committee 6, but which the Group felt should be included in Article 19 by analogy with the new wording of No. 372 adopted by Committee 6.
- the text of the footnote 1 to be appended to this new number, as in Proposal No. 4013 of the United States as modified by the United States Delegation, in the terms set out in Document No. DT 571, substituting a new wording which has certain terminological amendments to the Spanish and French texts.

It was not possible, however, to reach any agreement on the texts to be adopted for Nos. 383 and 384, or for the suggestions contained in Recommendation No. 323 of the C.C.I.R. The Working Group

therefore decided to set up a Drafting Group with the task of preparing new texts amalgamating the proposals by the United States, China and the Federal Republic of Germany.

The Working Group had previously decided unanimously that :

- the new provisions would be inserted at the beginning of Article 19 in one or two new sections
- the recommendations of the International Radio Consultative Committee would not be reproduced in the Radio Regulations but would only be referred to.

The Drafting Group was under the Chairmanship of Mr. Keith, Delegate of Australia, and consisted of the Delegates of China, the Federal Republic of Germany, Italy, Portugal, and the United States.

As laid down in its terms of reference, it prepared new texts and, further, examined Proposals Nos. 4017 and 4020 of the United States on pages 334-2 and 334-3 of the collection of proposals.

The Drafting Group's proposals are annexed, together with the rest of Working Group 7A4's work and are denoted by a reference in the column headed "Comments".

They were examined at the Working Group's seventh meeting on 3 November, 1959.

A remarkable feature of the Working Group's discussions was how anxious people were to make due allowance for other views.

Unanimous agreement was reached on the majority of the texts submitted for examination by Sub-Committee 7A.

However, the title proposed for the new Section 1 of Article 19 could not be agreed upon. An amendment by the French Delegation suggesting another was equally unsuccessful. The only point agreed upon in that connection was that there should be a reference made in the text to the need for identification (proposal by the Delegation of Australia seconded by several other delegations) and to refer the question back to the Language Group of Sub-Committee 7A for an acceptable title to be found in the three languages.

Regarding the proposed text annexed as No. 411C \$4, the Delegation of Indonesia wished to go on record as objecting to the examination by the Drafting Group of Proposals Nos. 4017 and 4020 which were outside its terms of reference.

M. Sannier Chairman:

A N N E X

Chapter VII

TITLE NOC <u>Identification of stations</u>

Article 19

TITLE MOD <u>Identification of stations and</u>

formation of call signs

TITLE ADD Section I. Requirement for identification

411a ADD \$1. The transmission of signals without identification or with incorrect
identification is forbidden to all
stations
1)

Foot- ADD 1) It is recognized that the present note state of radio engineering is not such as to always render possible the transmission of identification signals for certain special radio systems (e.g. radar and radio relay systems).

Comments

Proposal No. 4010 (adopted)

Proposal No. 4011 (not adopted)
question referred to the
Language Group of Sub-Committee 7A

Proposal No. 4012 (adopted with modifications to replace No. 383)

Proposal No. 4103 (adopted in the modified version given in Document No. DT 571 and with amendments to the Spanish and French texts)

Annex to Document No. 709-E Page 4

Proposal by the Drafting Group incorporating Nos. 384 and 385 and adopted by Working Group 7A4 with an amendment to the French text

\$2. For speedy identification, all stations shall transmit their identification signals as frequently as is practicable, during the course of their transmissions, including those for tests, adjustments or experiments.

During such emissions, the identification signals shall be transmitted at least once an hour, for preference during the 20 minute period, beginning 10 minutes before the full GMT hour, provided there is no danger of unwarrantable interference with other

411b

ADD

In order to satisfy identification requirements, administrations are invited to make sure that wherever possible the superposition methods recommended by the C.C.I.R. are followed.

TITLE ADD Section II. Methods of identification

transmissions.

Proposal of the Drafting Group adopted

Annex to Document No. DT 709-E Page 5

411c ADD \$4. Identification consists either of transmission of a call sign, or of another recognized method of identification, e.g. the transmission of one or more of the following: name of station, location of station, operating agency, international registration number, flight identification number, characteristic signal, characteristic of emission or other clearly distinguishing features readily recognized internationally.

411d ADD \$5. The transmission of identification signals must be by methods
which, as laid down in the C.C.I.R.
Recommendations, do not necessitate
the use of special terminal equipment for reception.

411e ADD \$6. If the method of identification by superposition is used, the identification signal must be preceded by the signal Q T T

Proposal No. 4020 modified by
the Drafting Group and
replacing Nos. 428 to 433
(Proposal No. 4039).
The amended text did not meet
with the unanimous approval of
Working Group 7A4

Proposal by the Drafting Group introducing a reference to the C.C.I.R. Recommendations, adopted after amendment of the English text.

Proposal by the Drafting Group adopted, with possibility of later examination, together with Nos. 414 and 415

Annex to Document No. DT 709-E Page 6

411f ADD \$7. When a number of stations work simultaneously in a common circuit, either as relay stations, or in parallel on different frequencies, each station shall as far as practicable transmit its own identification signal or those of all the stations.

Proposal No. 1447, modified by the Drafting Group and adopted by Working Group 7A4.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 710-FES 5 novembre 1959

SOUS-GROUPE DE TRAVAIL 5B4 SUB-WORKING GROUP 5B4 SUBGRUPO DE TRABAJO 5B4

ORDRE DU JOUR

Treizième séance - Sous-Groupe de travail 5B4

(Radiodiffusion à hautes fréquences)

Lundi, 9 novembre 1959, 9 h. (et, s'il est nécessaire, 15 h. et 20.h. 30) - Salle F

- 1. Suite de l'examen du rapport du Groupe spécial (Document Nº DT 659)
- 2. Projet de rapport du Sous-Groupe de travail 5B4 au Groupe de travail 5B (Document N° DT 501, Annexes 1 et 2; Document N° DT 659, Annexes 1 et 2 revisées)

AGENDA

13th Meeting of Sub-Working Group 5B4

(High Frequency Broadcasting)

Monday, 9 November 1959 at 9 a.m. (if necessary 3 p.m. and 8.30 p.m.) - Room F

- 1. Continued consideration of the report of the Ad Hoc Group (Document No. DT 659)
- 2. Draft Report of Sub-Working Group 5B4 to Working Group 5B (Document No. DT 501, Annexes 1 and 2 and Document No. DT 659, Annexes 1 and 2, as revised)

ORDEN DEL DÍA

13.ª sesión del Subgrupo de trabajo 584

(Radiodifusión por altas frecuencias)

Lunes, 9 de noviembre de 1959 a las 9 de la mañana (y en caso necesario, a las 3 de la tarde y a las 8 de la noche) - Sala F

- 1. Continuación del examen del informe del Grupo especial (Documento N.º DT 659)
- 2. Proyecto de informe del Subgrupo de trabajo 5B4 al Grupo de trabajo 5B (Documento N.º DT 501, Anexos 1 y 2, y Documento N.º DT 659, Anexos 1 y 2 revisados).

Le Président:

The Chairman: Sven Gejer

El Presidente:

Document No. DT 711-E 6 November, 1959

WORKING GROUP 4D

DRAFT REPORT

of Sub-Working Group 4D4 (Region 1) to Working Group 4D

1. The Sub-Working Group was set up on 7 October, 1959, to consider, and make recommendations on, the future allocation of the Band 68 - 88 Mc/s in Region 1. The Sub-Group held meetings. The following Delegations participated in its work:

Austria Italy
Bulgaria Netherlands
Czechoslovakia Spain
Denmark Sweden
Federal Republic of Germany Switzerland
France United Kingdom
Greece U.S.S.R.

The Sub-Group was also assisted by Mr. R. Smith of the I.F.R.B.

- Proposals for the future allocation of the band under consideration are given in Document No. DT 122, Addenda 3 and 4. These proposals fall into the following broad categories:
 - i) those involving the operation of aeronautical-radionavigation services in parts of the band;
 - ii) those involving the operation of fixed and/or mobile services in parts of the band;
 - iii) proposals for the operation of broadcasting stations in the U.S.S.R., Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania in the ranges 68 73 Mc/s and 76 88 Mc/s; also in British West Africa in the range 86-87.5 Mc/s.

Cognisance was also taken of proposals from France and Morocco (Nos. 497 and 3455) involving the operation of Meteorological Aids in the band 68.0-68.5 Mc/s; but the Delegate of France kindly agreed to deal with this particular requirement on a purely national basis and it is hoped that the Delegation of Morocco will agree to do likewise. Finally, the Sub-Group took into account Proposals Nos. 3544 and 3546, submitted by the United Kingdom, involving the inclusion of Footnotes to the frequency table authorising the operation of the radiolocation service, in the United Kingdom, in the range 82 - 87 Mc/s, and of the mobile (excluding aeronautical mobile) service in the range 87.5 - 88 Mc/s. Proposal No. 3545 was withdrawn by the United Kingdom.

The Sub-Group reached agreement on the allocations that need to be made to accommodate the services mentioned in paragraph 2 (i) and (ii) above. Agreement was, moreover, reached on the use of the bands 68 - 73 Mc/s and 76 - 88 Mc/s for broadcasting in the U.S.S.R., and on the use of the band 86 - 87.5 Mc/s for broadcasting in British West Africa. It was also agreed that Footnotes should be appended to the Frequency Table covering the requirement of the United Kingdom to use the band 82 - 87 Mc/s for the radiolocation service and the band 87.5 - 88 Mc/s for the mobile (excluding aeronautical mobile) service.

A suggested frequency allocation table, with associated Footnotes, meeting these requirements, is given in the Annex.

- The Sub-Group, was, however, unable to reach agreement on the use of the bands 68 73 Mc/s and 76 87.5 Mc/s, for broadcasting, in Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania (Proposals Nos. 595, 5297, 5299 and Document No. 329 refer). The Delegates of Austria, Denmark, Greece, Federal Republic of Germany and Sweden were opposed to the operation of broadcasting stations in these frequency ranges, in the countries concerned, because of the serious risk of harmful interference to low-power fixed and land-mobile services already operated, or to be operated, by their Administrations. It was explained that in many of these countries the bands allocated at Atlantic City for fixed and mobile services in this range were seriously congested. Moreover, the introduction of high-power broadcasting stations in the bands 68 70 Mc/s, 72.8 74.8 Mc/s and 78 80 Mc/s (at present allocated for aeronautical radionavigation) would seriously impede the use of these bands for fixed and mobile purposes (as has been proposed by many European countries).
 - The Delegates of Austria, Denmark, Greece, Federal Republic of Germany and Sweden were not prepared to agree to the operation of broadcasting stations in the frequency ranges 68 73 Mc/s and 76 87.5 Mc/s, subject to local and more detailed agreement between Administrations concerned, because they saw little prospect of being able to reach agreements that would adequately safeguard their fixed and mobile services and, at the same time, meet the essential needs of the countries desiring to use the bands for broadcasting. In their views the two services are not compatible.
- On the other hand, it was explained by the Delegates of Bulgaria, Czechoslovakia and the U.S.S.R. that the use of the bands 68 73 Mc/s and 76-88 Mc/s, for broadcasting, in their countries, and also in Albania, Hungary, Poland and Roumania, represented a most important requirement. They drew attention to Proposals Nos. 404 406, submitted by Czechoslovakia and Roumania (page 131 of the Yellow Book) in which the reasons underlying their needs in the range 68 73 Mc/s were stated. They agreed that there would need to be collaboration with neighbouring Administrations in order to minimise harmful interference to low-power fixed and land-mobile services in other countries but considered that problems of that kind could be

resolved given the necessary cooperation. They advocated detailed discussions with each of the countries concerned and expressed willingness to negotiate agreements with such countries either at the present Conference or subsequently. They considered that the claims of broadcasting to the use of the bands 68 - 70 Mc/s, 72.8 - 74.8 Mc/s and 78 - 80 Mc/s, in Eastern Europe, should be considered equally with those of the fixed and mobile services in deciding the future allocation of these bands. They also pointed to the need to ensure that harmful interference was not caused to the reception of broadcast transmissions due to the operation of fixed and mobile services in neighbouring countries.

- 7. The Sub-Group discussed the possibility that the field intensities to be protected in respect of the broadcasting, fixed and land-mobile services might be laid down in the Regulations, possibly by incorporation in a special Footnote that would make acceptance of the use of these bands for broadcasting dependent upon separate agreements between Administrations concerned. Several draft texts were considered but it was not possible to reach agreement on the terms of a Footnote that would meet all points of view.
- 8. Consideration was also given to the possibility that the use of the bands 68 73 Mc/s and 76 87.5 Mc/s, for broadcasting, might be accepted, subject to agreement on frequency assignments and other technical charactertistics for each broadcasting station at the next European VHF Broadcasting Conference. It was recognized that, in principle, a decision in this matter was appropriate to the present Administrative Radio Conference, especially as not only broadcasting but also fixed and land-mobile services were concerned. However, it appeared unlikely that there would be sufficient time at the present Conference to reach any such agreements. It was therefore agreed that the possibility of taking this matter to conclusion at the next Broadcasting Conference should be specially mentioned in this report since there are possibilities that further discussion in Working Group 4D may pave the way for a solution along those lines.
- In summary, the Sub-Group was unable to reach agreement on the use of the bands 68-73 Mc/s and 76-87.5 Mc/s for broadcasting in Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania. However, the Sub-Group was able to reach agreement on the remaining proposals that it was asked to examine and considers that so far as these Proposals are concerned the requirements of countries would best be met by the adoption of the frequency table and Footnotes shown in the Annex; but of course the table and Footnotes do not take account of the full requirements of broadcasting.

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- 10. The Sub-Group did not consider any proposals concerning allocations in this range of the spectrum for radio-astronomy since these will doubtless be dealt with in the Special Group set up to consider all such requirements.
- 11. Finally, the Sub-Group wishes to express its thanks to Mr. R. Smith of the I.F.R.B. for his help and advice, and for his assistance in the preparation of documents.

E. Sharpe Chairman

Annex: 1

ANNEX

SUGGESTED ALLOCATION TABLE FOR REGION 1

68 **-** 88 Mc/s

BAND Mc/s	Allocation
68 -74.8	Fixed Land Mobile 1) 2) 3) 4)
74.8 - 75.2	Aeronautical radionavigation 5)
75.2 - 87.5	Fixed Mobile 4) 6) 7) 8) 9) 10)
87.5 - 88	Broadcasting 11)

Footnotes

- 1) In Austria, France, Greece, Morocco and the United Kingdom, the band 68 70 Mc/s is allocated additionally for the aeronautical radio-navigation service.
- 2) RR 180 amended: In the U.S.S.R. the band 68 73 Mc/s is allocated for the broadcasting service. The broadcasting service in the U.S.S.R., and the authorized services in other countries are subject to local arrangement in order to avoid mutual harmful interference.
- 3) In Greece and the United Kingdom, the band 72.8 74.8 Mc/s is allocated additionally for the aeronautical radionavigation service.
- 4) In Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania and the U.S.S.R. the bands 73 74.8 and 75.2 76 Mc/s are allocated alternatively for the aeronautical radionavigation service.

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- 5) RR 184 amended: The Frequency 75 Mc/s is designated for aeronautical marker beacons. In Region 1 the guard band is \pm 0.2 Mc/s. However, other services must refrain from assigning frequencies close to the limits of this guard band to stations which, because of their power or position, might cause harmful interference to marker beacons.
- 6) RR 185 amended: In the U.S.S.R. the band 76 100 Mc/s is allocated for the broadcasting service.
- 7) RR 186: The broadcasting service in the U.S.S.R. and the authorized services in the neighbouring countries are subject to local arrangement in order to avoid mutual harmful interference.
- 8) In France, Morocco and the United Kingdom the band 78 80 Mc/s is allocated additionally for the aeronautical radionavigation service.
- 9) In the United Kingdom the band 82 87 Mc/s is allocated additionally for the Radiolocation service.
- 10) In British West Africa the band 86 87.5 Mc/s is allocated alternatively for the broadcasting service.
- 11) In the United Kingdom the band 87.5 88 Mc/s is allocated additionally for the land mobile service.

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 4D

REPORT

Sub-Working Group 4D8 to Working Group 4D

- 1. The Sub-Working Group held five meetings. Its terms of reference were: to consider and make recommendations concerning the proposals contained in DT No. 122, Add. 11, for the band 216 235 Mc/s first in Region 1 and secondly those for a world-wide allocation.
- 2. The Delegations of the following countries were represented at the meetings:

Australia, Belgium, Bulgaria, Czechoslovakia, Denmark, the Federal Republic of Germany, France, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the Union of South Africa, U.S.S.R., the United Kingdom and the United States of America.

- 3. The Sub-Working Group had the welcome assistance of Mr. Smith and Mr. Kari of the I.F.R.B.
- 4. The Group discussed the band 216 235 Mc/s dividing it into two parts, 216 223 and 223 235 Mc/s, taking into account Chapter I of the Final Protocol to the European Broadcasting Agreement (Stockholm, 1952) and its final Recommendation. As a result at the end of the third meeting, two working papers (DT 678 and DT 679) were produced. These contained tentative allocations and proposals for the two bands. During the discussions at the third meeting, the <u>Delegate of Portugal</u> made a statement which he desired to have recorded. That statement appears as Annex 2 to this Report.
- 5. During the fourth meeting, the two working papers, suitably amended by agreement, were accepted as showing the Region 1 plan for the band under discussion. Their content appears in Annex 1 to this Report.
- 6. The <u>Delegate of the United States</u> withdrew Proposals Nos. 3360, 3361 and 3362. This rendered unnecessary any further discussion on world-wide allocations in this band.
- 7. The <u>Delegate of the Union of South Africa</u> reserved his position and advised the Chairman that he would return to the question of allocations in the band 216 235 Mc/s and to the matter of RR 205 on behalf of Northern and Southern Rhodesia.

8. In the absence of a delegate of British West Africa, the meeting was unable to reach a conclusion on Proposal No. 5193 (Document No. 84).

W. Mohr Chairman

Annexes: 2

ANNEX 1

PROPOSED ALLOCATIONS FOR THE BAND 216 - 235 MC/S

Frequency Band Mc/s	Region 1
216 - 223	Aeronautical radionavigation Broadcasting 1) 2) 3) 4)
223 - 235	Aeronautical radionavigation * Fixed Mobile 2) 4) 5) 6)

1) The aeronautical radionavigation service will be operated only in Denmark, France, Greece, the Netherlands, Portugal, the United Kingdom, Sweden and the Union of South Africa.

The broadcasting service will be introduced in such a way so as not to reduce the service areas existing on (°) December, 1959, or such lesser areas as may exist thereafter for the aeronautical radionavigation service of the above-mentioned countries.

The agreement of these countries as applicable, will be obtained before new broadcasting stations are brought into operation which could cause harmful interference to the agreemutical radionavigation service.

The countries employing the aeronautical radionavigation service must not operate airborne equipment during flights over countries in which the band is used exclusively for the broadcasting service.

- 2) In France the provisions of note 1) above apply to the band 216 225 Mc/s.
- 3) In Italy the band 216 223 Mc/s is additionally allocated to the fixed service.
- 4) In the United Kingdom the band 216 225 Mc/s is used only for aeronautical radionavigation services and on a secondary basis for the radiolocation service.

^(°) Date of Final Acts of the Geneva Conference.

Footnotes continued:

- 5) In Austria and Switzerland the band 223 230 Mc/s is allocated to broadcasting only on a permitted basis and the band 230 235 Mc/s is used by the fixed and mobile services only.
- 6) Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumainia and the U.S.S.R. favour broadcasting in the band 223 230 Mc/s as a service with equal rights to the aeronautical radionavigation service.

Note:

RR 203 and RR 204 are deleted. RR 205 is to be amended (see paragraph 7 of this report).

ANNEX 2

STATEMENT BY THE DELEGATE OF PORTUGAL

Mr. Chairman,

The Portuguese Administration studied carefully the problem of allocating the band 216 - 223 Mc/s to the Aeronautical Radionavigation and BC services on an equality of rights, as it seems has been decided by the majority of delegations present on the Sub-Working Group 4D8.

First of all, Sir, we feel that dealing with so important a matter as to share a band allocated after a long time to a safety of life service with BC service, it is impossible to refer to a majority or a minority. What must be considered here is if this Sub-Working Group is prepared to agree that tomorrow hundreds of human lives should be endangered or not.

To the best of memory, Sir, this will be the first time such a so astonishing decision is taken upon.

Any we must say, Sir, that we don't know how it is possible to operate on an equality of rights those two services. Therefore, looking around, we see here such an assembly of clever and well qualified telecommunication experts that we are forced to decide perhaps by our weak mind! We put forward again the example offered before of what will happen when an aircraft still using radio navigation aids on this band must fly over Europe w with a lot of BC and TV stations operating on this particular band and we should be very pleasured if any delegation present could be so kind to teach us on this matter.

On the other hand, Sir, the Portuguese Administration is well in favour of the development of TV and BC services, because we think they fulfil very important purposes on extending the friendship between nations and contributing to higher standards of education, this is to say to a better and peaceful way of life. This is the reason why we are extending as much and as quickly as possible our own TV and BC nets. But that doesn't mean that those services must be allowed to cause harmful interference to one another.

At last but not at least, Mr. Chairman, we feel of the discussions having taken place on this Sub-Committee that the delegations with definite requirements would not oppose a compromise solution maintaining the status quo with a recommendation as outlined by the Swiss Delegation which we think would satisfy everybody, because that one is really the only reasonable solution for the problem we are facing now.

Annex 2 to Document No. DT 712-E Page 6

On this assumption, Sir, the Portuguese Delegation cannot accept the solution new proposed, and reserves its rights to come back again to this subject later.

Two points yet, Mr. Chairman:

- 1) We request our statement to be included in the report of this Sub-Committee calling the attention of all delegations to this particular problem.
- 2. If the United Kingdom and Swiss Delegations see no objection, the suggested United Kingdom footnote and the text of the suggested Swiss recommendation be also included in that report.

Document No. DT 713-E 6 November 1959

SUB-COMMITTEE 7B

REPORT

Working Group 7B7 to Sub-Committee 7B

- 1. Working Group 7B7 composed of delegates of: Australia, Canada, Denmark, Federal Republic of Germany, France, India, Israel, Japan, Korea, Netherlands, New Zealand, Norway, Portugal, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America, and the Observers of the I.C.S. and C.I.R.M. held seven meetings. Not all delegates, however, were able to attend all the meetings.
- 2. The Group considered all proposals contained in the Annexes to Documents Nos. DT 463 and DT 495, and proposals 5113 in Document No. 64 and 5556 in Document No. 475; and submits herewith:
 - i) a new Article No. 29a (Annex 1)
 - ii) a revised Appendix 11 (Annex 2).
- The Group gave long and careful consideration to the proposals regarding the frequency to be used for calling in the band 1 605 kc/s 4 000 kc/s, and finally adopted the texts given in Nos. 20 to 30. However, the Delegates of Australia and New Zealand were unable to accept Nos. 20 to 22 and 24 to 26.
- 4. The Group desired to draw the attention of the Sub-Committee to the following points:
 - i) Adoption of Nos. 32, 48 and 54 of Article 29a is dependent on whother calling frequencies are made available in the bands 4 000 kc/s 23:000 kc/s.
 - ii) The frequencies left blank in Nos. 36 and 55 have to be specified in accordance with decisions yet to be taken in the Sub-Committee.
 - iii) If No. 89 is adopted a similar regulation for radiotelegraphy should be inserted after No. 658 in Article.29.

- iv) Some members of the Group thought the sequential order of the sections and sub-sections of the new Article should be rearranged, but that this could best be done, if necessary, by comparison and realignment with the radiotelegraph procedures finally adopted for Article 29.
 - v) The definitions of "Telegram" and "Radiotelegram" in Nos 17 and 18 of Article 1 seem ambiguous, as, taken together they might be interpreted to mean that a radiotelegram cannot be transmitted by radiotelephony. If such is the case, the need for a revision of the definition should be brought to the notice of Committee 6.

W. Swanson

Chairman

Annexes : 2

ANNEX 1

ARTICLE 29a

General Radiotelephone Procedure in the Maritime Mobile Service

Section I. General Provisions

1.	§1 (1)	The provisions of the present article are	Proposals
	applicable	e in all cases to radiotelephone stations of the	considered
	Maritime N	Mobile Service, except for distress, urgency and	2062
	safety pro	ocedures to which the provisions of Article 37	4257
	apply.		
2.	(2)	Aircraft stations may enter into telephone communi-	
	cation wit	th stations of the Maritime Mobile Service on	2063
	frequencie	es allocated to that service for radiotelephony.	4258
	They must	then comply with the provisions of this Article,	
	and of Art	ticle 27.	
3.	§ ₂ (1)	The service of ship radiotelephone stations must	2064
	be perform	med by an operator satisfying the conditions fixed	2166
	by Article	24.	4259
4.	(2)	For the call signs for coast and ship radio-	2065
	telephone	stations see Article 19.	2167
			4260
5.	§ 3	The international radiotelephone service of	
	public con	rrespondence provided on ships should, if possible,	4388
	be operate	ed on a duplex basis.	

6.	§4 (1) Automatic calling and identification devices, and	1753
	devices providing for the emission of a signal to indicate	2066
	that a channel is in use, may be used in this service.	4261
		4316.
		4317
7.	(2) Radiotelephone stations of the Maritime Mobile	1723
	Service should as far as possible be equipped with devices	2067
	for instantaneous switching from transmission to reception	2169
	and vice versa. This provision is necessary for all stations	4262
	establishing communication between ships or aircraft and	4315
	subscribers of the land telephone system.	4324
8.	\$5 Stations of the Maritime Mobile Service equipped	2069 bis
	for radiotelephony may transmit and receive radiotelegrams	2172
	by means of telephony.	4378
	Section II. Preliminary Operations	
9.	§6 (1) Before transmitting, every station shall take	1756
	precautions to ensure that its emissions will not interfere	2074
	with communications already in progress; if such inter-	2079
	ference is likely the station awaits an appropriate break	4388
•	in the working.	
10.	(2) If, these precautions having been taken, the	
	emissions of the station happen to interfere with a radio	2075
	transmission already in progress, the following rules are	4388
	to be applied:	

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11.		a) The mobile station whose emission causes	1757
		interference to the correspondence of a mobile	2076
		station with a coast station or aeronautical	4388
		station must cease sending at the first request	
		of the said coast station or aeronautical station.	
12.		b) In the case where radiocommunication already	
		in progress between mobile stations is interfered	2077
		with by the emissions of another mobile station,	4388
		this station must cease sending at the first	
		request of one of the other stations.	
13.		c) The station which requests this cessation	
	•	must indicate the approximate waiting time	2078
		imposed on the station whose emission it suspends.	4388
		Section III. Calls, Reply to Calls and	
		Signals Preparatory to Traffic	
14. 87	7	Method of Calling - General	
15.	(1)	The call is made as follows:	
	•	- call sign or other identification of the	
		station called, not more than three times;	1770
		- the words THIS IS;	2183
		- call sign or other identification of the	
		calling station, not more than three times.	
16.	(2)	When contact is established the call sign or other	1770
id	lentific	ation may thereafter be transmitted once only.	2183

17.	(3) When the coast station is fitted with equipment	1771
	for selective calling and the ship is fitted with equipment	2082
	for receiving selective calls, the coast station shall call	2270
	the ship by transmitting the appropriate code signal, and	
	the ship station shall call the coast station, by speech, in	
	the manner given in No. 15.	
18.	Frequency to be Used for Calling for Preparatory Signals	,
19.	A. Frequency Bands between 1 605 kc/s and 4 000 kc/s.	
20.	(1) A radiotelephone ship station calling a coast	1776
	station of its own nationality should:	1777
21.	a) whenever and wherever traffic density is high	2083
	use a working frequency for the call;	2084
22.	b) in other cases, use the frequency 2 182 kc/s	2085
	for the call.	2195
		4341
		4345
		4369
23.	(2) A radiotelephone ship station calling a coast	1778
	station of another country should, as a general rule, use	2086
	the frequency 2 182 kc/s. However, where mutually agreed	2087
	by Administrations, the ship station may use a working	2196
	frequency on which watch is kept by that coast station.	4341
		4345
		4369

24.	(3)	A radiotelephone ship station calling another	
	ship stat	ion should:	
25.		a) whenever and wherever traffic density is high	1779
		and prior arrangements can be made, use an intership	1780
		frequency;	2088
26.		b) in all other cases use the frequency	21.97
		2 182 kc/s.	4365
			4366
			4367
27.	(4)	An aircraft station calling a coast station or a	2089
	ship stat	ion may use the frequency 2 182 kc/s.	
28.	(5°)	Coast stations should, in accordance with the	1782
	requireme	nts of their own country, call ship stations of	2090
	their own	nationality either on a working frequency, or,	2198
	when call	s to individual ships are made, on the frequency	4347
	2 182 kc/	s.	
29.		However, ship stations which keep watch simul-	1782
	taneously	on 2 182 kc/s and a working frequency should be	2090
	called on	the working frequency.	2198
			4347
30.	(6)	As a general rule, coast stations should call	1781
	radiotele	phone ship stations of another country on the	2091
	frequency	2 182 kc/s.	2199
			4341

4376

B. Frequency Bands between 4 000 kc/s and 23 000 kc/s. 31. §9 (1) A ship station calling a coast station by radio-32. 2092 telephony may use the frequency reserved for this purpose in the frequency band chosen. (2) A coast station calling a ship station by radio-33. 2093 telephony shall use one of its working frequencies specified in the List of Coast Stations. (3) The preliminary operations for the establishment of 34. 2094 radiotelephone communications may also be carried out by radiotelegraphy using the procedure appropriate to the radiotelegraphy services. (See Nos. 619 to 621) 35. C. Frequency Bands between 156 Mc/s and 174 Mc/s. (1) In the bands between 156 Mc/s and 174 Mc/s used 36. for the maritime mobile services, coast and ship stations 1783 should, as a general rule, call on the frequency 156.80 2095 Mc/s. However, when using a two-frequency channel for 2096 calling in the public correspondence service in cases where 2097 this has been implemented, coast stations shall transmit on 2271 Mc/s, and ship stations on ... Mc/s; but this does 2272 not prohibit initial calling and answering on the working 4365 channel when previously arranged. 37. (2) When the frequency 156.80 Mc/s is being used for distress, urgency or safety communications, a ship station 1784 requiring entry into the Port Operations service may 2098 establish contact on a port operations frequency when indi-2273

cated in heavy type in the List of Coast Stations.

38.	§11	Form of Reply to Calls	
39.		The reply to calls is made as follows:	
		- call sign or other identification of the	
	•	calling station, not more than three times;	1800
		- the words THIS IS;	2107
•		- the call sign or other identification of the	2201
		station called, not more than three times.	2274
40.		Frequency for Reply	
	§12 A	• Frequency Bands between 1 605 kc/s and 4 000 kc/s.	
41.	(1)	When a ship station is called on 2 182 kc/s it	1808
	should r	eply on the same frequency unless another frequency	2108
	is indic	ated by the calling station.	2202
			4371
42.	(2)	When a ship station is called on a working frequency	1809
•	by a coa	st station of the same nationality, it must reply on	2109
	the work	ing frequency normally associated with the frequency	2203
	used by	the coast station for the call.	4371
43.	(3)	A ship station should, after calling a coast station	1810
	or anoth	er ship station, indicate the frequency on which a	2100
	reply is	required if this frequency is not the normal one	2200
	associat	ed with the frequency used for the call.	2229
			4372
44.	(4)	A ship station which frequently exchanges traffic	
	with a c	oast station of another country may use the same	1811
	procedur	e for reply as ships of the nationality of the coast	2204
	station,	where this has been agreed by the Administrations	
	concerne	i.	

45.	(5) As a general rule a coast station shall reply:	
46.	a) on 2 182 kc/s to calls made on 2 182 kc/s	1812
	unless another frequency is indicated by the	2203
	calling station;	
47.	b) on a working frequency to calls made on a	
	working frequency.	
	813 B. Frequency Bands between 4 000 kc/s and 23 000 kc/s.	
48.	(1) When a ship station is called by a coast station, it	
	should reply, as a general rule, on the calling frequency of	2110
	the frequency band in question.	
49.	(2) When a coast station is called by a ship station,	
	it shall reply on one of its working frequencies specified	2111
	in the List of Coast Stations.	٠
	\$14 C. Frequency Bands between 156 Mc/s and 174 Mc/s.	
50.	(1) When a station is called on 156.80 Mc/s it should	1813
	reply on the same frequency.	2112
		4307
51.	(2) When a coast station open to public correspondence	
	calls a ship station either by speech or by selective calling	- 1814
	using a two-frequency channel, the ship station shall reply by	2113
	speech on the frequency complementary to that of the coast	2114
	station; conversely, a coast station shall reply to a call	2275
	from a ship on the frequency complementary to that of the	
	ship station.	

2104

52. Indication of the Frequency to be used for Traffic

A. Bands included between 1 605 kc/s and 4 000 kc/s. If contact is established on the frequency 2 182 kc/s, 1789 53. coast and ship stations must transfer to one of their normal 2099 working frequencies for the exchange of traffic. 2200 2228 4363 §16 B. Bands included between 4 000 kc/s and 23 000 kc/s. 54. When a ship station has established contact with a coast station or another ship station, on the calling fre-2101 quency of the band chosen, the two stations shall transfer to one of their respective working frequencies in that band. C. Bands included between 156 Mc/s and 174 Mc/s. 55. (1) In the bands between 156 Mc/s and 174 Mc/s used for the public correspondence service, whenever contact has been 1790 established between a coast station and a ship station on the 2102 frequency 156.80 Mc/s, or when using the two-frequency channel 2281, (See No. 36) the stations shall transfer to one of 4363 their normal pairs of working frequencies for the exchange of 4372 traffic. The calling station should indicate the channel to which it is proposed to transfer by reference to the frequency in Mc/s, or preferably to its channel designator. (2) When contact on 156.80 Mc/s has been established 56. 1792 between a coast station providing services for port operations 2103

and a ship station, the ship station should indicate the

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	particular service required (such as navigational information,	2282
	docking instructions, etc.), and the coast station then indi-	2283
	cates the channel to be used for the exchange of traffic by	4375
	reference to the frequency in Mc/s, or preferably its	
	channel designator.	
57.	(3) A ship station, when it has established contact	1793
	with another ship station on the frequency 156.80 Mc/s should	2105
	indicate the intership channel to which it is proposed to	2284
	transfer for the exchange of traffic by reference to the	4368
	frequency in Mc/s, or preferably to its channel designator.	
	Agreement on the Frequency to be used for Traffic	
58.	(1) If the station called is in agreement with the	
	calling station it transmits:	
59.	a) the reply to the call;	1821
60.	b) an indication that from that moment onwards it	1822
	will listen on the working frequency or channel	1823
	announced by the calling station;	1824
61.	c) an indication that it is ready to receive the	2115
, .	traffic of the calling station.	
62.	(2) If the station called is not in agreement with the	
	calling station on the working frequency or channel to be	
	used it transmits:	1825
63.	a) the reply to the call;	1826
64.		7 400
	b) an indication of the working frequency or	1827

(3) For communications between a coast station and a	4373
ship station, the coast station finally decides the frequency	4374
or channel to be used.	2117
(4) When agreement is reached regarding the working	
frequency or channel which the calling station shall use for	1828
its traffic, the station called indicates that it is ready to	
receive the traffic.	
§19 Indication of Traffic	
When the calling station wishes to exchange more	1796
than one radiotelephone call, or to transmit more than one	2106
radiotelegram, it should indicate this when contact with	2230
the station is established.	2285
	4380
§20 Difficulties in Reception	
(1) If a station called is unable to accept traffic	
immediately it replies to the call as outlined in No. 39	1834
followed by "Wait minutes (indicate probable duration	2118
of waiting time in minutes). If the probable duration	2231
exceeds 10 minutes (5 minutes in the case of aircraft	2286
stations communicating with stations of the Maritime Mobile	4381
Service), the reason for the delay must be given.	
Alternative 2 - discontinuous 22223 - discontinuous 2	
Alternatively, the station called may indicate by any	
appropriate means that it is not ready to receive traffic	
	ship station, the coast station finally decides the frequency or channel to be used. (4) When agreement is reached regarding the working frequency or channel which the calling station shall use for its traffic, the station called indicates that it is ready to receive the traffic. 819 Indication of Traffic When the calling station wishes to exchange more than one radiotelephone call, or to transmit more than one radiotelegram, it should indicate this when contact with the station is established. 820 Difficulties in Reception (1) If a station called is unable to accept traffic immediately it replies to the call as outlined in No. 39 followed by "Wait minutes (indicate probable duration of waiting time in minutes). If the probable duration exceeds 10 minutes (5 minutes in the case of aircraft stations communicating with stations of the Waritime Mobile

69.	(2) When a station receives a call without being	1835
	certain that such a call is intended for it, it must not	2119
	reply until the call has been repeated and understood.	2208
		4361
70.	(3) When a station receives a call which is intended	1835
	for it, but is uncertain of the call sign of the calling	2120
	station, it must reply immediately asking for a repetition of	2208
	the call sign or other identification of the calling station.	4362
	Section IV. Transmission of Traffic	
71.	\$21 A. Traffic Frequency	
72.	(1) The transmission of traffic lists on one or more	
	working frequencies may be briefly announced on 2 182 kc/s	4379
	or 156.80 Mc/s.	
73.	(2) Every station of the Maritime Mobile Service shall	
	use for the transmission of its traffic (radiotelephone calls	1837
	or radiotelegrams) one of its working frequencies for the	2122
	band in which the call has been made.	
74.	(3) In addition to its normal working frequency, printed	
	in heavy type in the List of Coast Stations, a coast station	1838
	may use one or more supplementary frequencies in the same band	2123
	in accordance with Article 34.	4276
75.	(4) The use of frequencies reserved for calling is for-	2124
	bidden for traffic.	
76.	(5) After contact has been established on the frequency	1840
	to be used for traffic, the transmission of a radiotelegram	1842
	or radiotelephone call is preceded by:	1843
		2125 2126

77.	- Hullo (call sign or other identification	1840
	of the station called);	1842
	- the words THIS IS;	1843
	- the call sign or other identification of the	1845
	calling station.	2125
		21 2 6
78.	(6) The call sign or other identification need not be	
	sent more than once.	
79.	B. Establishment of Radiotelephone	
	Calls and Transmission of	
	Radiotelegrams	
80.	\$22 a) Establishment of Radiotelephone Calls.	•
81.	(1) In setting up a radiotelephone call the coast station	
	should establish connection with the telephone network as	2127
	quickly as possible. In the meantime the mobile station shall	2128
	maintain watch on the appropriate working frequency as	
	indicated by the coast station.	
82.	(2) However, if the connection cannot be quickly	
	established, the coast station shall inform the mobile station	2127
	accordingly. The latter station shall then either:	2128
83.	a) maintain watch on the appropriate calling	
	frequency until an effective circuit can be	
	established; or	
84.	b) contact the coast station later at a mutually	
	agreed time.	

85.	(3) When a radiotelephone call has been completed the	2127
	procedure indicated in No. 91 shall be applied unless further	2128
	calls are on hand at either station.	
86.	\$23 b) Transmission of Radiotelegrams	
87.	(1) The procedure for the transmission of a radio-	
	telegram is given in Appendix 11.	
88.	(2) As a general rule radiotelegrams of all kinds	1848
	transmitted by ship stations and radiotelegrams in the service	1849
	of public correspondence transmitted by aircraft stations are	2129
	to be numbered in a daily series, number 1 being given to	4388
	the first radiotelegram sent each day to each separate station.	
89.	(3) A series of numbers which has begun in radio-	1848
	telegraphy should be continued in radiotelephony and vice	1349
	versa.	2129
		4388
90.	(4) Each radiotelegram shall normally be transmitted	
	once only by the sending station. However, it may when	2130
	necessary be repeated in full or in part by the receiving or	
	the sending station.	
91.	(5) If during the transmission of a radiotelegram, it is	
	necessary to spell certain expressions, difficult words, etc.	2134
	the spelling table given in Appendix 11 shall be used.	
92.	(6) In transmitting groups of figures each figure shall	2134
	be sent separately and the transmission of each group or series	2135
	of groups shall be preceded by the words "in figures". In	

cases of language difficulties the figure table given in Appendix 11 shall be used.

- 93. (7) Numbers written in letters shall be transmitted as they are written, their transmission being preceded by the 2136 words "in letters".
- 94. (8) The transmission of a radiotelegram is terminated 1861 by the words "radiotelegram ends" followed by the word "over".
- 95. §24 c) Acknowledgement of Receipt.
- 96. (1) The acknowledgement of receipt of a radiotelegram or a series of radiotelegrams shall be given by the receiving station in the following manner:
 - Hullo ... (call sign or other identification 1867 of the sending station); 2131
 - the words THIS IS; 2132
 - call sign or other identification of the 2133 receiving station;
 - "Your No. ... received, over"; or
 - "Your No. ... to No. ... received, over".
- 97. (2) The radiotelegram, or series of radiotelegrams,
 must not be considered as cleared until this acknowledgement 1865
 has been received.
- 98. (3) The end of work between two stations is indicated 1879 by each of them by means of the word "Out".

Section V. Duration and Control of Work

- 99. §25 (1) In the Maritime Mobile Service calling and signals

 preparatory to traffic must not exceed 2 minutes when made on

 4388

 2 182 kc/s or 156.8 Mc/s. (See No. 1.)
- 100. (2) In communications between land stations and mobile stations, the mobile station shall comply with the instructions given by the land station in all questions relating to the 4388 order and time of transmission, to the choice of frequency and to the duration and suspension of work. This provision does not apply to distress.
- 101. (3) In communications between mobile stations, the station called controls the working in the manner indicated in No. 100. However, if a land station finds it necessary to 4388 intervene these stations shall comply with the instructions given by the land station.

Section VI. Tests

- 102. §26 (1) When it is necessary for a mobile station to send
 2138
 signals for testing or adjustments which are liable to inter4383
 fere with the working of a neighbouring station, the consent
 4384
 of the station must be obtained before such signals are sent.
 4388
- 103. (2) When it is necessary for a station to make test signals, either for the adjustment of a transmitter before 1889 making a call or for the adjustment of a receiver, they 2139 must not continue for more than 10 seconds, and must include 2175 the call sign or other identification of the station 2266

Annex 1 to Document No. DT 713-E Page 19

	emitting the test signals. This call sign or other identi-	4385
	fication must be spoken slowly and distinctly.	4386
104.	(3) Any signals sent for testing must be kept to a	1890
	minimum, particularly on 2 182 kc/s or 156.80 Mc/s.	2140
		2176
		2267
		4383
		4.386

ANNEX 2

APPENDIX 11

(See Article 29a)

Procedure in the Mobile Radiotelephone Service

S1.	The	transmission of a radiotelegram is made	Proposals
as follow	s on	a working frequency:	considered
	-	rediotelegram begins from	
	-	(name of ship or aircraft)	
•	_	number (serial number of	## O O ##
		radiotelegram to land station)	3007
	-	number of words	3009
	_	date	3011
		time (time radiotelegram was	
·		handed in aboard ship or aircraft)	
	_	address	•
	•••	text	
	_	signature (if any)	
		radiotelegram ends, OVER.	
§2.	Whe	n it is necessary to spell out call signs,	3008
service a	.bbre	viations and words, the following table is	3008 bis
			3010
used:			3012
		·	3 013
			3014
(Table ul	tima	tely adopted by Sub-Committee 7B)	

GENEVA, 1959

Document No. DT 714-E
7 November 1959

WORKING GROUP 4G

REPORT

by Working Group 4Gl to Working Group 4G

- In carrying out its assigned task, Working Group 4Gl has completed a study of the frequency band 10 500 40 000 Mc/s in an attempt to reduce the number of footnotes contained in the draft Table of Frequency Allocations found in Document No. 449, the Report by Working Group 4G to Committee 4, which was returned to Working Group 4G by Committee 4 with a directive to 1) attempt to reduce the number of footnotes therein, and 2) attempt to accommodate the requirements of the radio astronomy service in the band 10 500 40 000 Mc/s.
- 2. The following Delegations participated in the work of Working Group 4G1:

United States of America France

United Kingdom U.S.S.R.

- Working Group 4Gl, taking advantage of previous discussions on the same subject in the 4 November meeting of Working Group 4G, pursued the following courses of action in attempting to minimize the number of footnotes appended to the draft table:
 - a) attempted to adjust the various frequency allocation proposals to permit world-wide allocations agreeable to all;
 - b) attempted to reach agreement on regional allocations to permit the insertion in the table of services now treated in footnotes;
 - c) consolidated multiple footnotes dealing with the same subject but different frequency bands into one all-inclusive footnote; and
 - d) inserted parenthetical statements in the table containing information previously contained in footnotes.
- 4. The cumulative affect of these courses of action is reflected in the Appendix hereto which represents a draft, modified version of Document No. 449. It is hoped this draft document can be approved by Working Group 4G and referred to Committee 4 as Document No. 449 (Rev.). It will be

noted that the Appendix contains not only changes recommended by Working Group 4Gl but also provisions for the radio astronomy service upon which Working Group 4G was able to reach agreement at its 4 November 1959 meeting. The latter provisions are contained in the new footnote 117a) to the draft table.

- 5. In summary, the actions taken by Working Group 4Gl resulted in the following recommendations:
 - a) amend the proposed allocation of frequencies between 23 000 and 33 400 Mc/s to read as shown in the Appendix hereto, thus permitting the deletion of footnote 117n) and the latter portion of footnote 117j) from Document No. 449;
 - b) delete footnotes 117e), 117g), 117h), 117o) and the first portion of 117j) by combining their contents with those of 117c) of Document No. 449 to produce a new footnote 117c) which reads as follows:
 - 117c) In Albania, Bulgaria, Hungary, Roumania, Poland, Gzechoslovakia and the U.S.S.R., the frequency bands 13 250 13 500 Mc/s, 14 175 14 400 Mc/s, 15 400 17 700 Mc/s, 21 000 22 000 Mc/s, 23 000 24 250 Mc/s and 33 400 36 000 Mc/s are allocated additionally to to fixed and mobile services.
 - c) combine the contents of footnotes 117m) and 117p) of Document No. 449 to create a new footnote 117i) to read as shown below, thus permitting the deletion of footnote 117p) from Document No. 449:
 - 117i) In Japan, the frequency bands 24 250 25 250 Mc/s and 33 400 36 000 Mc/s are allocated additionally to the meteorological aids service.
- 6. Attention is invited to the fact that the Delegation of the U.S.S.R. urged both Working Group 4G and Working Group 4Gl to insert in the table itself, either on a world-wide or regional basis, those services now catered for in the several footnotes appended to the draft table of Document No. 449. This suggestion was rejected by both working groups on the ground that the number of countries involved in those footnotes was insufficient to be representative of the total wishes of Region 1, let alone the entire world. It was the consensus of both working groups that such an allocation would portray a false picture of the allocation desired by the majority of countries concerned and that such a procedure should not be followed merely for the sake of reducing the total number of footnotes to the table of frequency allocations.

7. Working Group 4Gl recognizes that the reduction of the total number of footnotes by consolidating several footnotes into one footnote is an artificial reduction since it does not affect the substance thereof. Nonetheless, it is the considered opinion of the Group that there is nothing to be gained by its prolonged consideration of the problem. It is therefore recommended that Working Group 4G approve the Appendix to this document as its final report to Committee 4.

S.M. Myers Chairman

Appendix: 1

COMMITTEE 4

REPORT

Working Group 4G to Committee 4

- 1. In carrying out its mandate, Working Group 4G has completed a detailed examination of the proposals concerning the allocations of frequency bands above 10 500 Mc/s referred to it by Committee 4. The Group has held eight meetings, the last two of which were devoted primarily to minimizing the number of footnotes appended to the draft Table of Frequency Allocations.
- 2. The following Delegations participated in the work of the Group:

Argentina	Finland	Norway	United Kingdom
Australia	France	New Zealand	Sweden .
Austria	French OPTA	Pakistan	Switzerland
Canada	India	Paraguay	Union of South Africa
China	Indonesia	Netherlands	U.S.S.R.
Denmark	Italy	Philippines	
U.S.A.	Japan	Federal Republic of Germany	
		J =J =J	

- At its first meeting, Mr. W. B. Hawthorne (U.S.A.) was nominated Rapporteur and Mr. Boris Iastrebov, Member of the I.F.R.B., was invited to assist the Working Group.
- 4. For the bands concerned, no Table exists in the present Regulations; the Working Group has, therefore, drawn up the following draft new Table which it recommends for adoption by Committee 4. For the purpose of the present report each service for which allocation in any given band is on a primary basis, in the context of Document No. 242 (Rev.2), paragraph 7 (A), has been designated by an asterisk. In this connection, the following additional remarks may be helpful;
 - a) where a band is allocated to three or more services, of which two or more are on the basis of priority over the other service(s) the two or more primary services are indicated by asterisks; these primary services would operate on the basis of equality between themselves and each would have priority over the other service(s), against which no asterisk appears; and

Document No. 449-E (Rev.) Page 2

b) where a band is allocated to two services, one of which has been designated as the primary service, the primary service is indicated by an asterisk.

It follows that where a band is allocated to two or more services on an equal basis, or the band is allocated to one service only, no asterisk appears.

The recommendations contained in the Annex hereto result from general agreement in the Working Group; however it should be noted that a number of Delegations reserved final comment and that the Delegation of the U.S.S.R. urged the Working Group to insert in the draft table itself, either on a world-wide or regional basis, those services now catered for in a number of the footnotes appended to the draft table. This procedure was rejected by the Group on the ground that such an allocation would not be representative of the wishes of the majority of countries concerned, either on a world-wide or regional basis.

S. M. Myers Chairman

Annex: 1

A N N E X

	Allocation to services				
Frequency band (Mc/s)	Monld ride	Regional			
	World-wide	Region l	Region 2	Region 3	
10 500-10 550		10 500-10 550 a) Fixed* b) Mobile* c) Radio- location	10 500-10 550 Radiolocation (Limited to CW devices)	10 500-10 550 Radiolocation (Limited to CW devices)	
10 550-10 700	a) Fixed* b) Mobile* c) Radio- location 117a)				
10 700-13 250	a) Fixed b) Mobile 117b)				

- 231a ADD 117a) The frequency bands 10 680-10 700 Mc/s, 15 350-15 400 Mc/s, 19 300-19 400 Mc/s and 31 300-31 500 Mc/s are allocated additionally to the radio astronomy service. In making assignments to stations of other authorized services in these bands, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference, however, the protection afforded the radio astronomy service from extraband radiations shall be equal to that afforded other radio services operating in accordance with the Table of Frequency Allocations.
- 231b ADD 117b) In Austria, France, the Netherlands and the Federal Republic of Germany, the frequency band 11 500-12 500 Mc/s is allocated additionally to the broadcasting service.

^{*}The fixed and mobile services are the primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

	Allocation to services				
Frequency band (Mc/s)	111 3 3-	Regional			
	World-wide	Region l	Region 2	Region 3	
13 2 50-13 400	Aeronautical radionavigation (Doppler navigational aids)				
13 400-14 000	Radiolocation 117c) 117d) 117e)	·			
14 000-14 400	Radionaviga- tion 117c)				
14 400-15 150	a) Fixed b) Mobile				
15 150-15 250	a) Space* b) Earth-Space* c) Fixed d) Mobile				
15 250-15 400	a) Fixed b) Mobile ll7a)			•	

- 231c ADD 117c) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency bands 13 250-13 500 Mc/s, 14 175-14 400 Mc/s, 15 400-17 700 Mc/s, 21 000-22 000 Mc/s, 23 000- 24 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services.
- 231d ADD 117d) In Sweden, the frequency bands 13 400-14 000 Mc/s, 15 700-17 700 Mc/s, 23 000- 24 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services.
- 231e ADD 117e) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 13 500-14 000 Mc/s is allocated additionally to the radionavigation service.

^{*}The space and earth-space services are the primary services. The fixed and mobile services are secondary services as defined in paragraph 7A of Document No. 242 (Rev. 2).

	Allocation to services				
Frequency band Mc/s	World-wide	Regional			
		Region 1	Region 2	Region 3	
15 400 - 15 700	Aeronautical radionavigation 117c) 117f)			·	
15 700 - 17 700	Radiolocation 117c) 117d)				
17 700 - 21 000	a) Fixed b) Mobile 117a)			•	
21 000 - 22 000	Amateur 117c)				
22 000 - 23 000	a) Fixed b) Mobile 117g)				
23 000 - 24 250	Radiolocation 117c) 117d)			,	

- |231f ADD 117f) The frequency bands 960 1 215 Mc/s, 1 535 1 660 Mc/s, 4 200 4 400 Mc/s, 5 000 5 250 Mc/s and 15 400 15 700 Mc/s are reserved on a world-wide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground based facilities.
- 231g ADD 117g) The frequency 22 125 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 125 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

Frequency band	Allocation to services				
Mc/s	World-wide	Regional			
		Region 1	Region 2 Region 3		
24 2 50 - 25 250	Radionavigation 117h) 117i)				
25 250 - 31 5 00	a) Fixed b) Mobile 117a)				
31 500 - 31 800	a) Space * b) Earth-Space * c) Fixed d) Mobile		• •		
31 800 - 33 400	Radionavigation				
33 400 - 36 000	Radiolocation 117c) 117d) 117i)				
36 000 - 40 000	a) Fixed b) Mobile				
above 40 000	not allocated				

- 231h ADD 117h) In the frequency band 24 250 25 250 Mc/s, ground-based radionavigation aids are not permitted except where they operate in the cooperation with airborne or shipborne radionavigation devices.
- 23li ADD 117i) In Japan, the frequency bands 24 250 25 250 Mc/s and 33 400 36 000 Mc/s are allocated additionally to the meteorological aids service.

^{*)} The space and earth-space services are the primary services. The fixed and mobile services are secondary services as defined in paragraph 7A of Document No. 242 (Rev. 2).

GENEVE, 1959

Document N° DT 715-FES 6 novembre 1959

GROUPE DE TRAVAIL 4G WORKING GROUP 4G GRUPO DE TRABAJO 4G

ORDRE DU JOUR

Huitième séance du Groupe de travail 4G

Lundi, 9 novembre 1959, à 9 heures - Salle B

- 1. Examen du Rapport du Groupe de travail 4G1, et du projet du Document N° 449 (revisé) y annexé (Document N° DT 714).
- 2. Divers.

AGENDA

Eighth Meeting of Working Group 4G

Monday, 9 November 1959, 09.00 hours - Salle B

- 1. Consideration of Report of Working Group 4G1, and appended draft revision of Document No. 449 (Document No. DT 714 refers).
- 2. Other business.

ORDEN DEL DÍA

8.ª sesión del Grupo de trabajo 4G

Lunes, 9 de noviembre de 1959, a las 9 de la mañana - Sala B

- 1. Informe del Grupo de trabajo 4Gl y proyecto de revisión del Documento N.º 449 anexo al mismo (véase el Documento N.º DT 714).
- 2. Otros asuntos.

Le Président The Chairman El Presidente

S. M. Myers

ADMINISTRATIVE RADIO CONFERENCE

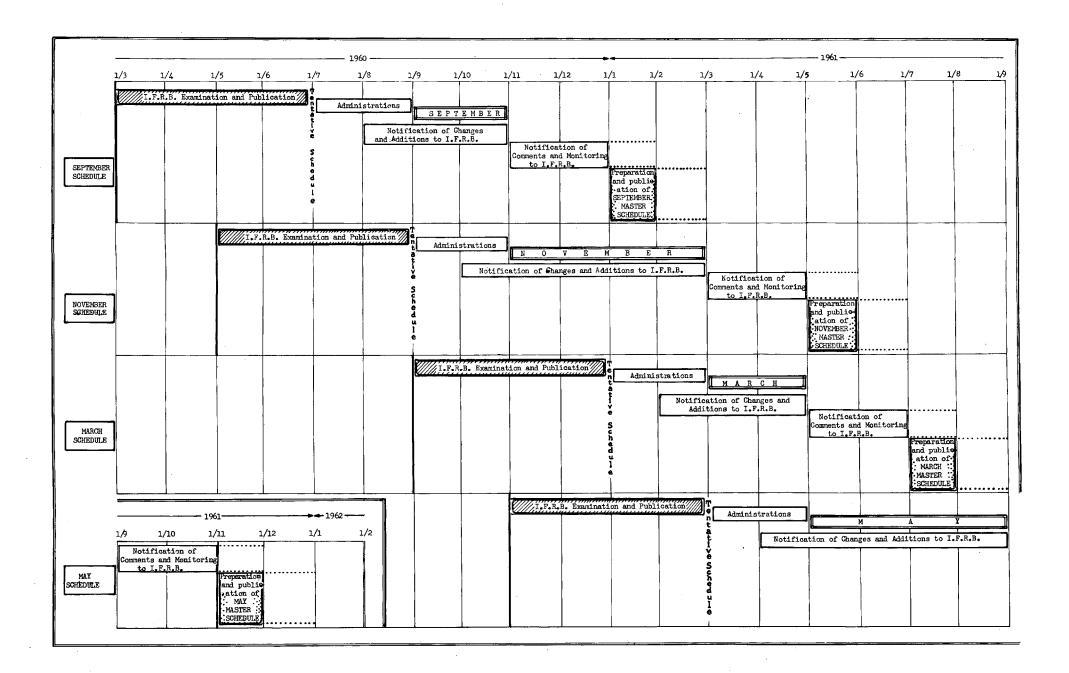
GENEVA, 1959

Document No. DT 716-E 7 November, 1959

SUB-WORKING GROUP 5B4

The various stages in the procedure described in Annex 1 to Document No. DT 659 are depicted in the attached chart which has been prepared by the I.F.R.B. for reference during the consideration of this document.

Annex: 1



GENEVA, 1959

Document No. DT 717-E 6 November, 1959

SUB-COMMITTEE 7B

REPORT

of Working Group 7B6 to Sub-Committee 7B

- 1. Working Group 7B6 was established by Sub-Committee 7B in the twelfth meeting of that Committee, on 8 October, 1959.
- 2. The purpose of the Working Group was to draft texts for regulations concerning the use of frequencies for radiotelephony in the mobile services, taking account of the proposals listed in the Annex to Document No. DT 366, and in accordance with the decisions on principles taken by the meeting. Document No. 416 is the Summary Record of the meeting of Sub-Committee 7B in which these principles are set forth.
- The specific proposals assigned to the Working Group are listed in Document No. DT 366. Subsequent to the issuance of this document, Sub-Committee 7B included the proposals for Radio Regulations 806, 807, 808, 809, 811, 812 and 818 in the terms of reference for Working Group 7B7. By agreement with the Chairman of Sub-Committee 7B and the Chairman of Working Group 7B7, the proposals for the above-listed seven Radio Regulations were deleted from consideration by Working Group 7B6.
- 4. On 15 October, 1959, Sub-Committee 7B asked the Working Group to take account of the proposals in Document No. 29 and the Footnotes to The Hague Frequency Table.
- 5. In the seventeenth meeting of Sub-Committee 7B, on 27 October, 1959, Proposals 4109 and 4110 were assigned to the Working Group for consideration.
- 6. With the large number of proposals to be reviewed, it was decided to form sub-working groups to facilitate handling the work. Two such groups were formed; one to review the proposals concerning the frequency range 1565-2850 kc/s, and the other to review the proposals concerning the frequency range 150.8-174 Mc/s.

- 7. The completed work of these two sub-working groups, together with additional proposals which were not within the terms of reference of these two groups, has been reviewed, and the result of this work, prepared as a revised Article 34, entitled "Use of Frequencies in the Maritime Mobile Radiotelephone Service", is attached as an Annex to this document.
- 8. In several paragraphs of the Annex, it will be necessary to record the appropriate Regulation number which applies, but which will not be available until the Regulations are completed.
- 9. In several places, it may be necessary to change the frequency range figures or change the name of a List in order to be in accord with the work of other Committees.
- 10. With respect to several paragraphs, the Working Group was unable to reach complete agreement. Each of these cases is covered in a separate paragraph hereinafter in this report.
- In accordance with the action taken at the combined meeting of Sub-Committees 7B and 7C on 3 November, 1959, the new Regulations for Article 34 adopted at that meeting and given in Document No. DT 643, Annex 2, page 16, have been incorporated in the attached Annex.
- 12. Following are comments on specific paragraphs, as indicated:
 - a) Paragraph 10.7. The frequencies 2 170 and 2 194 kc/s are specified to provide a guard band for the frequency 2 182 kc/s. The question of what is the minimum acceptable width of the guard band in view of present technical capabilities was referred by Sub-Committee 7B to Committee 6 for a recommendation. While a report has not yet been received, the Working Group decided to specify the frequencies 2 170 and 2 194 kc/s as the view of the group with the understanding that they may be changed by Sub-Committee 7B after receipt of the report from Committee 6.
 - Paragraph No. 15. The Working Group was unable to reach agreement as to whether this paragraph should be included. A substantial number of the group considered that where this paragraph deals with a watch for the radiotelephone alarm signal, it is more properly a concern of the Safety of Life at Sea Convention than of this Conference. A smaller number took the opposite view and felt the paragraph should be included in the Radio Regulations. The wording of the paragraph was acceptable. Agreement was reached to include this paragraph in the Annex in order that Sub-Committee 7B can consider the matter.

- c) Paragraph No. 26. This paragraph is based on Proposal No. 5558 in Document No. 497 which was not included specifically in the terms of reference of the Working Group as the proposal was not submitted until after the Working Group was established. It was the view of the group that Sub-Committee 7B, when it received the proposal, would forward it to the Working Group for consideration as it appeared to be within the activities of the group. It is included for the consideration of Sub-Committee 7B.
- d) <u>Paragraph No. 32</u>. It was the opinion of the Working Group that this paragraph should be brought to the attention of Sub-Committee 7C for the co-ordination of any safety provisions.
- e) <u>Paragraph No. 34</u>. This paragraph was referred to the Working Group by Sub-Committee 7B for inclusion in the texts and for specification of the frequency bands. This has been done with the frequency figures incorporated consistent with other paragraphs of the Annex.
- paragraph No. 38 and Note 5. Several European countries submitted proposals to introduce a two-frequency calling channel, Channel 24. The United Kingdom specified Channel 28, and, during the discussions, it became clear that other European countries favoured Channel 28 as a result of a recent agreement between several administrations. The United States opposed the provision of any international two-frequency calling channel. It was impossible to reach agreement in the Working Group, and paragraph No. 38 and Note 5 have been included in the Annex for the consideration of Sub-Committee 7B.
- g) Note 7. This note is contained in United States Proposal No. 4592 as Note 11. In the United States, it is visualized that a simple single-frequency VHF equipment fitted on the bridge of a ship would improve safety of life at sea. It is proposed to use Channel 13 for this purpose. The other members of the Working Group did not support the use of this channel for this purpose. As it was impossible to reach agreement in the Working Group, the paragraph is included for the consideration of Sub-Committee 7B.
- During the discussions in the Working Group, it was pointed out that Proposals Nos. 1700, 1701, 1737, 4130 and 4131 deal with frequencies with which ships must be equipped when operating in the range 150.8-174 Mc/s. As these proposals were not contained in the specific terms of reference of the Working Group, they were not considered. However, it was agreed desirable that they be brought to the attention of Sub-Committee 7B for consideration as to whether or not they should be included in the attached Annex or remain in Article 28.

T.A. Chandler

Chairman, Working Group 7B6

ANNEX

ARTICLE 34

USE OF FREQUENCIES IN THE MARITIME MOBILE RADIOTELEPHONE SERVICE

Section I - General Provisions

- 1. The provisions of the present Article are applicable in all cases to radiotelephone stations of the maritime mobile service.
- 2. Aircraft stations may enter into telephone communication with stations of the maritime mobile service on frequencies allocated to that service for radiotelephony. They must then comply with the provisions of this Article and Article 27.
- 3. Any aircraft in distress shall transmit the distress call on the frequency on which watch is kept by the land or mobile stations capable of helping it. When the call is intended for stations in the maritime mobile service the provisions of 5 and 6 shall be complied with.
- 4. The frequencies of transmission and reception (also the pairs of frequencies in the case of duplex telephony) allocated to each coast station shall be indicated in the List of Coast Stations. This List shall also indicate any other useful information concerning the service performed by each coast station.

(Note: The name of the List to be changed as may be necessary in accordance with Article 20)

Section II - Frequency Bands between 1 605 and 2 850 kc/s

(Note: Frequency figures to be changed if necessary, to be in accord with Committee 4 decisions)

A. Distress

for radiotelephony; it must be used for this purpose by ship, aircraft and survival craft stations using frequencies in the authorized bands between 1 605 and 2 850 kc/s when requesting assistance from the maritime services. It is used for the distress call and distress traffic, for the urgency signal and urgency messages and for the safety signal (safety messages are, where possible, transmitted on a working frequency after a preliminary announcement on 2 182 kc/s).

- 6. However, ship and aircraft stations which cannot transmit on 2 182 kc/s should use any other available frequency on which attention might be attracted.
- 7. Apart from transmissions authorized on 2 182 kc/s, all transmissions on the frequencies between 2 170 and 2 194 kc/s are forbidden.
- - B. Call and Reply
- 9. The frequency 2 182 kc/s may also be used for:
 - a) Call and reply in accordance with the provisions of

 (Note: Regulation numbers to be entered from Article concerning radiotelephone procedures).
 - b) Announcing the transmission, on another frequency, of traffic lists.
- 10. To facilitate the reception of distress calls, all transmissions on the frequency 2 182 kc/s must be reduced to a minimum.
- 11. An Administration may assign to its stations other frequencies for call and reply.
- 12. Ship stations and coast stations may use kc/s as a supplementary calling frequency when 2 182 kc/s is being used for distress purposes.
 - C. Watch
- All coast stations which are open to public correspondence and which form an essential part of the coverage of the area for distress purposes, shall, during their hours of service, maintain a watch on the frequency 2 182 kc/s.
- 14. These stations shall maintain this watch on the frequency 2 182 kc/s by means of an operator using some aural method (such as headphones, split headphones or loudspeaker).

- 15. In addition, ship stations should when possible keep a continuous watch by any appropriate means on the frequency 2 182 kc/s for receiving the radiotelephone alarm signal prescribed in No.
- 16. Ship stations of the maritime mobile service open to public correspondence should, as far as possible during their hours of service, remain on watch on the frequency 2 182 kc/s.
 - D. Traffic
- 17. Coast stations which use the frequency 2 182 kc/s for calling must be able to use at least one other frequency in the portions of the band 1 605-2 850 kc/s in which the maritime mobile radiotelephone service is admitted.

(Note: Frequency figures to be changed, if necessary, to be in accord with Committee 4 decisions)

- 18. Coast stations open to the international service of public correspondence on one or more frequencies between 1 605 and 2 850 kc/s must be capable of transmitting and receiving class A-3 emission additionally on the frequency 2 182 kc/s.
- 19. One of the frequencies which coast stations must be able to use in accordance with No. 17 is printed in heavy type in the List of Coast Stations to indicate that it is the normal working frequency of the station. Supplementary frequencies, if assigned, are shown in ordinary type.
 - (Note: Correct Regulation number to be inserted for paragraph 19. Name of List to be changed as may be necessary in accordance with Article 20.)
- Working frequencies of coast stations must be chosen in such a manner as to avoid interference with other stations.
- All ships in the maritime mobile service should be able to use the inter-ship and ship-shore frequencies assigned for world-wide use, kc/s, if required by their service, in addition to the frequency 2 182 kc/s.

(Note: Frequencies to be specified when determined.)

- E. Additional Provisions Applying to Region I
- 22. The provisions of this sub-section apply only to stations of the maritime mobile service.

23. The power of the unmodulated carrier-wave in the antenna of mobile radictelephone stations in the bands between 1 605 and 2 850 kc/s shall not exceed 100 watts.

(Note: Frequency figures to be changed, if necessary, in accordance with decisions of Committee 4)

- 24. Stations which use frequencies in the band 1 625-1 670 kc/s, allocated for low-power telephony services, shall, in principle, employ a carrier power as low as possible. Such carrier power shall not exceed 20 watts.
- 25. When a ship station of one country wishes to communicate with a coast station in another country, it may, by agreement with that coast station, use one of its own assigned frequencies (ship-to-coast), even if the use of such frequencies in the area where the ship is located is not envisaged.
- Ships frequently exchanging correspondence with a coast station of a nationality other than their own may use the same frequencies as ships of the nationality of the coast station where mutually agreed by individual Administrations.
- 27. In the authorized bands between 1 605 and 2 850 kc/s, the mean power of coast radiotelephone stations shall be limited to:
 - 2 kilowatts for coast stations located North of latitude 32°N;
 - 3.5 kilowatts for coast stations located South of latitude 32°N.
 - F. Additional Provisions Applying to Regions I and III
- In order to increase the safety of life at sea, all radiotelephone stations of the maritime mobile service, which normally keep watch on frequencies in this band take steps, as far as possible, to keep watch on the distress frequency 2 182 kc/s twice each hour for three minutes commencing at x h. 00 and x h. 30 Greenwich Mean Time (G.M.T.) during their hours of service. 1)
- 29. During the periods mentioned above, except for transmissions provided for in Article 37 (see No. 935 to No. 949) transmissions must cease within the band and kc/s.

(Note: Frequencies to be determined after receipt of advice from Committee 6 in regard to the guard band for 2 182 kc/s.)

Footnote 1): In Region III, these regulations do not apply to Japan and the Philippines.

Section III ~ Frequency Bands between 4 000 and 23 000 kc/s

30. In the bands authorized for radiotelephony, ship stations may use, for calling, one of the frequencies indicated in the table below:

	Band	Fre	eqι	ien	су
4	000 kc/s	,	_	-	
8	000 kc/s	=	_	_	
12	000 kc/s	_	=		
16	000 kc/s	_	_	_	
22	000 kc/s		-	_	

(Note: This section may require modification after report of Working Group 7B5 is considered by Sub-Committee 7B)

For the conduct of duplex telephony, the frequencies of emission of the coast stations and of the corresponding ship stations shall be associated in pairs, as far as possible, as indicated in Appendix 12.

Section IV - Frequency Bands between 150.8 and 174 Mc/s

- A. Call, Reply and Safety
- The frequency 156.80 Mc/s is the frequency designated for world-wide use in the international maritime mobile VHF radiotelephone service for call, reply and safety purposes. It may also be used for messages preceded by the urgency and safety signals and, if necessary, for distress messages.
- 33. It may also be used by coast stations to announce the transmission, on another frequency, of their traffic lists and important maritime information.
- 34. Ship stations equipped for radiotelephony in the bands 150.8-174 Mc/s, which need to use this band for safety purposes should exchange calls and traffic on 156.80 Mc/s.
- 35. Ship stations which cannot transmit on 156.80 Mc/s should use any other available frequency on which attention might be attracted.
- All emissions in the band 156.725-156.875 Mc/s capable of causing harmful interference to authorized transmissions by stations of the maritime mobile service on 156.80 Mc/s are forbidden.
 - B. Watch
- Every coast station providing an international maritime mobile service of radiotelephony in the band 150.8-174 Mc/s should, during its

working hours in that band, maintain as far as possible, an efficient aural watch on the frequency 156.80 Mc/s.

38. Coast stations open to public correspondence and using the two-frequency calling channel (157.40 and 162.00 Mc/s) should, as far as possible, maintain watch on the frequency 157.40 Mc/s during their working hours.

(Note: It was impossible to obtain agreement on this paragraph and it, therefore, should be considered by Sub-Committee 7B)

- 39. In addition to the watch prescribed by 37 and 38, coast stations open to the international service of public correspondence, should, during their hours of service, maintain watch on their receiving frequency or frequencies which are indicated in the List of Coast Stations for receiving calls from mobile stations.
- 40. With regard to the effective reception of calls from mobile stations, the method of watch shall be no less efficient than watch by an operator.
- 41. If the frequency 156.80 Mc/s is in use for distress urgency or safety, coast stations in the Port Operations Service in that particular area shall during their working hours keep an additional watch on the first choice Port Operations channel 156.60 Mc/s or other Port Operations frequency indicated in heavy type in the List of Coast Stations.
- Ship stations should, where practicable, maintain watch on 156.80 Mc/s when within the service areas of coast stations that provide international maritime VHF radiotelephone services.
 - C. Traffic
- Where practicable, coast stations open to the international service of public correspondence shall be capable of working with ship stations equipped for duplex or semi-duplex operation.
- 44. Coast stations, which use the frequency 156.80 Mc/s for calling must be able to use at least one other authorized channel in the international maritime mobile service of telephony in the band 150.80-174 Mc/s.
- 45. In the band 150.8-174 Mc/s, administrations shall assign frequencies, where practicable, to coast and ship stations, for such international services as administrations consider necessary, in accordance with the Assignment Table of Transmitting Frequencies as indicated in Appendix 12 bis.

- 46. In assigning frequencies to their coast stations, administrations should collaborate in cases where harmful interference might occur.
- 47. The method of working, that is, single-frequency or two-frequency, indicated in Appendix 12 bis for each channel should be adhered to for international services.
- 48. Communications in the Port Operations Service must be restricted to those related to the movement and the safety of ships and, in emergency, to the safety of persons.
- 49. Channels are designated by numbers in the Assignment Table in Appendix 12 bis.
- 50. The use of channels for maritime mobile purposes other than those indicated shall not cause harmful interference to services operating in accordance with the Allocation Table, and shall not prejudice the development of these services.
- 51. In assigning frequencies to authorized services, other than maritime mobile, administrations shall avoid the possibility of interference to international maritime VHF services.
 - D. Technical Characteristics
- 52. Only frequency modulation with a pre-emphasis of 6 db/octave (phase modulation) shall be used.
- 53. The frequency deviation corresponding to 100% modulation shall approach 15 kc/s as nearly as practicable. In no event shall the frequency deviation exceed plus or minus 15 kc/s. (It is recognized that under certain conditions, the percentage of modulation may be decreased to avoid adjacent channel interference.)
- 54. When transmitting on any of the frequencies designated in the Assignment Table in Appendix 12 bis, the emission of each ship station and of each coast station shall be polarized vertically at the source.
- 55. The audio frequency bandwidth shall be limited to 3 000 c/s.
- The output power of ship station transmitters should not exceed 20 watts. 2)

Footnote 2): In Region II, output power of ship station transmitters up to 50 watts may be allowed.

APPENDIX 12 BIS

TABLE OF TRANSMITTING FREQUENCIES FOR THE INTERNATIONAL MARITIME MOBILE RADIOTELEPHONE SERVICE IN THE BANDS 150.8 - 174 Mc/s

Channel	Transmit Frequencies Mc/s		n Intership	Port Operations		Public Forres-	
designators	Ship Stations	Coast Stations	Intersalp	Single- Frequency	Two Frequency	ponden ce	
1	156:05*	160:65			10	8	
2	156:10	160:70			8	10	
3	156:15*	160.75			9	9	
4	156,20	160,80			11	7	
5	156;25	160,85			6	12	
6	156;30	,	11				
7	156:35	160,95			. 7	11	
8	156:40	-	<u>2</u>				
9	156;45	156.45	5	5			
10	156:50	,	3	****			
1.1.	156:55	156:55		3			
12	156.60	156,60		1			
13	156:65	156,65***	4	. 4			
14	156.70	156.70		2			
15		Guard band	156 . 725 - 156.	775 Mc/s			
16	156.80	156.80		CALLING AND	D SAFETY		
17	,	Guard band	156 . 825 - 156.	875 Mc/s			
18	156.90	161.50			3		
19	156:95	161:55			4		
20 .	157:00	161,60			1		
21	157.05	156,05* or161.65			5		
22	157:10	161:70			2		
23	157,15	156.15* or161.75				5	
24	157:20	161.80				4	
25	157:25	161.85				3	
26	157:30	161.90				1	
27	157:35	161:95				<u>2</u> .	
28	157.40	162.00**				6	

^{*} See Note 6

^{***} See Note 5

*** See Note 7

**** See Note 8

NOTES WITH THE TABLE

- Note 1: The figures in the column headed "Intership" indicate the normal sequence in which channels should be taken into use by mobile stations.
- Note 2: The figures in the columns headed "Port Operations" and "Public Correspondence" indicate the normal sequence in which channels should be taken into use by each coast station. However, in some cases, it may be necessary to omit channels in order to avoid harmful interference between the services of neighbouring coast stations.
- Note 3: During ice seasons, ship stations shall avoid harmful interference to communications between icebreakers and assisted ships on the frequency 156.30 Mc/s (Channel 6).
- Note 4: Administrations should, as far as possible, arrange that ship stations fitted with the channels corresponding to the figures underlined in the Assignment Table car obtain a reasonably adequate use of available services.
- Note 5: When an Administration finds it necessary to introduce a two-frequency calling channel for public correspondence the channel marked ** shall be used for this purpose. This channel shall also be used for selective calling if this method of calling is introduced for public correspondence.
- Note: It was impossible to obtain agreement on Note 5 and it should be considered by Sub-Committee 7B.
- Note 6: The frequencies 156.05 and 156.15 Mc/s marked *) are used as ship frequencies in channels 1 and 3 respectively and as coast station frequencies in channels 21 and 23 respectively when these latter are used in the special semi-duplex public correspondence systems employed by France and Belgium, with 1 Mc/s separation between transmit and receive frequencies.
- Note 7: The use of this frequency is limited to ship-ship and ship-shore navigational communication exclusively.
- Note: It was impossible to obtain agreement on Note 7 and it should be considered by Sub-Committee 7B.
- Note 8: This channel is also available for Port Operations in Region II.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

WORKING GROUP 4D

DRAFT

FIRST REPORT

of Working Group 4D to Committee 4

- 1. Working Group 4D was set up at the eleventh meeting of Committee 4 on 4 September, 1959; its terms of reference being to consider the allocation of the frequency bands between 27.5 and 960 Mc/s.
- 2. The following delegations have taken part in the work of Working Group 4D:

Argentina	Spain	Pakistan
Austr ali a	United States of America	Netherlands
Austria	Finland	Portugal
Belgium	France	Federal Republic
Brazil	Greece	of Germany
Bulgaria	India	United Kingdom
Canada	Indonesia	Sweden
China	Italy	Switzerland
Korea	Japan	Czechoslovakia
Cuba	Norway	Union of South
Denmark	New Zealand	Africa
		U.S.S.R.
Brazil Bulgaria Canada China Korea Cuba	Greece India Indonesia Italy Japan Norway	of Germany United Kingdom Sweden Switzerland Czechoslovakia Union of South Africa

Observers from the W.M.O., I.A.R.U., I.B.T.O., C.O.S.P.A.R., I.A.T.A., E.B.U. and I.A.U. have also attended meetings of the Working Group.

3. Mr. Leo J. Huntoon of the United States Delegation has been the Rapporteur of the Working Group and Mr. M. Chef of the French Delegation and Mr. of the Argentine Delegation have respectively assisted with the French and Spanish texts.

Mr. John H. Gayer of the I.F.R.B. and Mr. Kari and Mr. Smith of the I.F.R.B. Secretariat have attended the meetings of the Working Group and Mr. Kari and Mr. Smith have assisted in the preparation of the reports of the Working Group and the Sub-Working Groups.

4. The Sub-Working Groups which were set up by the Werking Group together with their terms of reference and Chairmen are given below:

Sub-Working Group 4D1: Allocation of the frequency bands 27.5 - 29.7 Mc/s - Miss Marie Huet (France)

Sub-Working Group 4D2: Frequencies for Ionospheric-scatter - Mr. Hiroshi Shinkawa (Japan)

Sub-Working Group 4D3: Allocation of the frequency band 41 - 47 Mc/s in Region 1 - Mr. Børge Nielsen (Denmark)

Sub-Working Group 4D4, Allocation of the frequency band 68 - 88 Mc/s in Region 1 - Mr. Eric Sharpe (United Kingdom)

Sub-Working Group 4D4, Allocation of the frequency band 68 - 88 Mc/s in Region 3 - Mr. W.H. Hatfield (Australia)

Sub-Working Group 4D5: Allocation of the frequency band 100 - 108 Mc/s in Region 1 - Mr. Børge Nielsen (Denmark) with the assistance of Mr. U. Mohr (Federal Republic of Germany)

Sub-Working Group 4D6: Revision of Footnote No. 198 - Mr. J. Houtsmuller (Netherlands)

Sub-Working Group 4D7: Allocation of the band 174 - 235 Mc/s in Region 3 - Mr. J.M. Power (New Zealand)

Sub-Working Group 4D8: Allocation of the hand 216 - 235 Mc/s in Region 1 - Mr. U. Mohr (Federal Republic of Germany)

Sub-Working Group 4D9: Allocation of the band 420 - 450 Mc/s - Mr. C.W. Sowton (United Kingdom)

Sub-Working Group 4D10: Allocation of the band 585 - 960 Mc/s in Region 1 - Mr. Carlo Terzani (Italy)

Sub-Working Group 4D/
Special
Allocation for radio astronomy in the band 27.5 - 960 Mc/s Mr. Johan H.R. van der Willigen (Netherlands)

The Sub-Working Groups have dealt with the more difficult problems that have arisen during the deliberations of Working Group 4D and the Working Group would express its appreciation of the work of the Chairmen of the Sub-Working Groups.

5. The Working Group has met with considerable difficulties in reaching agreement on the allocations in the bands between 27.5 and 960 Mc/s. This appears to have been due to three main factors. Firstly, the requirements of new services, e.g. Space Research and Radio Astronomy, and the

introduction of scatter propagation systems, which use extremely high effective radiated powers. Secondly, the long period - twelve years - that has elapsed since the allocations in this range of the spectrum were considered at an international radio conference. Thirdly, the developments of television and FM sound broadcasting, particularly where the bands used for broadcasting differ in adjoining countries.

- 6. This first report covers the frequency range 235 960 Mc/s. A second report covering the frequency range 27.5 235 Mc/s will be submitted later.
- 7. The allocations which have been generally agreed in the band 235 960 Mc/s are shown in the Annex to this report, in the accepted form of a Table of Frequency Allocations together with any necessary footnotes which, as far as possible, conform to the standards of Document No. 242 (Rev. 2).
- 8. The following draft recommendations or resolutions with regard to the frequency band 235 ~ 960 Mc/s, are submitted for the consideration of Committee 4 for inclusion in the Radio Regulations.
- 9. The following comments and reservations have been made with regard to the frequency band 235 960 Mc/s.

C.W. Sowton Chairman

Annex: 1

$\mathtt{A} \ \mathtt{N} \ \mathtt{N} \ \mathtt{E} \ \mathtt{X}$

Francisonar		Allocati	on to services	3
Frequency band (Mc/s)	World-wide		Regional	
	world-wide	Region l	Region 2	Region 3
235 -328.6	a) Fixed b) Mobile 93c) 93d)			
328.6-335.4	Aeronautical radionavigation (Instrument Landing Systems)			

207**o** ADD

93c) In British West Africa, the frequency band 216-251 Mc/s is allocated alternatively to the broadcasting service.

207d ADD

93d) The frequency 243 Mc/s is the frequency in this band for use on board lifeboats, lifecrafts, survival craft and for equipment used for survival purposes.

	Allocation to services			
Frequency band	World-wide		Regional	
(Mc/s)		Region l	Region 2	Region 3
335.4–420	335.4-400 a) Fixed b) Mobile			•
	400-401 a) Meteorolo- gical aids b) Space 95a)			
(cont'd)				

208 SUP **94**

208a ADD 94a) (To be completed in Working Group 4D)

209 SUP 95)

209a ADD 95a) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 400-420 Mc/s is allocated additionally to the fixed and mobile services.

The course of the	Allocation to services				
Frequency band (Mc/s)	World-wide		Regional		
(FIC/S)	worra-wrae	Region l	Region 2	Region 3	
335.4-420 (cont'd)	401-406 a) Meteorolo- gical aids* b) Fixed c) Mobile except aeronauti- cal mobile 95a) 95b) 95c)				
	406-420 a) Fixed b) Mobile except aeronautical mobile 95a) 95d)				

- 209b ADD 95b) In France, the frequency band 401-406 Mc/s is allocated exclusively to the meteorological aids service.
- 209c ADD 95c) In Greece, Norway and Sweden, the frequency band 401-406 Mc/s is also allocated on a primary basis to the fixed and mobile, except aeronautical mobile services.
- 209d ADD 95d) The frequency band 406-410 Mc/s is also allocated to the radio astronomy service. Administrations assigning frequency to stations of other authorized services in this band shall take all practicable measures to avoid harmful interference to the radio astronomy service.

^{*}The meteorological aids service is the primary service. The fixed and mobile, except aeronautical mobile, scrvices are secondary services as defined in Document No. 242 (Rev.2) paragraph 7A.

Emorator	Allocation to services			
Frequency band	Howld wide		Regional	
(Mc/s)	World-wide Reg	Region l	Region 2	Region 3
420-450 97a)		420-430 a) Fixed* b) Mobile except aeronau- tical mobile* c) Radio- location 97b) 97c)	420-450 a) Radioloca- tion** b) Amateur	420-450 a) Radiolo- cation** b) Amateur 97e)
(cont'd)		97d)	(cont'd)	(cont'd)

210 SUP 96) 211 SUP 97)

211a ADD 97a) Radio altimeters may be temporarily employed in the frequency band 420-450 Mc/s until they are moved to a frequency band allocated to the aeronautical radionavigation service or until they are no longer required.

211b ADD 97b) In the United Kingdom, the frequency band 420-450 Mc/s is allocated on a primary basis to the radiolocation service and on a secondary basis to the amateur service.

211c ADD 97c) In Greece, the frequency bands 420-430 Mc/s and 440-450 Mc/s are allocated exclusively to the fixed service.

211d ADD 97d) In Albania, Bulgaria, Hungary, Poland, Roumanai, Czechoslovakia and the U.S.S.R., the frequency band 420-450 Mc/s is allocated additionally to the aeronautical radionavigation service.

211e ADD 97e) In Indonesia the frequency band 420-450 Mc/s is also allocated to the fixed and mobile except aeronautical mobile services on a secondary basis.

^{*} In Region 1, the fixed and mobile, except aeronautical mobile services are the primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

^{**}In Regions 2 and 3, the radiolocation service is the primary service. The amateur service is a secondary service as defined in Document No. 242 (Rev. 2), paragraph 7A.

Fraccuona		Allocatio	n to services			
Frequency band Market	Moral districts		Regional			
(Mc/s)	World-wide	Region l	Region 2	Region 3		
420-450 (cont'd)		430-440 a) Amateur b) Radiolo- cation 97b) 971) 97f) 97g)	420-450 (cont'd)	420-450 (cont'd)		
(cont'd)		97i)	(cont'd)	(cont'd)		

- 211f ADD 97f) In Austria, the Federal Republic of Germany, Portugal and Switzerland, the frequency 433.92 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 0.2% of that frequency.
- 211g ADD 97g) In Italy and Switzerland, the frequency band 430-440 Mc/s is allocated additionally to the fixed and mobile, except aeronautical mobile, services.
- 211h ADD 97h) In Norway, the frequency band 435-440 Mc/s is allocated additionally to the fixed service.
- 21li ADD 97i) In Greece, the frequency band 430-440 Mc/s is allocated alternatively to the fixed service.

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Frequency band	Regional			
(Mc/s)	World-wide	Region l	Region 2	Region 3
420-450		440-450	420-450	420-450
(cont'd)		a) Fixed* b) Mobile except aeronau- tical mobile* c) Radio- location 97b) 97c)	(cont°d)	(cont'd)
450-470	a) Fixed b) Mobile		manaman (ilian 1997) - Werneparri (iliangua di ripir reparri 1997) - Ngir re Sandillari	
97a)				

^{*}The fixed and mobile, except aeronautical mobile services, are the primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.), paragraph 7A.

M		Allocation to	services		
Frequency band (Mc/s) World-wide			Regional		
(MC/S)	World-wide	Region 1	Region 2	Region 3	
470-960		470-582 Broadcasting	470-890 Broadcasting	470-585 Broadcasting 97j)	
(cont'd)			(cont'd)	(cont'd)	

211j ADD 97j) In Australia, the frequency band 470-500 Mc/s is allocated alternatively to the fixed and mobile services.

Frequency band (Mc/s)	The second secon	Allocation to services			
	-World-wide	Regional			
` .		Region l	Region 2	Region 3	
470-960 (contd)		582-606 a) Broadcast-	470-890 (contd)	470 - 585 (c o ntd)	
		ing b) Aeronauti- cal radio- navigation 97k) 971)		585-610 Radionavi- gation 97m)	
(contd)			(contd)	(contd)	

- 211k ADD 97k) In the United Kingdom, the frequency band 582-606 Mc/s is allocated on a primary basis to the aeronautical radionavigation service, and on a secondary basis to the radiolocation service.
- 2111 ADD 971) In Greece and Italy, the frequency band 582-606 Mc/s is allocated additionally to the fixed service until January, 1965.
- 211m ADD 97m) In Australia, China, Korea and Japan, the frequency band 585-610 Mc/s is allocated additionally to the broadcasting service.

There	the first that the thing the state of the same and the sa	Allocatio	n to services	
Frequency band (Mc/s)	Ward wide	Regional		
(MC/S)	World-wide	Region 1	Region 2	Region 3
470-960 (contd)		606-790 Broadcasting	470-890 (contd)	585-610 (contd)
		97n) 97o) 97p)		610-890 a) Fixed b) Mobile c) Broadcas- ting 97q)
(contd)			(contd)	(contd)

- 21ln ADD 97n) The radionavigation service may continue to operate in the frequency band 606-610 Mc/s until the band is required for the broadcasting service.
- 2110 ADD 970) In Greece and Italy, the frequency band 606-685 Mc/s is allocated additionally to the fixed service until January, 1965.
- 211p ADD 97p) In Bulgaria and the U.S.S.R., the frequency band 606-960 Mc/s is allocated additionally to the aeronautical radionavigation service.
- 211q ADD 97q) In Australia, the frequency band 610-820 Mc/s is allocated exclusively to the broadcasting service, and the frequency band 820-960 Mc/s is allocated exclusively to the fixed service.

Frequency band (Mc/s)	Allocation to services			
	World-wide	Regional		
		Region l	Region 2	Region 3
470-960 (contd)		790-960 a) Fixed b) Broadcast- ing 97p) 97r) 97s)	470 - 890 (contd)	610-890 (contd)
			890-942 a) Fixed b) Radiolo- cation	890-942 a) Fixed * b) Mobile * c) Broad- casting* d) Radiolo- cation 97q)
			942 - 960 Fixed	942-960 a) Fixed b) Mobile c) Broad- casting 97q)

211r ADD 97r) In Region 1, stations using trospheric scatter may be accommodated in the frequency band 790-960 Mc/s under arrangements to be agreed between the Administrations concerned and affected, and shall operate in the frequency band 790-860 Mc/s on a secondary basis to the broadcasting service.

211s ADD 97s) In Belgium, France and the Principality of Monaco, the frequency band 790-860 Mc/s is allocated alternatively to the broadcasting service.

212 NCC 98) The frequency 915 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 25 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

213 SUP 99)

214 SUP 100)

^{*)} In Region 3, the fixed, mobile and broadcasting services are the primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev. 2), paragraph 7A.

Document No. DT 719-E CORRIGENDUM No. 4 14 November, 1959

WORKING GROUP 5B

New text for paragraph 13 of Document No. DT 719 (Report by Sub-Group 5Bl of Working Group 5B)

13. Questions relating to "inter-ship" frequencies

It was noted that the inter-ship frequency 2 396 kc/s listed for the United Kingdom in Annex 2 of the E.A.R.C. Agreement would be used by the United Kingdom in certain defined areas and by the Federal Republic of Germany in other defined areas. A further similar agreement is forthcoming between the Administrations of France and the Federal Republic of Germany concerning another inter-ship frequency.

The Sub-Working Group notes that, in general, the International Frequency List adopted by the E.A.R.C. for Region 1 provides for inter-ship communication in the sub-bands assigned for that purpose by No. 40 of the E.A.R.C. Agreement. There is, however, no provision in Article 11 of the Radio Regulations for notification of new frequency assignments for intership communication in those bands. The Sub-Working Group recommends that the question be considered by Working Group 5A.

The entries do not bear any date in Columns 2a or 2b, but only an abbreviation in Column 13, and it is felt they should be accorded a 2a date. The Sub-Working Group decided to refer the question to Working Group 5B.

In view of the above and in the absence of any inter-ship assignment in the 2 194 - 2 440 kc/s band for the Administrations of Spain and the U.S.S.R. in the frequency list adopted by the E.A.R.C., the Delegates of those countries will submit proposals for the inclusion of inter-ship frequencies for their respective countries. In that connection, the Delegates of the countries directly concerned will be consulted and the results examined at a later meeting.

Document N° DT 719 CORRIGENDUM N° 3 12th November, 1959

WORKING-GROUP 5B

CORRIGENDUM

to the Report of Sub-Working Group 5Bl to Working Group 5B

In Document N° DT 719, Pages 3 and 4, Replace Paragraph 3 by the following :

The possibility for bringing into full force the notification and registration procedure defined in Article 11 RR, the International Frequency List and the Table of Frequency Allocations for the bands which are not yet in force and consideration of the situation of the frequency assignments recorded in the M.R.F.R. in these bands. 2850 - 3950 kc/s Regions 1 and 3 and 2000 - 4000 kc/s Region 2 (except for aeronautical mobile exclusive bands).

It is recommended that these frequency assignments should be transferred to the Master International Frequency Register as follows:

- (1) Initial entries in the M.R.F.R. with dates appearing in Column 2(a) shall be transferred with the same dates in the corresponding column of the Master International Frequency Register.
- (2) Initial entries in the M.R.F.R. with dates appearing in Column 2(b) for Region 1 shall be transferred with the same dates to Column 2(a) of the Haster International Frequency Register.
- (3) Assignments entered in the M.R.F.R. subsequently to those referred to in (1) and (2) above, with a date appearing in Column 2(b) shall be transferred to Column 2(a) provided they receive favourable findings after examination by the I.F.R.B. in accordance with the new Article 11 procedure to be decided by this Conference; otherwise, the existing 2(b) dates shall be placed in Column 2(b) of the register.
- (4) The existing dates in Column 2(c) in all cases shall be transferred to the corresponding column in the Master International Frequency Register.
- (5) . Out-of-band assignments or those not in conformity with the Radio Regulations shall be so indicated by an appropriate symbol in the Remarks Column.

Document No. DT 719-E CORRIGENDUM No. 2 12 November, 1959

WORKING GROUP 5B

CORRIGENDUM

to the Report of Sub-Working Group 5Bl to Working Group 5B.

In Document No. DT 719, page 3, after paragraph 1, add the following paragraph:

"1 bis Consideration of the bands 150 - 2 850 kc/s (Regions 1 and 3) and 150 - 2 000 kc/s (except 535 - 1 605 kc/s) (Region 2)

The Sub-Working Group has considered the situation in these bands and recommends that these assignments should be transferred to the Master International Frequency Record and that the dates appearing in Column 2 of the M.I.F.R. should be those appearing in Column 2 of the Master Radio Frequency Record.

Attention is also drawn to the declaration of the Spanish Delegation concerning the band 415 - 1 605 kc/s in Region 1 which appears in paragraphs 4 and 5 of Annex 1 of this report. In paragraph 13 of this report the problem of intership frequency entries in the band 1 605 - 2 850 kc/s has been separately referred to".

Document No. DT 719-E CORRIGENDUM No. 1 10 November, 1959

WORKING GROUP 5B

CORRIGENDUM

to the Report of Sub-Working Group 5Bl to Working Group 5B

In Document No. DT 719, replace raragraph 11 on page 7 by the following:

11. Consideration of Document No. 403 (Submitted by India)

Sub-Working Group 5Bl took note of the opinion expressed by the Delegate of India conerning Document No. 403, when he stated that the operations already existing for the non-priority services must be preserved when the provisions contained in 7(A) of Document No. 242 (Rev.) are made operative. In the case of a priority channel being vacated by cancellation, this channel should be made available to the same type of service in order to retain the planned structure in bands where plans exist. In this context attention was drawn to the need to protect the services which operate with assignments in accepted frequency lists supported by assignments in the unplanned bands. As an example the services operating in the 3.3 Mc/s and 5 Mc/s shared bands were mentioned. It is understood that the main contents and recommendations of Document No. 403 are being discussed in a Sub-Working Group of 5A.

Document No. DT 719-E 7 November 1959

GENEVA, 1959

WORKING GROUP 5B

REPORT

Sub-Working Group 5Bl to Working Group 5B

Sub-Working Group 5Bl was constituted by Working Group 5B at its first meeting on 8 September 1959. The terms of reference of the Sub-Working Group as given by Working Group 5B were the following as per Document No. 207:-

"Study of the International Frequency List, based on the new International List adopted by the E.A.R.C. and possible readjustments of the assignments which appear therein:

a) Bands for which the List has been implemented:

14 - 150 kc/s Worldwide 150 - 2 850 kc/s Regions 1 and 3 150 - 2 000 kc/s Region 2 (except 535 - 1 685 kc/s)

b) Bands for which the List has to be implemented by an Administrative Conference or by special agreements:

2 850 - 3 950 kc/s Regions 1 and 3 (except for the aeronautical mobile exclusive bands)

2 000 - 4 000 kc/s Region 2 (See Section III of the I.F.R.B. Report)"

In addition to these, on a question raised by the Delegation of Spain it was decided that the situation in the bands covered by the European Regional Convention for the Maritime Mobile Radio Service and the European Broadcasting Convention of Copenhagen 1948 (415 - 1 605 kc/s) would also be studied by the Sub-Working Group 5B1.

The I.F.R.B. was represented by Mr. F. Dellamula and Mr. E.J.Robinson of the I.F.R.B. Secretariat acted as rapporteur at most of the meetings. Six meetings have been held so far at which most of the delegations present at the Radio Conference participated.

At its first meeting the Sub-Working Group drew up a detailed list of questions to be studied on the basis of its terms of reference as follows:

1. Consideration of the possibility of readjusting frequency assignments in the New International Frequency List adopted by the E.A.R.C. for the band 14 - 150 kc/s.

- 2. Measures to be taken in relation to those frequency assignments contained in the new International Frequency List adopted by the E.A.R.C. and entered in the M.R.F.R. as initial data, for which the completion data in accordance with No. 269 of the Agreement and the date of putting into service according to No. 270, have not been notified.
- The possibility for bringing into full force the notification and registration procedure defined in Article 11 RR, the International Frequency List and the Table of Frequency Allocations for the bands which are not yet in force and consideration of the situation of the frequency assignments recorded in the M.R.F.R. in these bands.
- 4. Consideration of the question of providing common working frequencies on a world-wide basis for the Maritime Mobile Radiotelephone Service in the frequency bands between 2 000 kc/s and 2 850 kc/s (E.A.R.C. Resolution No. 5 and Recommendations Nos. 2, 3 and 4 of the Baltic and North Sea Radiotelephonic Conference Göteborg 1955).
- 5. Consideration of the situation which may arise with respect to the assignments in the M.R.F.R. and study of measures to be taken, if the Table of Frequency Allocations or notes related thereto are modified by the Conference.
- 6. Consideration of the situation of frequency assignments entered in the M.R.F.R. in accordance with RR 338 (Resubmissions) and for which no actual harmful interference has been reported.

The Sub-Working Group also constituted three Working Parties to discuss and formulate their recommendations with respect to the position existing in the three regions in the bands concerned as follows:

- Region 1 Working Party under the chairmanship of Mr. Kirkpatrick of the United Kingdom.
- Region 2 Working Party under the chairmanship of Mr. Dawson of Canada.
- Region 3 Working Party under the chairmanship of Mr. Keith of Australia.

The Working Parties for Regions 2 and 3 have concluded their work and have accordingly been disbanded whilst the Working Party for Region 1 still has one item on its agenda.

The general questions discussed in Sub-Working Group 5Bl and the results thereof are as follows:

1. Consideration of the possibility of readjusting frequency assignments in the New International Frequency List adopted by the E.A.R.C. for the band 14 - 150 kc/s.

A problem was raised concerning the interchange of frequencies between the Administrations of Poland and Spain. In view of the fact that the Norwegian Administration would suffer interference if this change took place, the Polish Delegation had decided to withdraw their request and both the Administrations of Poland and Spain agreed to revert to the status quo. The Sub-Working Group has decided that no adjustments were required in this list and that the present entries in the Master Radio Frequency Record be transferred to the New Master International Frequency Register.

Measures to be taken in relation to those frequency assignments contained in the New International Frequency List adopted by the E.A.R.C. and entered in the M.R.F.R. as initial data, for which the completion data in accordance with No. 269 of the Agreement and the date of putting into service according to No. 270 have not been notified.

It is recommended that these should be deleted from the Master Radio Frequency Record and not included in the Master International Frequency Register. However, since a number of Administrations have not complied with the provisions of Nos. 269 and 270, it is considered necessary that those Administrations should be given the opportunity to further examine assignments in these bands in order that they may fulfil these provisions, or, on the other hand, cancel them. The final date for the completion of the technical data, and the date of bringing into use should be as soon as practicable after 30.6.60 but not later than 1.1.61. The I.F.R.B. will send to Administrations extracts of all such frequency assignments as soon as possible.

The possibility for bringing into full force the notification and registration procedure defined in Article 11 RR, the International Frequency List and the Table of Frequency Allocations for the bands which are not yet in force and consideration of the situation of the frequency assignments recorded in the M.R.F.R. in these bands. (3 155 - 3 400 kc/s and 3 500 - 3 900 kc/s Regions 1 and 3 and 2 000 - 4 000 kc/s for Region 2).

It is recommended by the countries of Region 2 and subsequently accepted by the countries of Region 1 that these frequency assignments should be transferred to the Master International Frequency Register. Those "in-band" frequency assignments with a date in column 2b prior to January 1, 1955, should be transferred to the Master International Frequency Register, entering the column 2b date in column 2a. All other frequency assignments having dates in column 2a and 2c, or 2b and 2c, should be transferred to the Master International Frequency Register, those dates being entered without change in the corresponding columns in the Master Register, except that "out-of-band" status should be so indicated by an appropriate symbol in the Remarks Column. For all assignments and notifications with dates subsequent to January 1, 1955, the Notification and Registration procedure decided by this Conference for bands where Lists have been adopted shall apply.

As regards Region 3, the Delegation of Australia supported an identical recommendation but the Delegation of India wished to study this recommendation further and for the time being would like to see it retained as recommended by the Working Party of Region 3 which is as follows:

- "1. Entries in the M.R.F.R. with dates appearing in column 2(a) shall be transferred with the same dates in the corresponding column of the M.I.F.R.
- " 2. Entries in the M.R.F.R. with a date appearing in column 2(b) shall be transferred to column 2(a) provided they receive favourable findings after examination by the I.F.R.B. in accordance with the new Article 11 procedure to be decided by this Conference; otherwise the existing 2 (b) dates shall be placed in column 2(b) of the Register.
- " 3. The existing dates in column 2(c) in all cases shall be transferred to the corresponding column in the M.R.F.R."

It is felt, however, that it night be possible to arrive at a uniform solution in Working Group 5B for all regions.

4. Consideration of the question of providing common working frequencies on a world-wide basis for the Maritime Mobile Radictelephone Service in the frequency bands between 2 000 kc/s and 2 850 kc/s (E.A.R.C. Resolution No. 5 and Recommendations Nos. 2. 3 and 4 of the Baltic and North Sea Radiotelephonic Conference - Göteborg 1955)

After a general discussion on the subject it was felt that as this question was also being discussed in other committees we may await their recommendations and this can be taken up later in Working Group 5B.

5. Consideration of the situation which may arise with respect to the assignments in the M.R.F.R. and study of measures to be taken if the Table of Frequency Allocations or notes related thereto are modified by the Conference.

It was felt that this is a general problem related to the entire Allocation Table and the Sub-Working Group is not in a position to make concrete recommendations, as the work of Committee 4 is still in progress.

6. Consideration of the situation of frequency assignments entered in the M.R.F.R. in accordance with RR 338 (Resubmission) and for which no actual harmful interference has been reported.

The Working Party for Region 1 considered that the question of the future status of frequency assignments entered in the Master Radio Frequency Record in accordance with RR 338 (Resubmissions) can be dealt with under the procedures to be adopted by Working Group 5A, in relation in particular to Section V of Article 11.

The Working Party for Region 2 considered it may be necessary for the I.F.R.B. to re-examine those assignments under Notification status, as a result of possible deletions from the E.A.R.C. agreed plans, see paragraph 2. Those remaining under Notification status will be transferred to the Master International Frequency Register, the provisions of 343, 344 and 345 of Article II of the Radio Regulations being applied.

7. Bands 415 - 1 605 kc/s (European Area)

The Sub-Working Group has considered the situation in these bands which are covered by the European Regional Convention for the Maritime Mobile Radio Service of Copenhagen 1948 (415 - 525 kc/s), and the European Broadcasting Convention of Copenhagen, 1948 (525 - 1 605 kc/s), taking into account the following documents:

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Document No. 40 (Rev.)
Document No. 38 (relevant parts)

Submitted by Spain

Document No. 105 (Proposal 5289 bis)
Document No. 249

Submitted by Libya
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The point of view of the Spanish Administration, as expressed in Document No. 40, was that the situation in these bands is obscure. However, the Sub-Working Group finds it to be generally understood that the Atlantic City Table of Frequency Allocations is in force in relation to these bands, that the two Conventions are still in force as between the parties who have ratified them, and that the assignments contained in the Plans annexed to the Convention have been entered in the Master Frequency Record and form part of the International Frequency List. It further finds that, while there is no express provision in the E.A.R.C. Agreement bringing Sections I - VI of Article 11 of the Radio Regulations into force in relation to these bands in the European Maritime and Broadcasting Areas, the I.F.R.B. has applied the Article 11 procedure in these bands and has thus kept the procedure in harmony with that obtained in the African Area of Region 1 and in Region 3.

The Sub-Working Group endorses this action and assumes that the position will be covered when the revised Article 11 is brought into force. The Delegate of Spain desires that his declaration be included in this report. It is annexed as Annex 1.

The Sub-Working Group recommends that the following two Notes should be passed by Committee 5 to the Plenary Assembly of the Conference:

I. Note concerning the European Broadcasting Convention, Copenhagen 1948.

The Administrative Radio Conference, considering the European Broadcasting Convention, Copenhagen, 1948, Article 7, Section 1, requests the General Secretariat of the Union to take the necessary steps to convene the meeting of the Delegates of the countries of the European Broadcasting Area, and suggest that the agenda of the meeting could be the following:

- 1. Election of Chairman of the meeting.
- 2. Approval of agenda of the meeting.
- 3. Question of convening the Conference of Plenipotentiaries of the Governments of the countries of the European Broadcasting Area, within eighteen months after the close of the Administrative Radio Conference, or at a later date.
- 4. Directives for the European Conference.

II. Note concerning the European Regional Convention for the Maritime Mobile Radio Service, Copenhagen 1948

The Administrative Radio Conference, considering the European Regional Convention for the Maritime Mobile Radio Service, Copenhagen, 1948, Article 8, Section 1, requests the General Secretariat of the Union to take the necessary steps to convene the meeting of the Delegates of the countries of the European Maritime Area, and suggests that the agenda of the meeting could be the following:

- 1. Election of Chairman of the meeting.
- 2. Approval of Agenda of the meeting.
- 3. Question of convening the Conference of Plenipotentiaries of the Governments of the countries of the European Maritime Area, within eighteen months after the close of the Administrative Radio Conference, or at a later date.
- 4. Directives for the European Conference.

The Delegate of Spain was of the opinion that, having regard to Article 10 of the I.T.U. Convention, Buenos Aires, 1952 and Article 4 of the Atlantic City Radio Regulations, any Conferences held to revise the Copenhagen Conventions should not be Conferences of Plenipotentiaries. The Sub-Working Group decided that it could only follow the texts of the relevant Articles of the Convention. Items 3 of the suggested agenda in Notes 1 and 2 were drawn up accordingly. (See the complete declaration of the Delegate of Spain in Annex 2).

The Delegate of Spain raised some small problems of his Administration in relation to the maritime mobile bands. These are being referred to the I.F.R.B. for a report which can be considered at a further meeting.

Proposal No. 5289 bis (Document No. 105) was introduced by the Delegate of Libya who wished it to be considered as a possible Recommendation rather than as an addition to Article 9 of the Radio Regulations as originally proposed. The proposed Recommendation was supported by the Delegate of Israel. The Sub-Working Group considered that the proposal could more appropriately be studied by the Ad Hoc Group set up by Committee 5 to consider the needs of new and developing countries, especially as it related to all Regions.

8. Incorporation of Nos. 53, 54, 56 and 57 of Article 6, Section I of the E.A.R.C. Agreement into the Radio Regulations.

It was agreed that paragraphs 53 and 54 should be considered for possible incorporation into the New Article 11 of the Radio Regulations since they refer to procedures to be carried out by the I.F.R.B. It is, therefore, suggested that the necessary action be taken by the Chairman of Working Group 5B to refer these paragraphs to Working Group 5A. With respect to paragraphs 56 and 57 it is felt that these should be considered with that part of the Radio Regulations dealing with Broadcasting in the Tropical Zone (Article 9, Section I, § 3), and it is suggested that appropriate action be taken by the Chairman of Working Group 5B to refer this matter to Committee 4 of the Conference.

9. Recording of frequency assignments in the band 535 - 1 605 kc/s (Region 2).

It is unanimously decided to recommend that the entries in the Master Radio Frequency Record be transferred to the Master International Frequency Register and that the provisions of Article 6 Section II, of the E.A.R.C. Agreement should be incopporated in a new Section of the new Radio Regulations, Article 11, with minor drafting amendments to paragraph 58 to be made by Committee 8. The first sentence of paragraph 228 Article 33 of the E.A.R.C. Agreement should also be included with the foregoing.

Problems of medium wave broadcasting raised by certain Administrations.

The Chairman of Working Party Region 3 was happy to report that the Administration of Iran had been able to solve their medium wave broadcasting problems by direct negatiations with the Administrations of Italy and the U.S.S.R. The Delegate of Korea wished it to be noted that although negotiations were still under way as regards his medium wave broadcasting problems, so far, no tangible result had been achieved.

11. Consideration of Document No. 403. (Submitted by India)

Sub-Working Group 5Bl took note of the opinion expressed by the Delegate of India concerning Document No. 403, when he stated that assignments already existing for Aeronautical Radionavigation must be preserved even if the provisions of priority as contained in Document No. 242 are made operative. In the case of a priority channel being vacated by cancellation this channel should be made available to the same type of service in order to retain the planned structure. It is understood that the main contents and recommendations of Document No. 403 is being discussed in a Sub-Working Group of 5A.

12. Consideration of Documents Nos. 22 and 24 (submitted by the United Kingdom).

The Sub-Working Group considered the above documents as well as the proposals of Japan contained in Proposals 1079 and 1080 relating to the transfer of certain provisions of the E.A.R.C. agreement to the new Radio Regulations.

It was agreed that the following provisions of the E.A.R.C. agreement should be recommended to be incorporated in the new Radio Regulations under Article 9 and with that end in view a recommendation should be sent to Committee 6 which is considering the Article 9.

E.A.R.C. agreement Articles to be transferred:

Articles Nos. 26, 27, 28, 32, 39, 40, 41, 50 and 64 Paragraphs 6.1, 6.2, and 6.3 of the African plan.

It was, however, agreed that as the guard band for frequency 2 182 kc/s had not been decided upon, this should be left for determination later.

It was also stated by the Chairman of Region 3 Working Party that frequency 3 805 kc/s was not required any more as a distress frequency and the reference to it may not be transferred to the new Radio Regulations.

The Sub-Working Group also decided to forward a recommendation for consideration relating to the planning of new maritime radiobeacons in the African area similar to the arrangements in the European area and this is found in Annex III.

13. Questions relating to "inter-ship" frequencies.

It was noted that the intership frequency 2 396 kc/s listed for the United Kingdom in Annex 2 of the E.A.R.C. agreement would be used by the United Kingdom in certain defined areas and by the Federal Republic of Germany in other defined areas. A further similar agreement is forthcoming between the Administrations of France and the Federal Republic of Germany concerning another intership frequency.

It is recommended that Proposals 1079 and 1080 be referred to Committee 4 for inclusion in Article 9 of the Radio Regulations.

As regards the "intership" frequency requirements submitted by the Administrations of Spain and the U.S.S.R. consultations will take place between the delegates of the countries mainly concerned and the results should be considered at a later meeting. The Sub-Working Group notes that Article II makes no provision for the notification of new "inter-ship" frequency assignments in the band 1 605 - 2 850 kc/s. Furthermore, as these entries do not actually bear any date in columns 2a or 2b but only a remark in column 13, it is felt that these assignments should be accorded a 2a date. The Sub-Working Group decided to refer this question to Working Group 5B.

S.A. Sathar Chairman

Annexes: 3

ANNEX 1

STATEMENT BY THE SPANISH DELEGATION REGARDING ITEM 7 (SITUATION AS REGARDS THE 415 - 1605 KC/S BANDS IN THE EUROPEAN ZONE)

1. The <u>Spanish Delegation</u> considers that the legal or regulatory situation is extremely confused as regards the bands comprised between 515 and 1 605 kc/s in the European zone. In fact, the four criteria which the Chairman of Working Group 5B singled out as being characteristic for the bands below 3 950 kc/s in Regions 1 and 3 and below 4 000 kc/s in Region 2 (with the exception of the aeronautical mobile service) do not apply to this band.

1. Validity of the Table of Frequency Allocations

Although the validity may be taken for granted there is no regulatory provision nor valid Union document to that effect.

2. Existence of an International Frequency List duly adopted.

The E.A.R.C. Agreement makes no reference whatsoever to these bands or zone except in the footnote, No. 178.1, which confirms that the said bands for that zone were deliberately omitted from consideration by that Conference. Therefore, there is no adopted list for these bands in this zone.

3. Authority of the I.F.R.B. to make specific initial basic entries in the Master Radio Frequency Record.

The authority vested in the I.F.R.B. to compile the Master Radio Frequency Record is provided for in Article 34 of the E.A.R.C. Agreement, Section II of which refers to the entry of basic data. Neither that section nor any other part of Article 34 makes the slightest reference to entries corresponding to the 415 - 1 605 kc/s bands in the European zone. The I.F.R.B. has not received any valid instructions from the Union for entering the appropriate basic data. The fact that the I.F.R.B. has included certain entries cannot in any way be regarded as justifying the situation.

4. <u>Validity of the frequency notification and registration procedure stipulated in Article 11 of the Radio Regulations.</u>

Neither the E.A.R.C. Agreement nor any other valid document of the Union asserts the validity of the said procedure for these bands and zone. The I.F.R.B. has been applying the procedure of its own accord. This cannot, of course, serve to justify the situation.

The countries signatories to the Copenhagen Conventions adduce in connection with the first three criteria mentioned above, certain provisions contained in the Conventions. The Spanish Delegation would like to point out that such Conventions can only be regarded, from the Union's standpoint, as special arrangements as stipulated in Article 41 of the International Telecommunication Convention. In accordance with the Convention itself amd with Article 4 of the Radio Regulations, the Copenhagen Agreements cannot in any way be binding on the Union in general or on any non-signatory country in particular. The Copenhagen Conferences which gave themselves plenipotentiary status, were not Administrative Conferences empowered, in accordance with No. 1076 of the RR, to establish frequency lists adopted by the Union.

- 2. The Spanish Delegation affirms that the position is the same in the bands between 155 and 285 kc/s in the European Zone, which are also covered by the Copenhagen plans. At the present time, however, as Spain neither uses nor intends to use these bands for the moment, no detailed reference is made to them.
- 3. With regard to the present position, the Copenhagen plans:

a) are clearly unjust;

- b) have not been respected by the countries signatory to them;
- c) include paragraphs which contravene the Radio Regulations and in particular Article 11 thereof (See Document No. 40);
- d) do not reflect, even approximately, the actual position, at least with regard to the broadcasting service.
- Any attempt by the signatory countries to the Copenhagen Conventions to try to impose, by force of numbers, a list based on the Copenhagen plans, in spite of their evident injustice, on the other countries in the European Zone (and in particular Spain, which was not even allowed to be present at the Conferences which drew up the plan) would run directly counter to that much-vaunted spirit of goodwill and co-operation of which mention has been made so often at this Conference.
- In view of the practical difficulties which may arise from a review of the Copenhagen plans at this Conference, the Spanish Delegation is of the opinion that until a review can be undertaken, the problems that have arisen may be solved by adopting a procedure for the 415 1 605 kc/s bands in the European Zone which is similar in every way to the one which has been and apparently will continue to be applied in Region 2 for the 535 1 605 kc/s band. In this band for Region 2 the E.A.R.C. drew up a Frequency List for information purposes only and recent assignments are entered in the Master Radio Frequency Record without dates in Column 2. Countries are controlled by special arrangements but these arrangements cannot be claimed to have the force of Regulations or to be obligatory for countries which are not parties thereto.

ANNEX2

STATEMENT BY THE SPANISH DELEGATION WITH REFERENCE TO THE PROPOSED NOTES IN ITEM 7

The Delegation of Spain declares that according to Articles 9 and 10 of the Buenos Aires Convention, the only Plenipotentiary Conference is that provided for in Article 9, and regional and service conferences have to be special administrative conferences.

In that case the Agenda to which Notes I and II refer should be amended by deleting the words "by plenipotentiaries of the governments" in items 3 of Notes I and II. Otherwise the Convention would be contravened.

ANNEX 3

The Administrative Radio Conference (Geneva, 1959),

considering

the need to facilitate the planning of new maritime radiobeacon stations in the band $285-315~{\rm kc/s}$, especially in the neighbouring localities of the European and African Areas

recommends

that the countries of the African Area be invited to adopt provisions similar to those contained in the "Regional Arrangement for Maritime Radio Beacons in the European Area of Region I, Paris, 1951",

Document No. DT 720-E 7 November, 1959

WORKING GROUP 7A7

AGENDA

Meeting of Working Group 7A7

Monday, 9 November, 1959, at 0900 hrs. - Room F

- 1. Second reading of texts relative to paragraphs 451 to 469 inclusive.
- 2. Reference List of Radar stations to be included in one of the Service Documents.
- 3. Redrafting of paragraph 474 (Proposals of Belgium, Nos. 1502 and 1504).
- 4. Consideration of paragraphs 477 to 483.
- 5. Appendix 6, List IV, Proposals 4555 to 4562 of the U.S.A.; 2741, 2742 of Belgium; 2743 to 2746 of France, French O.P.T.A. and Morocco; 2747 to 2749 of the Netherlands; 4574, 2750, 2751 of the United Kingdom; Circular No. 766; Documents Nos. 87 and 304.
- 6. Other business.

E. Ron Chairman

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

SUB-COMMITTEE 7A

THIRD REPORT

by Working Group 7A4 to Sub-Committee 7A

- 1. The purpose of this report is to inform Sub-Committee 7A of the results of the Working Group's discussions on:
 - a) the formation of call signs in the international series (No. 419 § 4) Proposals Nos. 5513 § 10 (Document No. 299) of the Belgian Congo and 4029 (page 377, Rev. 1) of the United States.
 - b) Proposals Nos.:
 - 5491 (Document No. 239) of the Federal Republic of Germany
 - 5509 and 5510 (Document No. 285) of the Bielorussian S.S.R.
 - 5513 \$ 30 and 40 (Document No. 299) of the Belgian Congo.

The above questions were examined at the eighth meeting of the Working Group on Friday, 6 November, 1959.

The Proposal by the Belgian Congo (No. 5513 **s** 10) that the figures ZERO (Ø) and one (1) be admitted as the first figures of call-signs did not meet with the unanimous approval of Delegations. It was referred to Sub-Committee 7A for a vote on the underlying principle.

The Delegation of the Belgian Congo and Territory of Ruanda Urundi requested that the report mention its withdrawal of Proposal No. 5513 8 20 suggesting that the use of abridged figures in call-signs be admitted or at any rate tolerated for countries which find such an arrangement convenient.

There was a short discussion on Proposal No. 4029 by the United States following on the United States Delegate's statement that it was related to others aimed at economy in the use of call-signs and that certain preliminary measures were needed before it could be adopted.

Several Delegations pointed out that such measures could not be studied during the present Conference, and the United States Delegation agreed that consideration of its Proposal should be left until the conclusion of work by the Working Group set up to study a new method of formation of call-signs to be submitted subsequently to the Administrations by the Secretary-General.

The purpose of Proposals Nos.: 5491 of the Federal Republic of Germany

5509 and 5510 of the Bielorussian S.S.R.

5513 \$ 30 and 40 of the Belgian Congo

is to obtain approval by the Conference of the transfers of call-signs already effected or contemplated, as set out below:

4.

Bielorussian S.S.R.	Notification 825 by the S.G. Proposal No. 5509
Germany	Proposal No. 5491
(Germany 1)	Proposal No. 5491 Proposals Nos. 5509 and 5510
(Germany 1)	Proposal No. 5491 Proposals Nos. 5509 and 5510
	Proposal No. 5510 of the Bielorussian S.S.R.
	Germany (Germany 1) (Germany 1) (Germany 1) Germany 1) etween the German the Federal Republic

The Delegations of the countries which proposed the exchanges of call-signs commented on the conditions in which they were agreeable to their being made.

The Delegation of the Belgian Congo requested that the following points be mentioned in the report:

- it was essential that the Conference should allocate it a number of series equal to the number it was willing to surrender to Germany
- for the sake of simplification of the procedure of transfer from the present signs to the future signs, the Belgian Congo wished to be allocated a continuous series of call-signs, the second and third letters of which went from NA to TZ; the series 9NA-9NZ not being available, however, it was prepared to accept the series 90A-9UZ, if its proposal for the allocation of the series ØNA-ØTZ was not accepted.

The Delegation of the Federal Republic of Germany was exceedingly grateful to the U.S.S.R., the Bielorussian S.S.R. and the Belgian Congo for their generous gesture enabling the requirements of all German stations to be filled. It requested the Delegation of the Bielorussian S.S.R. to agree that all call-signs should appear under the designation "Germany", and undertood to ensure that call-signs would be used on Germany on the basis of an effective distribution.

The Delegate of the Bielorussian S.S.R. said that he did not doubt that distribution would be perfectly fair. The apportionment he was proposing was a matter of more particular concern to other countries, which would need to be familiar with it to submit any complaints of interference.

Since it was not possible to reach agreement on this question in the Working Group, the two Delegations agreed that discussion should be resumed at a future meeting of the Sub-Committee.

M. Sannier

Chairman

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No. DT 722 - FES 9 novembre 1959

GROUPE DE TRAVAIL 4E WORKING GROUP 4E GRUPO DE TRABAJO 4E

ORDRE DU JOUR

Douzième séance du Groupe 4E (960 à 10.500 Mc/s)

Mardi 10 novembre 1959, 9 heures, (Salle C)

- 1. Comptes rendu des 9ème, 10ème et llème séances
- 2. Rapport oral du Président du groupe spécial 4E (radioastronomie)
- 3. Examen des rapports du sous-groupe de travail 4E3 (Document N^{O} DT 637, Rev. et corrigendum 1, Document N^{O} DT 698)
- 4. Examen du projet de rapport à la Commission 4 (Document Nº 654 Rev.)
- 5. Divers.

AGENDA

Twelfth Meeting of Working Group 4E (960 - 10,500 kc/s)

Tuesday, 10 November, 1959 at 0900 hours - Room C

- 1. Summary Records of the 9th, 10th and 11th Meetings of the Working Group
- 2. Oral report by the Chairman of Ad Hoc Working Group 4E (Radiostronomy)
- 3. Consideration of the Reports of Sub-Working Group 4E3 (Document No. DT 637 Rev. and Corrigendum 1; Document No. DT 698)
- 4. Consideration of the draft Report of Committee 4 (Document No. 654, Rev.)
- 5. Any other business.

ORDEN DEL DÍA

12.2 sesión del Grupo de trabajo 4E (960 - 10 500 kc/s)

Martes, 10 de noviembre, a las 9 de la mañana - Sala C

- 1. Informes de la 9.ª, 10.ª y 11.ª sesiones del Grupo
- 2. Informe oral del Presidente del Grupo 4E Ad hoc (radioastronomía)
- 3. Examen de los informes del Subgrupo 4E3 (Documento N.º DT 637, Rev y Corrigendum N.º 1, Documento N.º DT 698)
- 4. Examen del proyecto de informe a la Comisión 4 (Documento N.º 654, Rev.)
- 5. Otros asuntos.

Le Président :

The Chairman: G. C. Braga

El Presidente:

Document No. DT 723-E 9 November, 1959

WORKING GROUP 4D2

DRAFT REPORT

Sub-Working Group 4D2 to Working Group 4D

Frequency bands for ionospheric scatter: Sub-Working Group was appointed at the third meeting of Working Group 4D on 18 September, 1959, the terms of reference being to consider the desirability or otherwise of allocating special bands for ionospheric scatter technique.

The Sub-Working Group held eight meetings in all.

The following countries were represented in the Group: Austria, Australia, Brazil, Canada, China, Spain, United States of America, France, India, Italy, Japan, New Zealand, Netherlands, Portugal, Federal Republic of Germany, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, Union of Soviet Socialist Republics.

The Sub-Working Group was assisted by Mr. M.S. Kari of the I.F.R.B. Secretariat.

The Sub-Working Group discussed the possibility of allocating special bands in which the systems using ionospheric scatter could be accommodated. The Group has agreed to specify only one band for the purpose on world-wide basis, and four others on Regional basis, in the band 29.7-41 Mc/s. As regards the band 41-68 Mc/s, it was not possible to specify any particular band for the purpose, and the operation, if any, of systems using this technique in this band was agreed to be regulated by means of footnotes only. Particular concern was expressed about interference to the broadcasting service in this band, and as will appear from the Annex, this has been covered by means of adequate provisions in the footnotes.

The proposal from the U.S.S.R. for accommodating systems using ionospheric scatter technique in the frequency band 56.75-57.75 Mc/s could not be discussed in the Sub-Working Group.

The conclusions reached in the Sub-Working Group are shown in the Annex.

Chairman

H. Shinkawa

ANNEX

The contract of		Allocation t	o services			
Frequency band (Mc/s)	World-wide	Regional				
(MC/S)	MOLTO-MIGE	Region 1	Region 2	Region 3		
29.7-41	a) Fixed b) Mobile 1) 2) 3) 4)					

1) Systems designed to use ionospheric scatter (or other fixed systems designed to operate over distances exceeding 800 km.) shall confine their emissions to the following bands:

32.6-33 Mc/s 34.6-35 Mc/s - Regions 2 and 3 36.2-36.6 Mc/s - Region 1 36.4-36.8 Mc/s - Regions 2 and 3 39 -39.4 Mc/s - Region 1

and shall have priority in Region 2 in the bands available for use in that Region.

- 2) The operation of stations designed to use ionospheric scatter is permitted only under arrangements to be agreed between Administrations concerned or affected.
- 3) Ionospheric scatter stations existing on 1 January, 1960 and not causing harmful interference to other services, may, however, continue on their present assignments.
- 4) In the case of frequency bands limited to a particular region, the provisions of paragraph 90 shall apply and Administrations shall avoid beaming such transmissions towards the other region unless specifically co-ordinated otherwise.

Frequency band (Mc/s)	World-wide	Region l	Region 2	Region 3
41-68		41-47 a) Broad- casting * b) Fixed c) Mobile 2)	41-50 a) Fixed b) Mobile 2) 3) 5)	41-44 a) Fixed b) Mobile 2) 5)
		47-68 Broadcasting		44-50 a) Fixed b) Mobile c) Broad- casting 2) 3) 5)
			50-54 Amateur	50-54 Amateur
			54-74.6 a) Fixed b) Mobile c) Broad- casting (Cont'd)	54-68 a) Fixed b) Mobile c) Broad- casting 2) 3) 5)

⁵⁾ Systems designed to use ionospheric scatter which may cause harmful interference to the broadcasting service are not permitted.

^{*} The broadcasting service is the primary service. Fixed and mobile services are secondary services as defined in Document No. 242 (Rev.2) 7A.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE 1959

Document N° DT 724(Rev.)-F-E-S 14 novembre 1959

COMMISSION 4 COMMITTEE 4 COMISIÓN 4

NOUVEAU RENVOI 42a) (ET 36a))

Les bandes de garde des fréquences étalon sur 2,5 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz et 25 MHz peuvent être utilisées par le service de radioastronomie, sur la base d'un degré de protection contre les rayonnements hors-bande au degré de protection assuré à d'autres services radioélectriques fonctionnant conformément au Tableau de répartition des bandes de fréquences.

NEW FOOTNOTE 42a) (AND 36a))

The standard frequency guard-bands at 2.5 Mc/s, 5 Mc/s, 10 Mc/s, 15 Mc/s, 20 Mc/s and 25 Mc/s may be used by the radio astronomy service on the basis that the degree of protection from extra-band radiations shall be that afforded other radio services operating in accordance with the Table of Frequency Allocations.

NUEVA NOTA 42a) (Y 36a))

El servicio de radioastronomía podrá utilizar las bandas de protección de las frecuencias patrón de 2,5 Mc/s, 5 Mc/s, 10 Mc/s, 15 Mc/s, 20 Mc/s y 25 Mc/s, siempre que el grado de protección contra las radiaciones fuera de banda permitido a otros servicios radioeléctricos que trabajan de conformidad con el Cuadro de distribución de las bandas de frecuencias.

Document N° DT 724-FES 9 novembre 1959

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE. 1959

COMMISSION 4 COMMITTEE 4 COMISIÓN 4

Nouveau renvoi 42a)

Les bandes de garde des fréquences étalon sur 2,5 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz et 25 MHz peuvent être utilisées par le service de radioastronomie, sur la base d'un degré de protection contre les rayonnements hors-bande au plus égal au degré de protection assuré à d'autres services radioélectriques fonctionnant conformément au Tableau de répartition des bandes de fréquences.

New footnote 42a)

The standard frequency guard-bands at 2.5 Mc/s, 5 Mc/s, 10 Mc/s, 15 Mc/s, 20 Mc/s and 25 Mc/s may be used by the radio astronomy service on the basis that the degree of protection from extra-band radiations shall be no greater than that afforded other radio services operating in accordance with the Table of Frequency Allocations.

Nueva Nota 42a)

El servicio de radioastronomía podrá utilizar las bandas de protección de las frecuencias patrón de 2,5 Mc/s, 10 Mc/s, 15 Mc/s, 20 Mc/s y 25 Mc/s, siempre que el grado de protección contra las radiaciones fuera de banda no exceda al permitido a otros servicios radioeléctricos que trabajan de conformidad con el Cuadro de distribución de las bandas de frecuencias.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS GENEVE, 1959

Document N° DT 725-FES

ADDENDUM N° 1

10 novembre 1959

COMMISSION 7 COMMITTEE 7 COMISIÓN 7

ADDENDUM A L'ORDRE DU JOUR

13ème séance de la Commission 7

Jeudi, 12 novembre 1959

4a. Approbation des textes contenues dans le Document Nº 522.

ADDENDUM TO AGENDA

for Thirteenth Meeting of Committee 7

Thursday, 12th November, 1959

4a. Approval of Texts contained in Document No. 522.

ADDENDUM AL ORDEN DEL DÍA

13. a sesión de la Comisión 7

Jueves, 12 de noviembre de 1959

4. Aprobación de los textos contenidos en el Documento N. $^{\circ}$ 522.

Le Président :

The Chairman: A.J. Ehnle

El Presidente:

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

COMMISSION 7 COMMITTEE 7 COMISION 7

ORDRE DU JOUR

Treizième séance - Commission 7 (Exploitation)

Jeudi, 12 novembre 1959, 9 heures

- 1. Approbation du compte rendu de la llème séance (Document Nº 530).
- 2. Approbation des textes contenus dans le Document Nº 476.
- 3. Approbation des textes contenus dans le Document Nº 489.
- 4. Approbation des textes contenus dans le Document Nº 534.
- 5. Divers.

AGENDA

Thirteenth Meeting of Coumittee 7 (Operations Committee)

Thursday, 12 November 1959 at 9.00 a.m.

- 1. Approval of Summary Record of the Eleventh Meeting (Document No. 530).
- Approval of Texts in Document No. 476.
- Approval of Texts in Document No. 489.
- 4. Approval of Texts in Document No. 534.
- 5. Any other business.

ORDEN DEL DIA

13. a sesión de la Comisión 7 (Comisión de explotación)

Jueves, 12 de noviembre de 1959, a las 9 de la manana

- Informe de la 11. a sesión (Documento N.º 530). Textos del Documento N.º 476.
- Textos del Documento N.º 489.
- 4. Textos del Documento N.º 534.
- 5. Otros asuntos.

Le Président The Chairman El Presidente

A. J. Ehnle

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

GROUPE DE TRAVAIL 5B WORKING GROUP 5B GRUPO DE TRABAJO 5B

ORDRE DU JOUR

4ème séance - Groupe de travail 5B

Mercredi 11 novembre 1959, à 15 heures - Salle F

- 1. Rapport verbal des Présidents des Sous-Groupes de travail
- 2. Examen du rapport du Sous-Groupe de travail 5Bl (Document Nº DT 719)
- 3. Examen du rapport du Sous-Groupe de travail 5B2
- 4. Divers

AGENDA

4th Meeting - Working Group 5B

Wednesday, 11 November 1959 at 3 p.m. - Room F

- 1. Verbal reports by the Chairmen of the Sub-Working Groups
- 2. Report by Sub-Working Group 5Bl (Document No. DT 719)
- 3. Report by Sub-Working Group 5B2
- 4. Any other business

ORDEN DEL DÍA

4. a sesión - Grupo de trabajo 5B

Miércoles, 11 de noviembre de 1959, a las 3 de la tarde - Sala F

- 1. Informe oral de los presidentes de los Subgrupos de trabajo
- 2. Estudio del informe del Subgrupo de trabajo 5Bl (Documento N.º DT 719)
- 3. Estudio del informe del Subgrupo de trabajo 5B2
- 4. Otros asuntos.

Le Président Chairman El Presidente

Juan A. Autelli

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 727-FES 9 novembre 1959

SOUS-GROUPE DE TRAVAIL 4G2 (Région 1) SUS-WORKING GROUP 4G2 (Region 1) SUBGRUPO DE TRABAJO 4G2 (Región 1)

ORDRE DU JOUR

Première séance du Sous-groupe de travail 4G2 (Région 1)

Mercredi 11 novembre 1959, 20 h.30 - Salle H

- 1. Réduction du nombre des notes au Tableau de répartition entre 10 500 et 40 000 Mc/s, pour ce qui concerne la Région 1 (voir Document N° 449 et DT 714).
- 2. Divers.

AGENDA

First meeting of Sub-Working Group 4G2 (Region 1)

Wedenesday, 11 November 1959, 20.30 hours - Room H

- Reduction of footnotes appended to draft Table of Frequency Allocations 10 500 to 40 000 Mc/s insofar as Region 1 is concerned (Document No. 449 and DT 714 refer).
- 2. Any other business.

ORDEN DEL DÍA

Primera sesión del Subgrupo de trabajo 4G2 (Región 1)

Miércoles, 11 de noviembre, a las 8.30 de la noche - Sala H

- Reducción de las notas anexas al proyecto de Cuadro de distribución de las bandas de frecuencias 10 500 40 000 Mc/s en lo que se refiere a la Región 1 (Véanse los documentos N.ºS 449 y DT 714).
- 2. Otros asuntos.

Le Président The Chairman El Presidente

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

Document No. DT 728-E 10 November 1959

SUB-WORKING GROUP 5B6

AGENDA

First Meeting of Sub-Working Group 5B6

Thursday 12 November, 1959, at 1500 - Room F.

- 1. Election of Rapporteur.
- 2. Participation of the I.F.R.B. in the work of the Sub-Group.
- 3. Terms of reference. These are given in Document No. 207 but are repeated in Annex 1 attached.
- 4. Organization of work of Sub-Group taking into account Annexes 1 and 2 attached.
- 5. Any other business.

Chairman,

P. N. Parker

Annexes: 2

ANNEX1

1. Terms of Reference of Sub-Working Group 5B6.

Study of the situation with regard to frequency assignments in the bands above 27 500 kc/s.

2. Reference Documents and Proposals

Document No. 20 - Report of the I.F.R.B., Section VIII.

U.S. Proposals Nos. 3922 & 3923 (Page 302.7) and 3850 - 3872 (Pages 298 Rev.1 - 298.2)

Japanese Proposals No. 5385 and 5373 - 5380 (Document No. 127).

U. K. Proposals 1260 (Page 299.1), 1278 (303 Rev.1). 1246 - 1249 (Page 295).

Mexican Proposals 3731 - 3746 (Pages 292.9 - 292.11).

E.A.R.C. Agreement, Articles 33 & 34.

E.A.R.C. Agreement, Recommendation 13.

ANNEX 2

GENERAL QUESTIONS TO BE DISCUSSED IN SUB-WORKING GROUP 5B6

- 1. Measures to be taken in relation to the frequency assignments contained in the M.R.F.R. for which the minimum essential information has not been supplied.
- 2. Minimum essential information to be supplied for future entries and whether such information needs to be varied according to the type of service (see paragraph 5 below). In this connection it may be necessary to take into account the manner and timing by which the present entries in the M.R.F.R. should be made to conform to any new requirements of minimum essential data.
- 3. Measures to be taken in relation to the frequency assignments contained in the M.R.F.R. which are not in accordance with the Convention or Radio Regulations.
- Consideration of the measures to be adopted if the Table of Frequency Allocations or notes related thereto are modified by the Conference, i.e. preparation of a procedure for the transfer to their appropriate bands of assignments which do not conform to the revised Table.
- 5. The possible extension of the technical examination procedure above 27 500 kc/s taking into account:
 - (a) the long distance propagation of frequencies well above 27 500 kc/s by the normal F2 and Sporadic-E modes of propagation, particularly during high sunspot conditions;
 - (b) the long distance interference range of services using the ionospheric and tropospheric scatter techniques.

In this connection it may be necessary to give special attention to the minimum technical data required for notices of such services and the technical standards to be used by the Board when examining such notices.

- 6. Consideration of the dates to be entered in column 2 of the basic entries in the M.I.F.R. taking into account the Article 11 procedure prescribed for the bands above 27 500 kc/s as well as Regional and other Agreements.
- 7. Possible adoption of revised procedures for the notification of frequencies and the form of publication of the I.F.L. for the part of the spectrum at present covered by Volume III of the R.F.R. with a view to the preparation of a document which is less cumbersome and more convenient for Administrations.

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

COMMITTEE 6

$\mathbb{A} \ \mathbb{G} \ \mathbb{E} \ \mathbb{N} \ \mathbb{D} \ \mathbb{A}$

Twelfth Meeting - Committee 6 (Technical)

Wednesday, 11 November, 1959 at 15.00 hours - Room C

- 1. Summary Record of 7th Mecting (Document No. 469).
- 2. Summary Record of 8th Meeting (Document No. 483).
- 3. Summary Record of 9th Meeting (Document No. 533).
- 4. Summary Record of 10th Meeting (Document No. 536),
- 5. Summary Record of 11th Meeting (Document No. 543).
- 6. Report of Chairman of Ad Hoc Drafting Group:
 - a) Oral report.
 - b) Frequency Tolerances (Document No. 414).
- 7. Report of Chairman of Working Group 6A
- 8. Other Matters.

M. N. Mirza Chairman.

ADMINISTRATIVE RADIO CONFERENCE

Document No. DT 730-E (Rov.) 13 November, 1959

GENEVA, 1959

. WORKING GROUP 5A

LIST OF SUBJECTS YET TO BE TREATED BY WORKING GROUP 5A *

Item No.

2.

5•

- 1. Documents from Drafting Sub-Group.
 - a) Draft of Article 10 (and revisions).
 - b) Draft of Articel 12 (and revisions).
 - c) Compromise solution on question of dates (including revision of RR 310, 311, 312 and 313).
 - d) Revised Draft of Article 11.
 - e) Revised Draft of Appendix 1.
 - a) Monitoring station maps (Document No. DT 689) and action to be taken thereon.
 - b) Document No. 537 Mexico. Network of Monitoring Stations.
- 3. Report of Working Group 5A2. "footnotes".
- 4. Treatment of data from Working Group 5B and Committees 4 and 6 etc.
 - a) Document No. DT 719 page 7 No. 8 E.A.R.C. Nos. 53 and 54.
 - b) Document No. DT 719 page 7 No. 9 E.A.R.C. Article 6 Section II.
 - c) RR 391, 355 and advice to Committee 6 regarding following proposals:

3985 - 3990 (U.S.A.)
5075 (Spain)
1327, 1328, 1334 - 1337 (Netherlands)
1340 (France, French OPTA, Morocco)
1342 (U.S.S.R.)

- Finalisation of any matters arising from Chapter VII
- 6. Other Business
- 7. Approval of Chairman's Report.

Document No. DT 730-E (Rev.) Page 2

* NOTE: This list is not necessarily in chronological order, and it is proposed that the order, which will expedite the work to the maximum, be adopted. This will depend extensively on the availability of decisions taken in Working Group 5B, and material available to 5A.

G. Searle Chairman GENEVA, 1959

WORKING GROUP 5A

PROGRAMME FOR FUTURE WORK OF WORKING GROUP 5A

- 1. Document No. DT 649 Draft of Article 11 (including Document No. DT 688)
- 2. Document from Drafting Group on question of dates in column 2, etc. (including revision RR 310, 311, 312, 313).
- 3. Document No. DT 632 Draft of Article 10.
- 4. Document No. DT 633 Draft of Article 12.
- 5. Document No. DT 689 Monitoring Station Maps.
- 6. Report of Working Group 5A2. "Footnotes".
- 7. Consideration of revision of numbers 1, 2, 3 and 4 above including data from 5B etc.
- 8. Approval of Chairman's report.

Chairman,

G. Searle

GENEVA, 1959

Document No. DT 731-E 10 November, 1959

SUB-WORKING GROUP 5B3

DRAFT REPORT

of

Sub-Working Group 5B3 to Working Group 5B

CHAPTER I

Organization of the work of Sub-Working Group 5B3

1. Sub-Working Group 5B3 was established by Working Group 5B on 8 September 1959. Its terms of reference were as follows:

"Study of the Plan and List adopted by the E.A.R.C. for the Maritime Mobile Service between 4,000 kc/s and 27,500 kc/s and the possibility of their being put into foree, and consideration of any adjustments which are thought necessary."

Sub-Working Group 5B3 entrusted on 17 September 1959 a restricted Sub-Working Group 5B3 to examine the adjustments considered necessary to the Plan and List adopted by the E.A.R.C. for the Maritime Mobile Service between 4,000 kc/s and 27,500 kc/s. The original Membership of this restricted Group was:

Argentine

Australia

Canada

China

Colombia

Spain

United States of America

Italy

Japan

Malaya

Norway

Poland

United Kingdom of Great Britain and Northern Ireland

Union of South Africa

Union of Soviet Socialist Republics

Many other delegations, however, were so good as to lend their assistance.

- The restricted Sub-Working Group 5B3 held four meetings during which any re-adjustments considered necessary to the International Frequency List for the Maritime Mobile Radiotelegraph Service in its exclusive bands between 4,000 kc/s and 27,500 kc/s (Annex 6 to the Final Acts of the E.A.R.C.) were examined.
- The restricted Sub-Working Group 5B3 entrusted the examination of any re-adjustments considered necessary to the Maritime Mobile Radio-telephone Service Plan in the exclusive bands between 4,000 kc/s and 27,500 kc/s (Annex 5 to the Final Acts of the E.A.R.C.) to a Special Sub-Working Group made up of representatives of the United States of America, the United Kingdom and the Union of Soviet Socialist Republics, with Mr. J. BES (France) as Chairman. This Special Sub-Working Group has held seven meetings.
- Recommendations from Sub-Working Group 5B3 to Working Group 5B are included in Chapter II of this Report, as far as radiotelegraphy is concerned, and in Chapter III with respect to radiotelephony.
- 6. Sub-Working Group 5B3 now wishes to place on record an expression of its sincere thanks for the valuable advice and assistance received at every step of its proceedings from Mr. R. Petit, member of the I.F.R.B.. Thanks to Mr. Petit's experience, the Sub-Working Group has more thoroughly covered its assignments.
- 7. Finally, Sub-Working Group 5B3 is also happy to express its sincere appreciation to the I.F.R.B. for making available to it the services of Mrs. P. Neetens. Mrs. Neetens has, from the outset, performed the functions of an assistant to the Chairman and by discharing daily a number of technical and professional duties, has relieved the Chairman of a substantial burden of work.

CHAPTER II

RADIOTELEGRAPHY

Adjustments considered necessary to Annex 6 to the Final Acts of the E.A.R.C. (See Document No. DT 470)

Sub-Working Group 5B3 recommends to Working Group 5B that, in the bands allocated exclusively to radiotelegraph coast stations between 4,000 kc/s and 27,500 kc/s, each additional assignment or change to basic characteristics of recorded assignments, notified between 3 December, 1951, and the date of entry into force of the new Radio Regulations, should be the subject of a complete technical examination by the I.F.R.B., under the appropriate paragraphs of Section III of Article 33 of the E.A.R.C. Agreement. This recommendation in no way prejudges the notification and registration procedure that will be applicable after the entry into force of the new Regulations, nor the decision to be taken by the Conference on the transfer procedure of assignments to the new Register or on the dates to be entered in the new Master Register.

- 2. However, Sub-Working Group 5B3 considers that it should be suggested to Working Group 5A that for these entries the result of the examination should be taken into consideration in the procedure of transfer of assignments in the new Master Register.
- 3. The Master International Frequency Register for the exclusive coast radiotelegraph bands shall be made up of all listings contained in the basic E.A.R.C. Coastal Telegraph Plan bearing 2c dates, plus those additions and amendments recorded in the Master Record since 3 December, 1951.

Further recommendations

4. Sub-Working Group 5B3 considered proposals for amending and including in the new Regulations the provisions of No. 75 of the E.A.R.C. Agreement. It was agreed to recommend, subject to agreement by Committee 7, that the following text should be included in the new Regulations:

"In order to reduce adjacent channel interference, coast radiotelegraph stations operating in the maritime mobile exclusive bands between 4,000 kc/s and 27,500 kc/s shall not use class A2, F2 or P2 emissions."

5. Sub-Working Group 5B3 also considered proposals for including in the new Regulations the provisions of No. 70 of the E.A.R.C. Agreement, the purpose of which is to limit the power of radiotelegraph coast stations to the following maximum values:

<u>Band</u>	Power limit
4 Mc/s	5 kW
6 Mc/s	5 kW
8 Mc/s	lo kW
12 Mc/s	15 k₩
16 Mc/s	15 kW
22 Mc/s	15 kW

Sub-Working Group 5B3 agreed that such provisions should be included in the new Regulations, subject to agreement by Committee 7.

6. (Number 78 of the E.A.R.C. Agreement) (Proposals No. 5109 - Document No. 62 5405 - Document No. 154)

CHAPTER III

RADI OTELEPHONE

Adjustments considered necessary to Annex 5 to the Final Acts of the E.A.R.C.

1. General considerations:

- In considering the requirements which were submitted and which refer to present needs, the Sub-Working Group took the view that it was in the general interest of operators of the Maritime Mobile Service for the numerous coast stations which are at present using out-of-band frequencies especially in those bands exclusively allocated to ship stations (in this connection, see Document No. 334), to operate henceforward in appropriate bands. It also considered that this transfer should be carried out in an orderly manner, in order that the coast radiotelephone stations of all Administrations might fit into the framework of a plan to enable them to operate without mutual harmful interference.
- 1.2 When it came to examine the E.A.R.C. Plan, the Working Group noted that while the addition of allotments to some areas might be considered, it was impossible to allow allotments of any considerable power to certain other areas without serious disturbance to the operation of coast stations of other countries, particularly in Europe. After serious consideration of the problem, the Group suggests the following solution.

2. <u>Solution suggested</u>:

- 2.1 The Group believed that an additional channel could be set up in each of the frequency bands, if the following figures for the spacing between assigned frequencies were adopted:
- 4 Mc/s band: 6.4 kc/s instead of 6.9 kc/s (11 channels instead of 10)
- 8 Mc/s band: 6.4 kc/s instead of 7.1 kc/s (11 channels instead of 10)
- 12 Mc/s, 16 Mc/s and 22 Mc/s band: 7 kc/s instead of 7.7 kc/s (10 channels instead of 9).

This narrowing of the channels may result in a reduction in quality, but this seems permissible in view of the progress achieved in the design of receivers since the Plan was drawn up. In some cases, however, the audio frequency band transmitted may have to be slightly-reduced - from 3,000 c/s to 2,700 c/s, for example.

2.2 The additional channel could appropriately be fitted in the lower part of each band. In this way, all frequencies in the present Allotment Plan would be increased, thanks to which many of the crystals at present in use could be used again after a slight readjustment.

- 2.3 The Working Group considered that the allotments to appear in the new channel under Section I of the Plan should be determined according to the following principles:
 - (1) firstly, the additional allotments which were requested and which relate to present needs of stations operating outside the appropriate bands;
 - (2) secondly, depending on technical possibilities, some of the allotments appearing in Section II of the E.A.R.C. Plan and notified to the I.F.R.B. by 16 August, 1959, as having been brought into use. These allotments would be considered in the chronological order of the dates appearing in Column 2c opposite the assignments concerned (these assignments bear the date 4 December, 1951, in Column 2b and a date in Column 2c);
 - (3) thirdly, depending on technical possibilities, allotments corresponding to some of the additional assignments notified to the Board since 3 December 1951, and considered in the chronological order of the dates in Column 2b, provided that the notifying Administration concerned did not have allotments under Section I of the Plan. (These assignments bear dates in Columns 2b and 2c. The date in Column 2b is the date of notification and is always subsequent to 4 December, 1951);
 - (4) fourthly, depending on technical possibilities, certain of the allotments in Section II which had not been notified to the I.F.R.B. by 16 August, 1959, as having been brought into use.
- 2.4 With regard to the other channels, the Allotment Plan would remain as adopted by the E.A.R.C. except when it was possible to include therein certain additional allotments provided for in paragraph 2.3(1), but which had not found a place in the new channel.
- 2.5 The Sub-Working Group thought that the procedure outlined in paragraphs 2.3 and 2.4 above would have the advantage of clearing the existing channels from some of the additional assignments which have been notified since 3 December, 1951, and would consequently compensate, by an improvement in sharing conditions, for the reduction in quality which may be caused by the narrowing of the channels.
- 2.6 The Sub-Working Group applied the principles specified in paragraphs 2.3 and 2.4 in drawing up suggestions for adjustments to the Plan, which it submits for the consideration of Working Group 5B. (See Annex 2).

- 2.7 If the principle of creating a new channel in the coast radio-telephone station bands is adopted, it would also be advisable to create a new channel in the ship bands so that it will still be possible for frequencies to be used in pairs for transmission and reception. The Table in Appendix 12 of the Regulations, amended in accordance with Annex 7 to the Final Acts of the E.A.R.C., would consequently have to be modified (See Annex 1).
- 2.8 The Sub-Working Group considers that it would be possible to apply the principle of channel-compression on the date of entry into force of the new Regulations, or at the latest within a period of three months following that date. The assignments entered in the Master Radio Frequency Record in the former channels would retain the same dates under 2a, 2b or 2c in the new narrowed channels.
- 2.9 The Sub-Working Group was of the view that additional needs arising in the future could be dealt with, when the time comes, by the procedure specified in No. 68 of the E.A.R.C. Agreement, as proposed by the United Kingdom in Document No. 30.
- 2.10 The Sub-Working Group considers on the other hand that the Plan, which it recommends to include in an Appendix to the Regulations, could in any case be revised without awaiting the next meeting of the Administrative Radio Conference. For instance, such a revision could be necessary in order to take account of the progress of single-sideband radiotelephony. It is of the opinion that the new Regulations should provide for a procedure making it possible to call a Conference for this purpose.

3. Further recommendations by the Sub-Working Group

Sub-Working Group 5B3 thought that it might be appropriate to submit the following recommendations concerning the frequency bands allotted exclusively to the coast radiotelephone stations. It should be noted that some of these recommendations are connected with those in paragraph 2 above.

4. Establishment of the new Master International Radio Frequency
Register with respect to the coast radiotelephone exclusive
bands

The following would be transferred to the new Master International Radio Frequency Register:

- 4.1 the allotments of the new Plan, without date in Columns 2a, 2b or 2c;
- 4.2 the assignments in conformity with the allotments in Section I of the new Plan; they would bear the date 3 December 1951, in Column 2a.

- 4.3 the assignments corresponding to the allotments in Section II of the new Plan; they would bear the date 4 December, 1951, in Column 2b;
- 4.4 the assignments not in conformity with the Plan, notified to the I.F.R.B. between 3 December, 1951, and the date of entry into force of the new Regulations, would be considered as transferred to the channels of the new Plan if they had been notified on the central channel frequencies of the E.A.R.C. Plan. If that were not the case, the Administrations concerned would have a period of three months to readjust them so that they retain the same relative positions in relation to the channels in the new Plan as they had in relation to the channels in the E.A.R.C. Plan;
- all assignments mentioned in paragraph 4.4 above would be submitted to a complete technical examination by the I.F.R.B. in accordance with Section III of Article 33 of the E.A.R.C. Agreement, with respect to the allotments appearing in Sections I and II of the Plan (that is to say, with respect to the frequency assignments brought into use or liable to be brought into use in the future in accordance with the allotments in the Plan), as well as with respect to frequency assignments in conformity with 327 and 328 which were previously entered in the Master Radio Frequency Record and which have not, in fact, caused harmful interference. The same would be done for the changes of basic characteristics of assignments in conformity with the Plan.
- 4.5.1 Each assignment, when transferred, would retain in Column 2b of the new Master Register the date which it had in the Master Radio Frequency Record, and the finding would be indicated by a symbol in the new Register.
- 4.5.2 The date to be entered in Column 2c of the new Register would be determined according to recommendations of Group 5A.
- 5. Future procedure for notifying and recording frequency assignments in the coast radiotelephone exclusive bands
 - 5.1 The procedure of the new Article 11 would be applicable (see Document No. DT 649), taking into account the following points:
 - 5.2 In addition to the examination provided for in 328a, each notice concerning a frequency assignment to a coast radiotelephone station should be examined from the point of view of its conformity with the Allotment Plan included in an Appendix to the new Regulations.
 - 5.3 Further action would be as follows:
 - 5.3.1 If the assignment notified is in full conformity with an allotment in the Plan (that is, if the frequency, the allotment area, the power and any appropriate limitations are those provided for in the Plan), the notice would not be submitted to the technical examination provided for

in 329 and the assignment would be entered in the Master Register with the date 3 December, 1951, in Column 2a or the date 4 December, 1951, in Column 2b, depending on whether it was an allotment in Section I or Section II of the Plan.

- 5.3.2 If the assignment notified is not in conformity with the Allotment Plan, the technical examination provided for in 329 would be carried out with respect to the allotments in Sections I and II of the Plan (that is, from the point of view of the probability of harmful interference to the detriment of a service operated by a station which has a frequency assignment in full conformity with the allotments in Section I or II of the Plan which is already entered in the Master International Radio Frequency Register, or which may be so entered in the future), as well as with respect to frequency assignments in conformity with 328a which were previously recorded in the Master Register and which have not, in fact, caused harmful interference.
- 5.3.3 The procedure to be applied according to the finding is the procedure applicable in similar circumstances to any other notice (See 334 to 338a of the draft Article 11, Document No. DT 649). Should the assignment be entered in the Register, it would be given the appropriate date in Column 2b and the finding shall be indicated by a symbol.
- 5.3.4 If a notice relates to a change of an assignment to a coast radiotelephone station, and the change merely consists in changing the type of transmission without increasing the width of the frequency band assigned, the date of this change would be entered in Column 2c without altering the date entered in Column 2a or Column 2b (U.S.A., Document No. 140, 3905 bis).
- 5.3.5 If the finding is unfavourable with respect to 328a, the procedure provided for in the new Article 11 would be applied (see 339a to 339i). Should the assignment be entered in the Register, it would be given the appropriate date in Column 2b, and an indication of the finding would be entered in the Remarks Column.
- 5.3.6 The date to be entered in Column 2c shall be the date determined according to the recommendations of Group 5 h.
- 5.3.7 It should be made clear that no regulation allowing for the transfer of a date entered in Column 2b to Column 2a can be applied. The re-examination of an unfavourable finding with respect to 320 could in fact only lead to an alteration of the symbol indicating the finding.
- 5.3.8 If the principles in paragraph 5 were accepted, a special drafting Group could be entrusted to prepare on the basis of these principles, draft texts for inclusion in Sections III and IV of the new Article 11. It would also be appropriate to include, in Section IV of Article 9, an introductory sentence to the Appendix containing the Allotment Plan.

ANNEXE 1

ANNEX 1

ANEXO 1

PROPOSITION D'AJUSTEMENT AU TABLEAU DE L'APPENDICE 12 AU RECLEMENT DES RADIOCOMMUNICATIONS SUGGESTION FOR ADJUSTMENT TO THE TABLE IN APPENDIX 12 TO THE RADIO REGULATIONS PROPOSICIÓN DE AJUSTE AL CUADRO DEL APÉNDICE 12 AL REGLAMENTO DE RADIOCOMUNICACIONES

Bande-Band-Banda	4000 kg	:/s	8000	kc/s	12000 k	c/s	16000	kc/s	22000	kc/s
Série Nº Series No. Serie N.º	Côtières Coast Costeras	Navires Ship Barco	Cêtières Coast Costeras	Navires Ship Barco	Côtières Coast Costeras	Navires Ship Barco	Côtières Coast Costeras	Navires Ship Barco	Côtières Coast Costeras	Navires Ship Barco
1.	43.71,0	4066,0	8748,0	\$198,0	13133,5	12333,5	1.7293,5	16463,5	22653,5	22003,5
2	4377,4	4072,4	8754,4	8204,4	13140,5	12340,5	17300,5	16470,5	22660,5	22010,5
3	4383,8	4078,8	8760,8	8211,8	13147,5	12347,5	17307,5	16477,5	22667,5	22017,5
4	4390,2	4085,2	8767,2	8218,2	13154,5	12354,5	17314,5	16484,5	22674,5	22024,5
5	4396,6	4091,6	8773,6	8224,6	13161,5	12361,5	17321,5	16491,5	22681,5	22031,5
6	4403,0	4098,0	8780,0	8231,0	13168,5	12368,5	17328,5	16498,5	22688,5	22038,5
7	4409,4	4104,4	8786,4	8237,4	13175,5	12375,5	17335,5	165 05,5	22695,5	22045,5
8	4415,8	4110,8	8792,8	8243,8	13182,5	12382,5	17342,5	16512,5	22702,5	22052,5
9.	4422,2	4117,2	8799,2	8250,2	13189,5	12389,5	17349,5	16519,5	22709,5	22059,5
10	4428,6	4123,6	8805,6	8255,6	13196,5	12396,5	17356,5	16526,5	22716,5	22066,5
11	4435,0	4130,0	8812,0	8262,0						

ANNEX 2

ANEXO 2

PROPOSITION D'AJUSTEMENTS AU PLAN MARITIME RADIOTELEPHONIQUE (Annexe 5 aux Actes finals de la C.A.E.R.)

SUGGESTION FOR ADJUSTMENTS TO THE MARITIME RADIOTELEPHONE PLAN
(Annex 5 to the Final Acts of the E.A.R.C.)

PROPOSICIÓN DE AJUSTES AL PLAN MARÍTIMO RADIOTELEFÓNICO
(Anexo 5 a las Actas finales de la C.A.E.R.)

Les adjonctions ou modifications suggérées sont soulignées Additions or amendments suggested are underlined Las adiciones o modificaciones sugeridas están subrayadas

	Fréquence Frequency Frecu e ncia kc/s	Zone d'allotissement Area of Allotment Zona de adj∉dicación	Puissance maximum Maximum power Potencia máxima kW	Station(s) côtière(s) caractéristique(s) de la zone Significant soast station(s) in the area Estación o estaciones costera(s) caractéris— tica(s) de la zona		Allotissement(s) du Plan f.A.E.R. le(s) plus affecté(s) Most affected allotment(s) in the E.A.R.C. Plan Aejudicación o adjudicacio- nes del Plan C.A.E.R. más afectada(s)	Observations Remarks Observaciones
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bande des 4 Mc/s	4371.0 (nouvelle voie)	URSS Asie méridionale USSR Southern Asia URSS Asia meridional	5		l° fre.		
4 Mc/s band Banda de 4 Mc/s	(new channel) (nuevo canal)	URSS Asie septentrionale USSR Northern Asia URSS Asia septentrional	15		l° fre.		
		URSS Europe USSR Europe URSS Europa	15		l° fre.		

(1)	(2)	(3)	(4)	(5)	(6)	(7)
437 <u>1.0</u> (<u>nouvelle</u> voie) (new channel)	URSS Extrême—Orient USSR Far East URSS Lejano oriente	15		l° fre.		
(nuevo canal)	URSS Nord-Ouest USSR North West URSS Noroeste	15		l° fre.		
	Ukraine Ukraine Ucrania	15		l° fre.		
	Union de l'Afrique du Sud Union of South Africa Unión Sudafricana	2				
	Uruguay Uruguay Uruguay	5				
,	Nouvelle-Guinée néer- landaise Netherlands New Guinea Nueva Guinea neerlandesa	1				
	République de Panama Panama Republic República de Panama	2,5				
	Malaya Malaya Malaya	0,5				
	Singapore Singapore Singapore	0,5				

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Page 12

Nyasaland Nyas			<u> </u>		Page 12		
Nyasaland Nyas	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(muevo canal) Samoa occidental Western Samoa Samoa occidental Iles de Cook ou Hervey Cook or Hervey Islands Islas de Cook o Hervey Spmalie Adm. italienne Somaliland Italiana Nigeria Nigeria Nigeria Nigeria Nigeria Vinited States West Estados Unidos de América Oeste Géorgie du Sud South Georgia Georgia del Sur O,25 0,1 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03 0,03	(nouvelle voie)	Nyasaland	0,03				
Cook or Hervey Islands Islas de Cook o Hervey Spmalie Adm. italienne Somaliland Italian Adm. Somalia Adm. Italiana Nigeria Nigeria Nigeria Nigeria Nigeria Vigeria Nigeria Nigeria O,3 Etats-Unis d'Amérique Ouest United States West Estados Unidos de América Oeste Géorgie du Sud South Georgia Georgia del Sur		Western Samoa	0,25				
Somaliand Italian Adm. Somalia Adm. Italiana Nigeria Nigeria Nigeria Nigeria 4377,4 (ex 4372,4) Etats-Unis d'Amérique Ouest United States West Estados Unidos de América Oeste Géorgie du Sud South Georgia Georgia del Sur		Cook or Hervey Islands	0,1				
Nigeria Nigeri		Somaliland Italian Adm.	0,03				
(ex 4372,4) United States West Estados Unidos de América Oeste Géorgie du Sud South Georgia Georgia del Sur	·	Nigeria	0,3				
South Georgia Georgia del Sur	4377,4 (ex 4372,4)	United States West Estados Unidos de América	20				
		South Georgia	0,3				
Territoire de la 0,25 Nouvelle-Guinée Territory of New Guinea Territorio de Nueva Guinea		Territory of New Guinea	0,25				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
$(ex \frac{4377,4}{4372,4})$	Pakistan Pakistan Pakistán	3,5				
	Royaume-Uni United Kingdom Reino Unido	20				
	URSS Asie méridionale USSR Southern Asia URSS Asia meridional (Antenne directive, Azimut 80°) (Directional antenna azimuth 80°) (Antena directiva acimut 80°)	3	Baku	2° fre.		
4383,8 (ex 4379,3)	Afrique du Sud South Africa Unión Sudafricana	3				
	Brésil Brazil Brasil	3				
	Ethiopie Ethiopia Etiopía	2				
	Fidji Fiji Fidji	0,4				

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	4383,8 (ex 4379,3)	Inde Sud India South India Sur	5				l) Voir Annexe 5 aux Act es finals de la CAER (p. 3)
		Macau Macau Macau	0,15				1) See Annex 5 to the Final Acts of the EARC (p. 3)
-		Mexique Mexico México	2,5				1) Véase el Anexo 5 a las Actas finales
į		Norvège 1) Norway 1) Noruega 1)	5				de la CAER (p.3)
		Suède 1) Sweden 1) Suecia 1)	5				
		Timor portugais Portuguese Timor Timor portugués	0,5				
		URSS Extrême-Orient USSR Far East URSS Lejano oriente	<u>10</u>	Vladivostok 10 kW Petropavlovsk 5 kW	2° fre.		
	<u>4390,2</u> (ex 4386,2)						Sans modifi- cation No change
				·			Sin modifi- cación
		1	}	· ·			

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>4396,6</u> (ex 4386,2)						Sans modifica- tion
						No change
					,	Sin modifi- cación
4403 (ex 4393,1)						Sans modifica- tion
						No change
						Sin modifi- cación
4409,4 (ex 4406,9)	Allemagne Germany Alemania	6				
	Canaries Canaries Canarias	5			i	
	Chine Centre China Central China Central	3				
	Espagne Spain España	5				

(1)	(3)	(3)	(4)	(5)	(6)	(7)
4409,4 (ex 4406,9)	Etats-Unis d'Amérique Est United States East Estados Unidos de América Este	20		3° fre.		
	Iles Salomon Solomon Islands Islas Salomón	0,25				
	Kenya Kenya Kenya	0,5				
	Maroc espagnol Spanish Morocco Marruecos español	0,3				
	Pologne Poland Polonia	5				
	URSS Asie septentrionale USSR Northern Asia URSS Asia septentrional	(X) <u>5</u>	Dikson Ostrov	2º fre.		
	URSS Nord-Ouest USSR North-West URSS Noroeste	(½) 5 (HJ) 2 (HN)	Mourmensk	2º fre.		
4415,8 (ex 4413,8)	Angola 1) Angola 1) Angola 1)	. 1				1) Voir Annexe 5 aux Actes finals de la CAER (p.6) 1) See Annex 5 to the Final Acts of the EARC (p.6) 1) Véase el Anexo 5 a las Actas finales de la CAER (p.6)

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
4 <u>415,8</u> (ex 4413,8)	Antilles néerlandaises l) Netherlands Antilles l) Antillas neerlandesas l)	1				1) Voir Annexe 5 aux Actes finals de la CAER. (p.6)
	Canada Est et Centre Canada East and Central Canadá Este y Centro	12				1) See Annex 5 to the Final Acts of the EARC (p.6)
	Cap Vert 1) Cape Verde 1) Cabo Verde 1)	0,1				1) Véase el Anexo 5 a las Actas finales de la CAER (p.6)
	Guinée portugaise 1) Portuguese Guinea 1) Guinea portuguesa 1)	0,1				
	Indes portugaises Portuguese Indies Indias portuguesas	0,5				
	Indonésie Indonesia Indonesia	0 , 5				·
	Mozambique Mozambique Mozambique	0,5				
	Nouvelle-Zélande New Zealand Nueva Zelandia	1				
	Pays-Bas 1) Netherlands 1) Paíscs Bajos 1)	10				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
(ex 4413,8)	Portugal 1) Portugal 1) Portugal 1)	5				1) Voir Annexe 5 aux Actes finals de la CAER (p.6)
	S. Tomé et Principe 1) S. Tomé and Principe 1) S. Tomé y Principe 1)	0,5	·			l) See Annex 5 to the Final Acts of the EARC (p.6)
	Surinam 1) Surinam 1) Surinam 1)	0,35				l) Véase el Anexo 5 a las Actas finales de la CAER (p.6)
4	URSS Europe USSR Europe URSS Europa	(½) <u>2</u>	Novorossiisk 2 kW Riga 2 kW	2º fre.		23 3323 (243)
	Yougoslavie Yugoslavia Yugoeslavia	1				<u>.</u>
4422,2						Sans modification
(ex 4420,7)						No c hange Sin modificación
4428,6 (ex 4427,6)						Sans modification No change Sin modificación
4435 (ex 4434,5)	Argentine Nord Argentine North Argentina Norte	20				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
4435 (ex 4434,5)	Australie Ouest Australia West Australia Oeste	0,25				
	Belgique Belgium Bélgica	3				
	Bulgarie Bulgaria Bulgaria	0,5				
	Congo belge Belgian Congo Congo Belga	1				
	Etats-Unis d'Amérique Est United States East Estados Unidos de América	20		2° fre.		
	Hongkong Hongkong Hongkong	3				
	Iran Iran Irán	1				

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(1)	(2)	(3)	-	(4)	(5)		(6)	(7)
<u>4435</u> Ukraine (ex 4434,5)		(½) <u>5</u>	O dessa		lº fre.	Belgique Bulgarie Tran	0,5 kW	saire entre l'URSS
						Belgium Bulgaria Iran	3 kW 0,5 kW 1 kW	Coordination necessary between the USSR and the countries mentioned in Column 6.
				ļ		Bélgica Bulgaria Irán	3 kW 0,5 kW 1 kW	

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	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bande des 8 Mc/s	8748 (<u>nouvelle</u> <u>voie</u>) (new channel	URSS Europe USSR Europe URSS Europa	15		l° fre.		
8 Mc/s (Band Banda	(nuevo canal	URSS Extrême-Orient USSR Far East URSS Lejano oriente	15		l° fre.		
de 8 Mc/s		URSS Nord-Ouest USSR North West URSS Noroeste	15		l° fre.		
		Ukraine Ukraine Ucrania	15		l° fre.		
		Afrique du Sud Sou t h Africa Unión Sudafri c ana	2	·			
		Uruguay Uruguay Uruguay	1				
		Republique de Panama Panama Republic República de Panamá	2,5				
		Malaya Malaya Malaya	0,5	`			
		Singapore Singapore Singapore	0,5				

	•			rage 22		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
8748 (nouvelle voie) (new channel)	Iles de Cook ou Hervey Cook or Hervey Islands Islas de Cook o Hervey	0,1				
(nuevo canal)	Samoa occidental Western Samoa Samoa occidental	0,25				
	Sierma Leone Sierra Leone Sierra Leona	0,5				
	Golfe persique Persian Gulf Golfo pérsico	0,5 (HJ)				
·	Groenland Greenland Groenlandia	0,05				
(ex 8747.6)						Sans modification No change Sin modificación
8760.8 (ex 8754.7)	Union de l'Afrique du Sud Union of South Africa Union Sudafricana	3				
	Australie Ouest Australia West Australia Oeste	0,13				
	Chili Sud Chile South Chile Sur	0,1				

(1)	(2)	(3)	(4)	(5)	(6)	(7)
8760 <u>.</u> 8 (ex 8754.7)	Indochine Indochina Indochina	0,2				l) Voir Annexe 5 aux Actes finals de la
	Nicaragua Nicaragua Nicaragua	0,1				CAER (p.10) 1) See Annex 5 to the Final Acts of the
	Norvège 1) Norway 1) Noruega 1)	5				FARC (p.10) 1) Véase el Anexo 5 a
	République Dominicaine Dominican Republic Republica Dominicana	0,15				las Actas finales de la CAER (p.10)
	Suède 1) Sweden 1) Suecia 1)	5				
	URSS Asie méridionale USSR Southern Asia URSS Asia meridional (Antenne directive, azimut 80°) (Directional antenna azimuth 80°) (Antena directiva acimut 80°)	3.	Baku	2º fre.		
8767.2 (ex 8761.8)						Sans modification No change Sin modification

y				2 460 ~		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>8773.6</u> (ex 8768.9)						Sans modification No change Sin modificación
(ex 8776)						Sans modification No change Sin modificación
<u>6786.4</u> (ex 8783.1)		6				
	Antilles néerlandaises Netherlands Antilles Antillas neerlandesas	1 (HJ)				
	Argentine Sud Argentina South Argentina Sur	1		2° fre.		
	Bulgarie Bulgaria Bulgaria	0,5				
	Canada Est et Centre Canada East and Central Canada Este y Centro	12				
	Canaries Canaries Canarias	5				
i		l .	1	I	1	I

				1 460 27		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
8786.4 (ex 8783.1	Congo Belge Belgian Congo Congo Belga	1				l) Voir Annexe 5 aux Actes finals de la CAER (p.14)
	Espagne Spain España	5				1) See Annex 5 to the Final Acts of the EARC (p.14)
	Inde Nord 1) India North 1) India Norte 1)	5				1) Véase el Anexo 5 a las Actas finales
	Maroc espagnol Spanish Morocco Marruecos espanol	0,3				de la CAER (p.14)
	Nouvelle-Zélande l) New Zealand l) Nueva Zelandia l)	5	·			
	Surinam Surinam Surinam	0,35 (HJ)				· ·
	URSS Europe USSR Europe URSS Europa	(½) <u>2</u>	Novorossiisk 2 kW Klaipeda 2 kW	2e fre.		

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>8792.8</u> (ex 8790.2)	Angola 1) Angola 1) Angola 1)	1				l) Voir Annexe 5 aux Actes finals de la
	Cap Vert 1) Cape Verde 1) Cabo Verde 1)	0,1				CAER (p.15) 1) See Annex 5 to the Final Acts of the
	Chine Centre China Central China Central	3				EARC (p.15) 1) Véase el Anexo 5 a las Actas
	Gilbert et Ellice Gilbert and Ellice Gilbert y Ellice	0,25				finales de la CAER (p.15)
	Guinée portugaise 1) Portuguese Guinea 1) Guinea portuguesa 1)	0,1				·
	Indes portugaises Portuguese Indies Indias portuguesas	0,5				
	Mexique Mexico México	2,5				
	Pays-Bas 1) Netherlands 1) Paises Bajos 1)	10				
	Philippines Philippines Filipinas	1				

(1)	(2)	(3)	(4)	(5)	(6)	(7)
8792.8 (ex 8790.2)	Pologne Poland Polonia	5				1) Voir Annexe 5 aux Actes fi- nals de la CAER (p.15)
	Portugal 1) Portugal 1) Portugal 1)	. 5				1) See Annex 5 to the Final Acts of the
	S. Tomé et Principe 1) S. Tomé and Principe 1) S. Tomé y Principe 1)	0,5				EARC (p.15) 1) Véase el Anexo 5 a las Actas finals de la CAER (p.15)
	URSS Nord-Ouest USSR North West URSS Noroeste	(1) <u>5</u>	Mourmansk 5 kW Tallin 3 kW	2° fre.	Pays-Bas 10 kW Pologne 5 kW Portugal 5 kW	Coordination né- cessaire entre l'URSS et les pays mentionnés dans la colonne 6
					Netherlands 10 kW Poland 5 kW Portugal 5 kW	Coordination necessary between the USSR and the countries mention- ed in Column 6
					Paises Bajos 10 kW Polonia 5 kW Portugal 5 kW	Coordinación necesaria entre la URSS y los países mencionados en la columna 6
	Uruguay Uruguay Uruguay	5				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
8799.2 (ex 8797.3)	Cbili Nord Chile North Chile Norte	0,2				1) Voir Annexe 5 aux Actes fi- nals de la CAER (p.16)
	Colombie Colombia Colombia	2				1) See Annex 5 to the Final Acts of the
	Danemark 1) Denmark 1) Dinamarca 1)	5				EARC (p. 16) 1) Véase el Anexo 5 a las
	Etats-Unis d'Amérique Nord et Centre United States North and Central Estados Unidos de América Norte y Centro	1				Actas finales de la CAER (p.16)
	France France Francia	20		2° fre.		
	Indonésie Indonesia Indonesia	3				
	Italie Italy Italia	10		2º fre.		
	Mozambique Mozambique Mozambique	0,5				

			Page 29					
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
8799.2 (ex 8797.3)	Nigéria Nigeria Nigeria	0,3						
	Seychelles Seychelles Seychelles	0,5						
	URSS Asie moridionale USSR Southern Asia URRS Asia meridional (Antenne directive azimut 80°) (Directional antenna azimuth 80°) (Antena directiva acimut 80°)	(Ø,\$) <u>3</u>	Baku	l° fre.				
	Ukraine Ukraine Ucrania	5	Odessa	2º fre.	Danemark 5 kW (France 20 kW) Italie 10 kW	Coordination néces- saire entre l'URSS et les pays men- tionnés dans la colonne 6. (La France a donné son accord).		
						Coordination necessary between the USSR and the countries mention- ed in Column 6. (France agreed) Coordinación nece- saria entre la URRS y los países mencionados en la		
						columna 6. (Francia dió su aprobación)		

(1)	(2)	(3)	(4)	(5)	(6)	(7)
8799.2 (ex 8797.3)	Vénézuéla Venezuela Venezuela	2				1) Voir Annexe 5 aux Actes finals de la CAER (p.17)
<u>8805.6</u> (ex 8 <u>\$</u> 04.4)	Australie Est Australia East Australia Este	1	•			1) See Annex 5 to the Final Acts of the MARC (p.17)
	Belgique 1) Belgium 1) Bélgica 1)	3				l) Véase el Anexo 5 a las Actas finales de
	Bermudes Bermuda Bermudas	3				la CAER (p.17)
	Brésil Sud du 21° Sud Brazil Southof 21° South Brasil Sur de 21° Sur	3				
	Hongkong Hongkong Hongkong	1				
	Iran Iran Iran	1				
	Ken y a Kenya Kenya	0,5				
	Royaume-Uni United Kingdom Reino Unido	15		2° fre.		

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>8805.6</u> (ex 8804.4)	URSS Extrême-Orient USSR Far East URRS Lejano oriente	<u>15</u>	Vladivostok Providenia B.	2º fre.	(Hongkong 1 kW) (Hongkong 1 kW) (Hongkong 1 kW)	Coordination avec le Royaume- Uni pour éviter les brouillages mutuels. Coordination with the United Kingdom to avoid mutual interference. Coordinación con el Reino Unido para evitar las interferencias perjudiciales mutuas.
	Yougoslavie Yugoslavia Yugoeslavia	2				
8812.0 (ex 8811.5)	Argentine Nord Argentine North Argentina Norte	20				
	Chine Est China East China Este	5				
	Côte de l'Or Gold Coast Costa de Oro	3				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
8812.0 (ex 8811.5)	Etats-Unis d'Amérique United States Estados Unidos de América	20		2° fre•		
	Fidji Fiji Pidji	0,5				
	Gambie Gambia Gambia	0,7				
	Grèce Grecce Grecia	3,5				
	Israël Israel Israel	3,5				
	Pakistan Pakistan Pakistan	3,5				
	Turquie Turkey Turquia	3,5				
	URSS Asie septentrionale USSR Northern Asia URRS Asia septentrional	10		2º fre.		

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bande des 13 Mc/s	13133,5 (nouvelle voie) (new channel)	URSS Europe USSR Europe URSS Europa	15	,	l° fre.		
13 Mc/s Band Banda de	(nuevo canal)	URSS Nord-Ouest USSR North West URSS Noroeste	15		lº fre.		
13 Mc/s		URSS Extrême-Orient USSR Far East URRS Lejano oriente	15		l° fre.		
		Ukraine Ukraine Ucrania	15		l° fre∙		
		Argentine (13142.1 kc/s) Argentine (13142.1 kc/s) Argentina (13142.1 kc/s)	0,5				
		Nouvelle-Guinée néerlandaise Netherlands New Guinea Nueva Guinea neerlandesa	1				·
		République de Panama Panama Republic República de Panamá	2,5				
		Nigéria Nigeria Nigeria	0,5				
		Groënland Greenland Groelandia	0,05	·			

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>13140,5</u> (ex 13134,4)						Sans modification No change Sin modificación
(ex 13147,5	Australie Est Australia East Australia Este	1				1) Voir Annexe 5 aux Actes finals de la CAER (p.18)
	Colombie Colombia Colombia	2 , 5				1) See Annex 5 to the Final Acts of the EARC (p.18)
	Norvège 1) Norway 1) Noruega 1)	5				1) Véase el Anexo 5 a las Actas fi- nales de la CAER (p.18)
	Pakistan Pakistan Pakistán	3				
	Suède 1) Sweden 1) Suecia 1)	5				
	URSS Extrême-Orient USSR Far East URSS Lejano oriente		Vladivostok 15 kW Petropavlovsk 5 kW	2º fre.		
	Vénézuéla Venezuela Venezuela	2,5				
		·				

(1)	(2)	(3)		(4)	(5)	(6)	(7)
13154,5 (ex 13149,8)							Sans modification No change Sin modificación
13161,5 (ex 13157,5)	Chine Est China East China Este	5		·			
	Etats-Unis d'Amérique Est United States East Estados Unidos de América Este	20					
	Iran Iran Irán	1					
	URSS Europe USSR Europe URSS Europa	<u>10</u>	Moskva		2º fre.) (Etats-Unis E 20 kW)) Iran 1 kW	
	Ukraine Ukraine Ucrania	5	Odessa		2º fre.)))	colonne 6 (Les Etats-Unis ont donné leur accord)
						(United 20 kW) Converse Conver	Coordination necessary between the USSR and the countries mentioned in Column 6 (The United States agreed)
)(Estados 20 kW) Unidos E)) Irán 1 kW	Coordinación nece- saria entre la URSS y los países men- cionados en la Coló (Los EE.UV. dieron su aprobación)

(1)	(2)	(3)		(4)	(5)	(6)	(7)
13168,5 (ex 13165,2)	Australie Ouest Australia West Australia Oesto	0,13					1) Voir Annexe 5 aux Actes finals de la CAER (p.20)
	Brésil Brazil Brasil	3				·	1) See Annex 5 to the Final Acts of the EARC (p.20)
	Cuba Cuba Cuba	3				·	1) Véase el Anexo 5 a las Actas fi- nales de la CAER (p.20)
	Finlande Finland Finlandia	3					
	Islande 1) Iceland 1) Islandia 1)	1					
	Italie Italy Italia	10					
	Philippines Philippines Filipinas	0,4					
	URSS Asie méridionale USSR Southern Asia URSS Asia meridional (Antenne directive azimut 80°) (Directional antenna azimuth 80°) (Antena directiva acimut 80°)	<u>3</u>	Baku				

(1)	(2)	(3)	(4)	(5)	(6)	(7)
13175,5 (ex 13172,9)						Sans modification No change Sin modificación
13182,5 (ex 13180,6)						Sans modification No change Sin modificación
13139,5 (ex 13185,3)						Sans modification No change Sin modificación
13196,5 (ex 13196)	Canaries Canaries Canarias	5				
	Chili Chile Chile	0,1				
	Egypte Egipto	3				
	Espagne Spain España	5				
	Etats-Unis d'Amérique Est United States East Estados Unidos de América Este	20		2º fre		

(1)	(2)	(3)	(4)	(5)	(6)	(7)
13196,5 (ex 13196)	Gambie Gambia Gambia	0,7				
	Indonésie Indonesia Indonesia	. 3				
	Maroc espagnol Spanish Morocco Marruecos español	0,3				
	URSS Asie septentrionale USSR Northern Asia URSS Asia septentrional	(½) <u>10</u>	Dikson ostrov	2º fre.		
	URSS Extrême-Orient USSR Far East URSS Lejano oriente	<u>10</u>	Vladivostok 10 kW Petropavlovsk 10 kW	3° fre.	Indonésie 3 kW	Coordination né- cessaire entre l'URSS et le pays mentionné dans la colonne 6.
					Indonesia 3 kW	Coordination necessary between the USSR and the country mentioned in Column 6.
					Indonesia 3 kW	Coordinación ne- cesaria entre la URSS y el país mencionado en la columna 6

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>13196,5</u> (ex 13196)	URSS Nord-Ouest USSR North West URSS Noroeste	5.	Mourmansk	2º fre.	Espagne 5 kW	Coordination néces- saire entre l'URSS et les pays mentio- nés dans la colon- ne 6 (Les Etats- Unis ont donné leur accord)
					Spain 5 kW	Coordination ne- cessary between the USSR and the countries mentio- ned in Column 6 (The United States agreed)
					España 5 kW	Coordinación ne- cesaria entre la URSS y los países mencionados en la columna 6 (Los Estados Unidos dieron su aprobación)
	Uruguay Uruguay Uruguay	5				

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(1) (2)(3) (4) (5)(6) (7)URSS Nord-Ouest 17293.5 15 lo fre. (nouvelle USSR North West voie) URSS Moroeste (new channel) (nuevo canal) URSS Europe 15 lo fre. USSR Europe URSS Europa Ukraine 15 1º fre. Ukraine Ucrania Viêt-Nam 2 Viet-Nam Viet Nam Brésil 3 Brazil Brasil Australie Est 17300,5 1 (ex 17294,4) Australia East Australia Este Royaume-Uni 20 United Kingdom Reino Unido URSS Asie septentrionale 5 Dikson Ostrov 2º fre. (Royaume-Uni 20 kW) Le Royaume-Uni a donné son USSR Northern Asia URSS Asia septentrional accord. (United Kingdom 20 kW) The United |Kingdom agreed El Reino Unido dió su (Reino Unido 20 kW) aprobación.

Bande des 17 Mc/s 17 Mc/s Band Banda de 17 Mc/s

(2)	(3)	(4)	(5)	(6)	(7)
URSS Extrême-Orient USSR Far East URSS Lejano oriente	5	Vladivostok	l° fre.		
					Sans modification No change Sin modificación
					Sans modification No change Sin modificación
Chine Centre China Central China Central	3				
United States East					
Philippines Philippines Filipinas	1				
				•	
	URSS Extrême-Orient USSR Far East URSS Lejano oriente Chine Centre China Central China Central Etats-Unis d'Amérique Est United States East Estados Unidos de América Este Philippines Philippines	URSS Extrême-Orient USSR Far East URSS Lejano oriente Chine Centre China Central China Central Etats-Unis d'Amérique Est Estados Unidos de América Este Philippines Philippines	URSS Extrême-Orient USSR Far East URSS Lejano oriente Chine Centre China Central China Central China Central Etats-Unis d'Amérique Est United States East Estados Unidos de América Este Philippines Philippines	URSS Extrême-Orient USSR Far East URSS Lejano oriente Chine Centre China Central China Central China Central Etats-Unis d'Amérique Est United States East Estados Unidos de América Este Philippines Philippines	URSS Extrême-Orient USSR Far East URSS Lejano oriente Chine Centre China Central China Central China Central Etats-Unis d'Amérique Est Estados Unidos de América Este Philippines Philippines

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>17321,5</u> (ex 17317,5)		<u>10</u> .	Moskva Odessa	3° fre.)(Etats-Unis E 20 kW)) Iran (Sec.II) 1 kW))))	Coordination né- cessaire entre l'URSS et les pays mentionnés dans la colonne 6 (Les Etats- Unis ont donné leur accord)
					(United 20 kW) States E) Iran (Sec.II) 1 kW))	Coordination ne- cessary between the USSR and the countries men- tioned in Column 6 (The United States agreed)
)(Estados 20 kW)) Unidos E)) Irán (Sec.II) 1 kW)))	Coordinación ne- cesaria entre la URSS y los países mencio- nados en la Columna 6 (Los EE.UU. dieron su aprobación)
17328,5 (ex 17325,2)						Sans modifi- cation. No change Sín modifica- ción.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
17335.5 (ex 17332,9)	Angola 1) Angola 1) Angola 1)	1	·			l) Voir Annexe 5 aux Actes finals de la CAER (p.24)
	Antilles néerlandaises 1) Netherlands Antilles 1) Antillas neerlandesas 1)	1				1) See Annex 5 to the Final Acts of the EARC (p.24)
	Canada Est Canada East Canadá Este	12				1) Véase el Anexo 5 a las Actas fina- les de la CAER (p.24)
	Cap Vert 1) Cape Verde 1) Cabo Verde 1)	0,1				
	Chili Chile Chile	0,1				
	Guinée portugaise 1) Portuguese Guinea 1) Guinea portuguesa 1)	0,1				
	Inde Sud India South India Sur	5				
	Macau Macau Macau	0,15				
	Mozambique Mozambique Mozambique	0,5				

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
17335,5 (ex 17332,9)	Pays-Bas 1) Netherlands 1) PaísesBajos 1)	10				l) Voir Annexe 5 aux Actes finals de la CAER (p.24)
	Pologne Poland Polonia	5				1) See Annex 5 to the Final Acts of the EARC (p.24)
	Portugal 1) Portugal 1) Portugal 1)	5				1) Véase el Anexo 5 a las Actas finales de la CAER (p.24)
	S. Tomé et Principe 1) S. Tomé and Principe 1) S. Tomé y Príncipe 1)	0,5				
	Surinam 1) Surinam 1) Surinam 1)	0,35				
	Timor portugais Portuguese Timor Timor portugués	0,5				
	URSS Extrême-Orient USSR Far East URSS Lejano oriente	5	Kholmsk	2° fre.		
17342,5 (ex 17340,6)	Union de l'Afrique du Sud Union of South Africa Unión Sudafricana	3			·	
	Allemagne Germany Alemania	6				
l	1	ŧ	1	1	1	1

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
17342,5 (ex 17340,6)	Dinamarca 1)	5	·			1) Voir Annexe 5 aux Actes finals de la CAER (p.25)
	Etats-Unis d'Amérique Ouest United States West Estados Unidos de América Oeste	20				l) See Annex 5 to the Final Acts of the EARC (p.25)
	France France Francia	20		2º fre.		l) Véase el Anexo 5 a la Actas finales de la CAER
	Italie Italy Italia	10		2º fro.		(p.25).
	Pakistan Pakistan Pakistán	1				
	Pays-Bas Netherlands Países Bajos	10		2º fre.		
	URSS Europe USSR Europe URSS Europa	(X) <u>2</u>	Riga	2º fre.		
17349,5 (ex 17348,3)						Sans modification No change Sin modificación

(1)	. (2)	(3)	(4)	(5)	(6)	(7)
<u>17356,5</u> (ex 17356)	Canaries Canaries Canarias	5				
	Egypte Egypt Egipto	3				
	Espagne Spain España	5				
	Etats-Unis d'Amérique Est United States East Estados Unidos de América Este	20		2º fre.		
	Indonésie Indonesia Indonesia	3	·			
	Maroc Espagnol Spanish Morocco Marruecos español	0,3				
	URSS Asie septentrionale USSR Northern Asia URSS Asia septentrional	<u>15</u>	Tiksi Bukhta	1º fre.		

(1)	(2)	(3)	(4)	(5)	(6)	(7)
17356.5 (ex 17356)	URSS Nord-Ouest USSR North West URSS Noroeste	5	Mourmansk	2º fre.	Espagne 5 kW	Coordination nécessaire entre l'URSS et les pays mentionnés dans la Colon- ne 6 (Les Etats- Unis ont donné leur accord)
					Spain 5 kW (United 20 kW) States E)	Coordination necessary between the USSR and the countries mentioned in Column 6 (The United States agreed)
					España 5 kW (Estados 20 kW) Unidos E)	Coordinación necesaria entre la URSS y los países mencio- nados en la columna 6 (Los Estados Unidos dieron su apro- bación)
	Uruguay Uruguay Uruguay	3				

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*	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bande des 22 Mc/s	(nouvelle	URSS Nord-Ouest USRR North-West URSS Noroeste	. 15		l° fre.		
22 Mc/s Band Banda de	(nuevo canal)	Ukraine Ukraine Ucrania	15		l° fre.		
22 Nc/s		Chili Chile Chile	0.2				
		Viêt-Nam Viet-Nam Viet-Nam	2				
	2266 <u>0.5</u> (ex 22654.4)	Pakistan Pakistan Pakistan	1				
		Royaume-Uni United Kingdom Reino Unido	20				
		URSS Extrême-Orient USSR Far East URSS Lejano oriente	15	Vladivostok			
	22667.5 (ex 22662,1)						Sans modification No change
							Sin modificacion

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(1)	(2)	(3)	(4)	(5)	(6)	(7)
22674.5 (ex 22669,8)						Sans modification No change Sin modificación
22681.5 (ex 22677.5)	Chine Centre China Central China Central Etats-Unis d'Amérique E United States E	3 20				
	Estados Unidos de América E <u>URSS Nord-Ouest</u>	5	Nourmansk	2º fre.)) (Stats-Unis E) 20 kW)	Coordination néces- saire entre l'URSS
	USSR North-West URSS Noroeste URSS Europe USSR Europe URES Europa	10	Moskva) Iran (Sec.II)) l kW)	et les pays men- tionnés dans la colonne 6. (Les Etats-Unis ont donné leur accord)
					(United States E W) Iran (Sec.II) 1 kW	Coordination necessary between the URSS and the countries mentioned in Column 6. (The United States agreed)
					(EE.UU. E. 20 kW) Iran (Sec.II) k lW	Coordinación necesaria entre la URSS y los países mencionados en la Columna 6. (Los EE.UU. dieron su aprobación)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
22688,5 (Ex 22685.2)						Sans modification No change Sin modificación
22695.5 (ex 22692.9)						Sans modification No change Sin modificación
22702.5 (ex 22700.6)						Sans modification No change Sin modificación
22709.5 (ex 22708.3)	·					Sans modification No change Sin modification
22716.5 (ex 22716)						Sans modification No change Sin modificación

Document No. DT 732-E 10 November, 1959

SUB-COMMITTEE 7A

AGENDA

Meeting on Wednesday, 11 November, 1959, at 9 a.m. - Room D

- 1. Summary Record of the Twentieth meeting (Document No. 496)
- 2. Summary Record of the Twenty-first meeting (Document No. 499)
- 3. Annex to Document No. 496
- 4. Annex to Document No. 499
- 5. Proposal 5126, concerning Appendix 13 (Document No. 72, by the Federal Republic of Germany)
- 6. Report by Working Group 7A2 (Document No. DT 534) and)Proposal 5562 by Venezuela (Document No. 527)
- 7. First Report by Working Group 7A4 (Document No. DT 699)
- 8. Second Report by Working Group 7A4 (Document No. DT 709)
- 9. No. 294 of the E.A.R.C. Final Acts
- 10. Resolution 8 of the Extraordinary Administrative Radio Conference
- 11. Recommendation 7, Baltic and North Sea Radiotelephone Conference
- 12. Any other business.

P. Bouchier Chairman

GENEVE, 1959

Document N° DT 733-FES 10 novembre 1959

GROUPE DE TRAVAIL 4E
WORKING GROUP 4E
GRUPO DE TRABAJO 4E

ORDRE DU JOUR

Treizième séance du Groupe 4E (960 à 10 500 kc/s)
Mercredi 11 novembre 1959, à 9 heures, Salle B

- 1. Examen du rapport du Sous-Groupe de travail 4E3 (Document Nº DT 698)
- 2. Examen du projet de rapport à la Commission 4 (Document Nº 654 Rev.)
- 3. Divers.

AGENDA

Thirteenth Meeting of Working Group 4E (960 - 10 500 kc/s) Wednesday.11 November. 1959 at 0900 hours - Room B

- 1. Consideration of the Report of Sub-Working Group 4E3 (Document No. DT 698)
- 2. Consideration of the draft Report of Committee 4 (Document No. 654, Rev.)
- 3. Any other business.

ORDEN DEL DÍA

13.ª sesión del Grupo de trabajo 4E (960 - 10 500 kc/s)
Miércoles, 11 de noviembre de 1959, a las 9 de la mañana - Sala B

- 1. Examen del informe del Subgrupo 4E3 (Documento N.º DT 698)
- 2. Examen del proyecto de informe a la Comisión 4 (Documento N.º 654, Rev.)
- 3. Otros asuntos.

Le Président : G.C. Braga

El Presidente:

GENEVE, 1959

Document No DT 734-FES
10 novembre 1959

COMMISSION 4 COMMITTEE 4 COMMISSION 4

ORDRE DU JOUR

23ème séance - Commission 4 (Tableau de répartition des bandes de fréquences) Mercredi 11 novembre 1959, 15 heures - Salle B

- 1. Examen du second Rapport du Groupe spécial numéro 126 du Règlement (s'il est publié) et de la Proposition N° 5557 de la Turquie (Document N° 498).
- 2. Examen des 3ème et 4ème rapports du Groupe de travail 4B à la Commission 4 (Documents N°S 457 et 521 respectivement) relatifs aux bandes de fréquences comprises entre 325 et 4 000 kc/s ainsi que du Corrigendum N° 1 au Document N° 457 qui sera distribué en cours de séance.
- 3. Examen du rapport du Groupe spécial relatif à la méthode future d'attribution des fréquences (Document N° 525) et de la proposition de la République Féderale d'Allemagne (Document N° 528).
- 4. Divers.

AGENDA

Twenty-third Meeting of Committee 4 (Frequency Allocation)

Wednesday, 11 November, 1959, at 3 p.m. - Room B

- 1. Consideration of the second Report by Working Group 4 Ad Hoc RR 126 (if evailable) and Proposal No. 5557 of Turkey (Document No. 498).
- 2. Consideration of the Third and Fourth Reports by Working Group 4B to Committee 4 (Documents Nos. 457 and 521 respectively) concerning the frequency bands 325 4 000 kc/s, together with Corrigendum No. 1 to Document No. 457 which will be distributed at the meeting.
- 3. Consideration of the Report by Working Group 4 Ad Hoc on future frequency allocation policy (Document No. 525) and of the proposal by the Federal Republic of Germany (Document No. 528)
- 4. Any other business.

ORDEN DEL DÍA

23.ª sesión de la Comisión 4 (Distribución de las bondas de frecuencias)

Miércoles, 11 de noviembre de 1959, a las 3 de la tarde - Sala B

- 1. Examen del segundo informe del Grupo de trabajo especial 4 RR 126 (si se ha publicado) y Proposición N.º 5557, de Turquía (Documento N.º 498).
- 2. Examen de los informes 3.º y 4.º del Grupo de trabajo 4B a la Comisión 4 (Documentos N.ºs 457 y 521, respectivamente), relativos a las bandas de frecuencias 325 4 000 kc/s, así como del Corrigendum N.º 1 al documento N.º 457 que se distribuirá en sesión.
- 3. Examen del informe del Grupo de trabajo especial 4, relativo a la futura política de distribución de frecuencias (Documento N.º 525) y de la proposición de la República Federal de Alemania (Documento N.º 528).
- 4. Otros asuntos.

Le Président :

The Chairman: Gunnar Pedersen

El Presidente:

Document No. DT 735-E 10 Novembor, 1959

WORKING GROUP 7A7

A G E N D A

Meeting of Working Group 7A7

Thursday, 12 November, 1959, after the meeting of Committee 7 - Room D

- 1. Conclusion of the debate on the inclusion of indications of certain special services, in form of notes, in the List of Coast Stations (U.S.A. Proposal No. 4556, Yellow Book, page 706 (Rev. 1)).
- 2. Approval of texts combined in the Annex to this Document (paragraphs 472 to 474 of the Radio Regulations).
- 3. Appendix 6, List of Ship Stations.

- 4. Transfer of Part A, Part B and Part C of the present List of Coast and Ship Stations into the new List of Coast Stations and List of Ship Stations along with their relative notes as may be modified or supplemented.
- 5. Other business.

E. Ron

Chairman

Annex: 1

ANNEX

ADDITIONAL TEXTS

- RR 472 86. The List of Coast Stations (List*) shall be re-published every three years and kept up-to-date by Recapitulative Supplements every six months.
 - 472-bis The List of Ship Stations (List*) shall be re-published every year without supplements.
 - 474 §8. The Alphabetical List of Call Signs (List ...*) of stations included in Lists* shall be re-published at intervals determined by the Secretary General and kept up-to-date by Recapitulative Supplements every three months.
 - 474-bis The Alphabetical List of Call Signs of stations of the

 Maritime Mobile Service (List*) shall be re-published every two

 years and kept up-to-date by Recapitulative Supplements every three

 months.

^{*} numbers to be given by Committee 8

Document No. DT 736-E 10 November 1959

WORKING GROUP 4D

REPORT

of the Sub-Working Group AD7 to Working Group AD

The Sub-Working Group 4D7 was appointed by the Working Group 4D at its Seventh Meeting on 8 October 1959. The terms of reference of the Group were to consider the proposals and to recommend the allocation for the frequency band 174-235 Mc/s for Region 3.

The Sub-Working Group held three meetings in all. The following countries took part in the discussions of the Group:

Australia China U.S.A. India Indonesia Japan Korea Malaya New Zealand Pakistan Philippines

Mr. M.S. Kari of the I.F.R.B. Secretariat assisted the Sub-Working Group.

The recommendations of the Sub-Working Group are contained in the Annex to this report.

J.M. Power

Chairman Sub-Working Group 4D7

Annex: 1.

\underline{A} \underline{N} \underline{N} \underline{E} \underline{X}

				- the supplementary and a like off suffice of the s	
P. Lin Landers	Allocation to services				
Frequency band Mc/s	World-wide		Regional		
		Region 1	Region 2	Region 3	
174-216				a)Fixed b)Mobile c)Broad- casting 86a) 86b)	
216-225				a)Aeronauti- cal radio- naviga- tion * b)Radio- location 92a) 92b)	
225-235				a)Fixed b)Mobile c)Aeronauti- cal radio- naviga- tion	

200	SUP	86)
200a	ADD	86a) In India, New Zealand, Pakistan and Phillipines, the frequency band 200-216 Mc/s is allocated additionally to the aeronautical radionavigation service.
200ъ	ADD	86b) In Australia, the frequency band 202-209 Mc/s is allocated alternatively to the aeronautical radionavigation service
206	SUP	92)

^{*} In Region 3, the aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev. 2) paragraph 7A

206a	ADD	92a) In Indonesia, the frequency band 216-222 Mc/s is allocated alternatively to the fixed, mobile and broadcasting services.
206b	ADD	92b) In Japan, the frequency band 216-222 Mc/s is allocated alternatively to the broadcasting service.
206c	VDD	92c) In Korea and the Philippines, the frequency band 216-225 Mc/s is allocated additionally to the fixed and broadcasting services.

ADMINISTRATIVE RADIO CONFERENCE

Document No. DT 737-E 10 November 1959

GENEVA, 1959

WORKING GROUP 4D

REPORT BY SUB-WORKING GROUP 4D10

The Sub-Working Group's terms of reference were: to consider allocations in Region 1 in the frequency bands between 585 and 960 Mc/s. It held three meetings, on 27 October and on 2 and 5 November, 1959. The following countries were represented:

Austria, Belgium, Bulgaria, Denmark, France, Greece, Italy, Norway, the Netherlands, Portugal, the Federal Republic of Germany, the United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland, the Union of South Africa and the Union of Soviet Socialist Republics. The I.F.R.B. was represented by Mr. M.S. Kari of the I.F.R.B. Secretariat.

The Sub-Working Group recommends that Working Group 4D adopt the changes to the Frequency Allocation Table and footnotes relating thereto set forth in the Annex hereinafter. These recommendations were unanimously adopted by the Sub-Working Group itself.

The Sub-Working Group wishes to draw attention to a proposal by Italy in favour of including a paragraph in Article 4 of the Radio Regulations showing that the services using scatter techniques may be run only by virtue of agreements between the Administrations concerned or affected thereby.

The Swedish Delegation has proposed that such agreements be negotiated through the I.F.R.B., which body would be responsible for bringing them to the notice of all I.T.U. Members.

The Sub-Working Group took no decision about Proposals 3370 (United States) and 3262-3265 (Switzerland). These proposals being of world-wide application, the Working Group felt they lay outside its terms of reference.

The Chairman:

C. Terzani

Annex: 1.

A N N E X

	Allocation to services				
Frequency band Mc/s	World-wide	Regional			
·		Region 1	Region 2	Region 3	
582-606		582-606 a) Broad- casting b) Aero- nautical radio- naviga- tion 97k)			

211k ADD ex-99a)

97k) In the United Kingdom, the frequency band 582-606 Mc/s is allocated on a primary basis to the aeronautical radionavigation service, and on a secondary basis to the radiolocation service.

211**0** ADD ex-99b)

97%) In Greece and Italy, the frequency band 582-606 Mc/s is allocated additionally to the fixed service until January, 1965.

Mc/s	World-wide	Region 1	Region 2	Region 3
606-790		606-790 Broadcasting 97n) 97o) 97p)		

211n ex-100c)	ADD	97n) The radionavigation service may continue to operate in the frequency band 606-610 Mc/s until the band is required for the broadcasting service.
2110 ex-100b)	ADD	970) In Greece and Italy the frequency band 606-685 Mc/s is allocated additionally to the fixed service until January, 1965.
211p ex-100a)	ADD	97p In Bulgaria and the U.S.S.R., the frequency band 606-960 Mc/s is allocated additionally to the aeronautical radionavigation service.

Frequency band	World-wide	Region 1	Region 2	Region 3
790-960		790-960 a) Fixed b) Broadcast- ing 97p) 97r) 97s)		

2llr ADD ex-100f)

97r) In Region 1 stations using tropospheric scatter may be accommodated in the frequency band 790-960 Me/s under under arrangements to be agreed between the Administrations concerned or affected, and shall operate in the frequency band 790-860 Me/s on a secondary basis to the broadcasting service.

211s ADD ex-100g)

97s) In Belgium, France and the Principality of Monaco, the frequency band 790-860 Mc/s is allocated alternatively to the broadcasting service.

WORKING GROUP 4D

AGENDA

Thirteenth and Fourteenth Meetings of Working Group 4D

(Table of Frequency Allocations 27.5-960 Mc/s)

Thursday, 12 November, 1959, at 15.00 hours - Room E and Friday, 13 November, 1959, at 09.00 hours - Room F

- Consideration of the report of Sub-Working Group 4D10 Allocation of the frequency band 585-960 Mc/s in Region 1 - Document No. DT 737 refers.
- Consideration of the first draft report of Working Group 4D to Committee 4 - Allocation of the frequency band 235-960 Mc/s - Document No. DT 718 refers.
- Consideration of the reports of various Sub-Working Groups as available.
 - 1) Sub-Working Group 4D2 Frequencies for Ionospheric Scatter Document No. DT refers.
 - 2) Sub-Working Group 4D4/Region 1 Allocation of the frequency band 68-88 Mc/s Document No. DT refers.
 - 3) Sub-Working Group 4D5/Region 1 Allocation of the frequency band 100-108 Mc/s Document No. DT refers.
 - 4) Sub-Working Group 4D6 Revision of footnote 198 Document No. DT ... refers.
 - 5) Sub-Working Group 4D7/Region 3 Allocation of the frequency band 174-235 Mc/s Document No. DT 736 refers.
 - 6) Sub-Working Group 4D8/Region 1 Allocation of the frequency band 216-235 Mc/s Document No. DT refers.
 - 7) Sub-Working Group 4D Special Frequency allocation for radioastronomy - Document No. DT refers.
- 4. Any other business.

C.W. Sowton Chairman GENEVA, 1959

WORKING GROUP 5B

FINAL REPORT

By Sub-Working Group 5B2 to Working Group 5B

- Sub-Working Group 5B2 was established by Working Group 5B on Tuesday, 8 September, 1959. Its terms of reference were generally to consider the aeronautical mobile plan, between 2 505 kc/s and 23 350 kc/s "with an eye to their implementation and any necessary re-adjustments" (see Annex to Document No. DT 98-E).
- 2. This plan, generally referred to as the I.A.A.R.C. Plan, is contained in Annexes 8 and 9 to the 1951 E.A.R.C. Agreement. In relation to the plan itself, several factors or groups of factors had to be considered before the Sub-Working Group could reach its conclusions; among these factors are the following:
 - A. The use or disposition to be made of a number of provisions of the E.A.R.C. Agreement applying to the said plan.
 - B. A number of proposals had been made to this Conference by various I.T.U. Administrations with reference to the I.A.A.R.C. Plan.
 - C. Some additional proposals were submitted by certain delegations during the Conference.
 - D. Pages IV.8 and IV.9 of the I.F.R.B. Report contain certain questions and suggestions also related to the implementation and administration of this Plan.
 - E. In addition to the above, there were a number of problems within the terms of reference of other units of the Conference concerning which the views of Sub-Working Group 5B2 were sought by or were believed by this Sub-Working Group to be useful to these other units of the Conference.
- 3. On the basis of the above, Sub-Working Group 5B2 organized its work into a programme which is contained in Annex 1 to this Report.
- 4. With regard to its basic terms of reference, as reflected in the first paragraph above, 5B2 recommends that the "I.A.A.R.C. Plan" be included in the Radio Regulations in the form of an Appendix, the proposed text of which is contained in Annex 2 to this Report.

- 5. The following are statements of the actions taken with respect to the different items of the programme of work of Sub-Working Group, as set forth in Annex 1 hereto.
- 6. Item 1 Proposal 29ter (U.S.S.R.): Extension of Certain Major World Air Route Areas

This proposal was first studied by an Ad Hoc Group and a special fact finding body. A study of the conclusions of these two groups led Sub-Working Group 5B2 to the conclusion that Proposal 29ter could not be accepted in its original form. The Sub-Working Group therefore decided to undertake studies designed to find a solution to the problems raised in Proposal 29ter. The results of these studies is reflected in Annex 7 hereto, which constitutes a suggestion for the amendment of Appendix 16bis as shown in Annex 2. It is suggested that a specialized drafting group be appointed to incorporate these amendments in Appendix 16bis, if they are adopted.

- 7. In connection with this problem Sub-Working Group 5B2 recommends the adoption of the Resolution which is contained in Annex 8 to this Report and which concerns the convening of an Extraordinary Administrative Radio Conference to revise the Plan.
- 8. Item 2 Proposals Nos. 3659 (U.S.A.) and 5088 (G)

The delegations of the two administrations having filed these proposals combined them into a common proposal which, after consideration by Sub-Working Group 5B2, was adopted in the form of a text to be inserted at the appropriate point in the Radio Regulations (probably in Artice 9).

- 9. This text is contained in Annex 3 to this Report, and Sub-Working Group 5B2 recommends its adoption by Working Group 5B to govern the new Appendix 16bis referred to in paragraph 4 above.
- 10. Item 3 Appendix 16bis

Proposals 5079 (G) 5080 (G) 4596 (U.S.A.)

These proposals were combined by the interested delegations into a single proposal which ultimately became the text of the Appendix referred to in paragraph 4 above.

11. Item 4 - Public Correspondence

Proposals 1059 (F) 1060 (G) Proposal 1059 was withdrawn, thus leaving only Proposal 1060, which was adopted by Sub-Working Group 5B2. This proposal is intended to govern the conditions under which public correspondence shall be exchanged in the aeronautical mobile bands. The text adopted by 5B2 is contained in Annex 4 to this Report.

12. Use of the Frequency 5 680 kc/s Proposal 4629 (CAN)

This proposal was amended by the Delegation of Canada, and its intent is carried out in Annex 2 to this Report, (paragraph 3, Part 1, Section II).

13. I.A.A.R.C. Recommendation No. 13 Proposal 4600 (U.S.A.)

This recommendation deals with methods to be employed to obtain a more efficient use of the frequencies in the exclusive HF aeronautical mobile bands. Sub-Working Group 5B2 recommends its adoption by Working-Group 5B in the form given in Annex 5 to this Report.

14. C.C.I.R. Recommendation on SSB Proposal 5081 (G)

After discussion of this proposal, Sub-Working Group 5B2 reached the following conclusions:

- a) This recommendation is addressed principally to the maritime service and contains only incidental references to the aeronautical service.
- b) The Sub-Working Group needs take no action thereon.
- c) However, if a study of this recommendation is undertaken by Sub-Working Group 5B3 or some other unit of the Conference, Sub-Working Group 5B2 would be interested in participating in such work.
- 15. The gist of the above information was conveyed to the Chairman of Working Group 5B by the Chairman of Sub-Working Group 5B2 in a communication dated 29 September, 1959.
- Because of the highly specialized nature of the HF aeronautical mobile R and OR Plan, special I.F.R.B. procedures have been needed in the past and will continue to be required in the future for the notification, examination and recording of frequency assignments in the bands involved.
- 17. These procedures will be contained in an article of the Radio Regulations which is now under study by Working Group 5A. It was thought by Sub-Working Group 5B2 that its views in the matter might be helpful to Working Group 5A. Accordingly, the Sub-Working Group studied the problem and adopted on the subject the draft text contained in Annex 6 to this Report.

- 18. Copies of this text were made available informally to the Chairman of Working Group 5A for advance information.
- The Sub-Working Group requested me to point out that should the proposed Appendix 16 bis and other relevant texts be incorporated into the Regulations, Annexes 8 and 9, and other relevant provisions of the E.A.R.C. should cease to have effect as between the parties to the new Regulations. It was assumed by Sub-Working Group 5B2 that the same general situation will exist for other parts of the E.A.R.C. Agreement and that this Conference will study the problem and determine the manner in which the various provisions of this Agreement will be affected legally by the coming into force of new Radio Regulations.
- 20. Some time after the Sub-Working Group had adopted the programme of work contained in Document No. DT 149, Proposals Nos. 5548 to 5550 were filed by the Moroccan Delegation. The gist of these proposals is that, in Appendix 16 bis, the territorial area for the Kingdom of Morocco should be conform to the 1959 borders, that for OR band allotments in Moroccan territory, only the country abbreviation "MRC" should appear, and that certain other consequent adjustments should be made. Other delegates also approached the Chairman of the Sub-Working Group on the same or related subjects. During discussion of this problem in the Sub-Working Group 5B2, it was pointed out that:
 - a) This problem would presumably affect not only the aeronautical mobile OR service, but other services as well;
 - b) In most cases the country abbreviations thus sought to be changed were originally selected on the basis of bilateral agreements;
 - c) In certain cases the amendment of these abbreviations is associated with other important interests which are of direct concern only to the governments parties to the agreements mentioned in b) above, and;
 - d) Certain delegations at this Conference have already begun bilateral talks for the purpose of reaching understandings on this subject prior to the amendment of these abbreviations.
- 21. On the basis of the above, the Sub-Working Group recommends that the delegations of the governments interested in the amendment of these abbreviations endeavour to agree in bilateral negotiations on the manner in which such amendments will be made and notify the Acting Secretary-General of the results of such negotiations in sufficient time so that the proper amendments may be made in Appendix 16 bis before the final adoption of this text by the Conference.
- 22. In other cases, changes were requested in the meaning of these abbreviations merely to reflect an extension of the geographical area of the country concerned since the I.A.A.R.C. Plan was adopted.
- 23. It might seem at first that such changes concern only the government whose territory is involved, and should therefore be made automatically at the request of that government. However, it should be pointed out that in most cases the use of an aeronautical mobile frequency outside the precise geographical areas to which it was originally allotted in 1951, at the E.A.R.C., is likely to cause harmful interference in other areas to which the same frequency was allotted at that time,

- 24. Until Appendix 16 bis is revised, therefore, such extended uses should be subject to I.F.R.B. examination and action on the basis of the original geographical area of allotment.
- 25. Sub_Working Group 5B2 now wishes to place on record an expression of its sincere thanks for the valuable advice and assistance received at every step of its proceedings from Mr. John A. Gracie, Member of the I.F.R.B. Thanks to Mr. Gracie's help, it is certain that the course followed by the Sub-Working Group has been wiser and its assignment more thoroughly covered.
- 26. Finally, Sub-Working Group 5B2 is also happy to express its sincere appreciation to the I.F.R.B. for making available to it the services of Mrs. Betty Arnold. Mrs. Arnold has, from the outset, performed the functions of an assistant to the Chairman and by discharging daily a number of technical and professional duties, has relieved the Chairman of a substantial burden of work.

Arthur L. Lebel Chairman

Annexes: 8

ANNEX1

PROGRAMME OF WORK FOR AERONAUTICAL GROUP 5B2

(Note: The entries shown under each item refer to a) the Administration making the proposal, b) the number of the proposal in the "yellow books" and c) the page or document in which the proposal is to be found.)

Item	No.	1.	Amendment	of MWARA		•	
			URS	29 ter	?	Page 40 Rev. 1	
11	No.	2.	Λ mendment	to Articl	.e 9		
			G USA	5078 3659		Document No. 46 Page 257 Rev. 1	
TŤ,	No.	3.	Appendix 1	.6bis			
			G G USA	5079 5080 4596		Document No. 47 Document No. 47 Page 816.3 and Document No. 14	12
11	No.	4.	Public cor	responden	ıce		
			F G	1 059 1060		Page 256 Rev. 1 Page 256.1	
Ħ	No.	5.	Change of	footnote	applyi	ing to the use of 5680 kc/s	
			CAN	4629		Page 193 Rev. 1	
11	No.	6.	IAARC Reco	mmendatio	n No.	13	

USA

4600

Page 825.1

Annex 1 to Document No. DT 739-E Page 7

- Item No. 7. Action on E.A.R.C. provisions
- " No. 8. C.C.I.R. Recommendations on SSB for the Aeronautical Service and G 5081 Document No. 48
- No. 9. Other Aeronautical Matters referred to the Group, either by Committee 5B or by other components of the Conference.
- " No.10. Questions suggested by the I.F.R.B. for consideration Document No. 20, Section IV, pages IV.8 and IV.9.

Λ N N E X 2

APPENDIX 16 bis

Frequency Allotment Plan for the Aeronautical Mobile Service and Related Information

(See Article 9)

TABLE OF CONTENTS

PART 1

General Provisions

			Page
Section	Ι	Definitions	
Section	II.	Technical and Operational Principles	
		A. Determination of Channel Width	
		B. Interference Range Contours	
		C. Radiated powers	
		PART II	
	Free	quency Allotment Plan for the Aeronautical Mobile (R) Service in the Exclusive Bands between 2,850 and 17,970 kc/s	
Section	I.	Description of the MWARA, RDARA, and sub-RDARA Boundaries	
		A. Description of the Major World Air Route Area (MWARA) Boundaries	
		B. Description of the Regional and Domestic Air Route Area (RDARA)	
Section	II.	Allotment of Frequencies to the Aeronautical Mobile (R) Service	
		A. Frequency Allotment Plan (per MWARA's, RDARA's and sub-RDARA's)	
		*	

Annex 2 to Document No. DT 739-E Page 9

Page

B. Frequency Allotment Plan (per Numerical Order of Frequencies)
PART III
Technical and Operational Principles for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service
Section I. Available Frequency Bands and Channels
Section II. Adaptation of Technical Principles
Section III. Preparation of the Allotment Plan for the Acronautical Mobile (OR) Service Bands
PART IV
Plan for the Allotment of Frequencies for the Aeronautical Mobile (OR) Service in the Bands between 2,505 and 23,350 kc/s
1. Abbreviations
2. (OR) Frequency Plan
A. Exclusive Bands
Region 1. 3,155-3,200, 3,200-3,230 and 3,800-3,900 kc/s
Region 2, 2,505-2,850, 3,155-3,200 and 3,200-3,230 kc/s Region 3, 3,155-3,200, 3,200-3,230 and 3,900-3,930 kc/s
C. Shared Bands (Frequencies not Alloted)

PART I

GENERAL PROVISIONS

Section I. Definitions

1. Frequency Allotment Plan.

A plan which shows the frequencies to be used in particular areas or by particular countries, without specifying the stations to which the frequencies are to be assigned.

2. The terms to express the different methods of frequency distribution as used in this Appendix have the following meanings:

Frequency distribution to:	French	English	Spanish
Services	At t ribution (attribuer)	Allocation (to allocate)	Atribucion (atribuir)
Areas	Allotissement (allotir)	Allotment (to allot)	Adjudicacion (adjudicar)
Stations	Assignation (assigner)	Assignment (to assign)	Asignacion (asignar)

- 3. A Major World Air Route is considered to be a long-distance route, made up of one or more segments, essentially international in character, extending through more than one country and requiring long-distance communications facilities.
- 4. A Major World Air Route Area (MWARA) is an area embracing a certain number of Major World Air Routes, which generally follow the same traffic pattern and are so related geographically that the same frequency families may logically be applied.
- 5. Regional and Domestic Air Routes are all those using the Aeronautical Mobile (R) Service not covered by the definition of Major World Air Routes in paragraph 4 above.
- 6. A Regional and Domestic Air Route Area (RDARA) is one embracing a certain number of the air routes defined in the foregoing paragraph.

7. Family of Frequencies in the Aeronautical Mobile Service.

A group of frequencies selected from different aeronautical mobile bands in such a way as to permit communication, at any time and over any

distance, between aircraft in flight and appropriate aeronautical stations.

Section II. Technical and Operational Principles used for the Establishment of the Plan of Allotment of Frequencies in the Aeronautical Mobile (R) and (OR) Services

A. Determination of Channel Width

1. Frequency Separation.

The frequency separations adopted are adequate to permit high capacity means of communication, as indicated in the following table:

Band	Separation	Band	Separation
2,850-3,155 kc/s 3,400-3,500 kc/s 3,900-3,950 kc/s 4,650-4,750 kc/s 5,450-5,480 kc/s 5,480-5,730 kc/s 6,525-6,765 kc/s	7 kc/s 7 kc/s 7 kc/s 7 kc/s 7 kc/s 7.5 kc/s 7.5 kc/s	8,815- 9,040 kc/s 10,005-10,100 kc/s 11,175-11,400 kc/s 13,200-13,360 kc/s 15,010-15,100 kc/s 17,900-18,030 kc/s	8.5 kc/s 9 kc/s 9.5 kc/s 10 kc/s 10 kc/s

- 1) It is assumed that A3 modulation frequencies will be limited to 3,000 cycles and that the sideband radiation of other-authorized emissions will most exceed that of A3 emissions.
- 2) The use of channels as derived from the above table, for the various classes of emissions (Al, A2, A3, A4 and Fl), will be subject to special arrangements by the administrations concerned in order to avoid the interference which may result from the simultaneous use of the same channel for several classes of emission, no inherent priority being given to any particular class of emission.
- 3) It is recognized that two or more Al channels can be derived from each of the channels provided under this frequency separation plan.
- 4) The grouping of adjacent channels derived from the above table to permit the satisfaction of particular requirements, will be subject to special arrangements by the administrations concerned.
- 5) The arrangements contemplated in 2), 3) and 4) above should be made under the provisions of Article 41 (Special Arrangements) of the International Telecommunication Convention and Article 4 of the Radio Regulations.

2. Frequencies to be alloted.

The following is a list of the frequencies to be alloted in the exclusive aeronautical mobile bands, on the basis of the frequency separation provided for under paragraph 1 above:

Band:

3,151

```
3,900-3,950 kc/s
                                                                   4,650-4,750 kc/s
                        3,400-3,500 kc/s
2,850-3,155 kc/s
                                                                   4,654.5 )
4.661.5 )
                        3,404.5
                                              3,904
2,854
                                              3,911
2,861
                        3,411.5
                                              3,918
3,925
                                                                   4,668.5
2,868
                        3,418.5
2,875
                                                         (OR)
                                                                   4,675.5
                                                                               (R)
                        3,425.5
                                                                   4,682.5
                                                         (7)
                                                                               (7)
                                              3,932
2,882
                        3,432.5
2,889
                                              3,939
                                                                   4,689.5
                        3,439.5
2,896
                                     (R)
                                                                   4,696.5
                                              3,946
                        3,446.5
2,905
                        3,453.5
                                     (14)
                                                                   4,703.5
2,910
                        3,460.5
                                                                    4,710.5
2,917
                        3,467.5
                                                                    4,717.5
                                                                               (OR)
2,924
                        3,474.5
                                                                   4,724.5
                                                                               (7)
           (R)
2,931
                        3,481.5
                                                                   4,731.5
2,938
                        3,488.5
           (24)
                                                                    4,738.5
2,945
                        3,495.5
                                                                   4,745.5)
2,952
2,959
2,966
2,973
2,980
2,987
2,994
3,001
3,008
3,015
3,023.5
         (R) & (OR)
3,032
3,039
3,046
3,053
3,060
3,067
3,074
3,081
3,088
           (OR)
3,095
           (18)
3,102
3,109
3,116
3,123
3,130
3,137
3,144
```

Band:

```
10,005-10,100
5,450-5,480
                5,480-5,730
                                 6,525-6,765
                                                  8,815-9,040
                                                                        kc/s
    kc/s
                     kc/s
                                     kc/s
                                                      kc/s
        ) (R)
                                                                   10,012
5,454
                5,484
                                 6,529.5)
                                                  8,820
                5,491.5)
5,461.5)
                                 6,537
                                                                   10,021
                                                  8,828.5
5,469
         (4)
                5,499
                                 6,544.5
                                                  8,837
                                                                   10,030
5,476.5)
                5,506.5
                                 6,552
                                                  8,845.5
                                                                   10,039
                5,514
                                 6,559.5)
                                                                               (R)
                                                  8,854
                                                                   10,048
                5,521.5
                                                                               (10)
                                                                   10,057
                                 6,567
                                                  8,862.5
                5,529
                                 6,574.5)
                                                  8,871
                                                                   10,066
                5,536.5
                                 6,582
                                                  8,879.5
                                                                   10,075
                5,544
                                 6,589.5)
                                                  8,888
                                                             (\mathbb{R})
                                                                   10,084
                5,551.5
                                                                   10,093
                                 6,597
                                            (R)
                                                  8,896.5)
                                                            (18)
                5,559
                                 6,604.5)
                                           (21)
                                                  8,905
                5,566.5
                                 6,612
                                                  8,913.5
                5,574
                            (R)
                                 6,619.5
                                                  8,922
                5,581.5
                           (26)
                                 6,627
                                                  8,930.5
                5,589
                                 6,634.5
                                                  8,939
                5,596.5
                                 6,642
                                                  8,947.5
                                 6,649.5
                5,604
                                                  8,956
                5,611.5
                                 6,657
                                             */**8,961.5)
                5,619
                                 6,664.5
                5,626.5
                                 6,672
                                                  8,967
                                                  8,975.5)
                5,634
                                 6,679.5)
                5,641.5
                                                  8,984
                                *6,685
                5,649
                                                  8,992.5
                                                             (OR)
                                *6,687.5)
                                                  9,001
                5,656.5
                                                             (9)
                                 6,693
                5,664
                                                  9,009.5
                                 6,700.5)
                5,671.5
                                                  9,018
                                 6,708
                          (R)
                                                  9,026.5
                                 6,715.5)
                                           (OR)
                5,680
                           හි
                                                  9,035
                                 6,723
                                           (12)
                         (OR)
                                 6,730.5)
                                 6,738
                5,688
                5,695.5
                                 6,745.5)
                5,703
                           (OR)
                                 6,753
                          (6)
                5,710.5)
                                 6,760.5)
                5,718
                5,725.5)
```

^{*} Available for Al emission only.

^{**} It is necessary that only equipment having a high degree of stability be used on this channel.

Band:

```
17 900-18 030
                   13 200-13 360
                                      15 010-15 100
11 175-11 400
                        kc/s
                                                              kc/s
      kc/s
                                           kc/s
                                      15 016
                                                        17 906.5
11 180.5
                   13 205.5
                                      15 026
                                                        17 916.5
                   13 215.5
11 190
                   13 225.5
                                 (OR) 15 036
                                                        17 926.5
11 199.5
11 209
                   13 235.5
                                 (6)
                                      15 046
                                                        17 936.5
                   13 245.5
                                                        17 946.5
11 218.5
                                      15 056
                                                 (10)
11 228
              (OR)
                   13 255.5
                                      15 066
                                                        17 956.5
              (11)
11 237.5
                                      15 076
                                                        17 966.5
                   13 264.5
                                      15 086
11 247
11 256.5
                   13 274.5
                                     *15 092.5
                                                       *17 975
                   13 284.5
                                     *15 096.5)
                                                        17 983.5
11 266
                                                        17 993.5
                                                                      (or)
                   13 294.5
*11 273
                   13 304.5
                                 (R)
                                                        18 003.5
                                                                      (6)
                   13 314.5
                                 (10)
                                                        18 013.5
11 280.5
                   13 324.5
11 290
                                                        18 023.5
11 299.5
                   13 334.5
11 309
11 318.5
                   13 344.5
                   13 354.5
11 328
              (R)
11 337.5
11 347
              (13)
11 356.5
11 366
11 375.5
11 385
11 394.5
```

3. Channels Common to (R) and (OR) Services.

The channels common to the (R) and (OR) services, centered at 3 023.5 and 5 680 kc/s, are authorized for use world-wide as shown in Part II of this Appendix.

Notwithstanding those provisions of the Allotment Plan set forth in Part II horeof, the frequency 5 680 kc/s may also be used at aeronautical stations for communication with aircraft stations when other frequencies of the aeronautical stations are either unavailable or unknown. However, this use shall be restricted to such areas and conditions that harmful interference cannot be caused to other authorized aeronautical uses.

^{*} Available for Al emission only.

4. The International Civil Aviation Organization (I.C.A.O.) coordinates aeronautical (R) communications with international air operations for a large part of the world and this organization should be consulted in appropriate cases, particularly in the operational use of the frequencies in the Plan.

5. Adaptation of Allotment Procedure

It is recognized that all the sharing possibilities have not been exhausted in the allotment plans contained in this Appendix. Therefore, in order to satisfy particular operational requirements which are not otherwise met by these allotment plans, Administrations may assign frequencies from the HF aeronautical mobile bands in areas other than those to which they are allotted in the said plans. However, the use of the frequencies so assigned must not decrease the protection to the same frequencies in the areas where they are allotted by the plans below that prescribed in Part I, Section II and Part III, Section II, paragraph 4(4) of this Appendix for the (R) and (0R) Services respectively.

- 6. When necessary to satisfy the needs of international air operations Administrations may adapt the allotment procedure for the assignment of aeronautical mobile (R) frequencies, which assignments shall then be the subject of prior agreement between Administrations affected.
- 7. Resort to the coordination described in paragraph 4 shall be made where appropriate and desirable for the efficient utilization of the frequencies in question.

B. <u>Interference Range Contours</u>

1. Definition of Contours.

The transparencies inserted in the pocket at the end of this Appendix show contours which indicate the minimum acceptable distance separating two ground stations of 1.0 kW radiated power (unmodulated) for the frequencies stated and for producing a protection ratio of 15 db of desired signal to interfering signal on the same frequency at an aircraft operating at the limit of the service range of the desired ground transmitter.

The service range is not included in the contour.

2. Type of Map Used.

These transparencies can be used only on a Mercators projection world map of the scales given on each transparency, and will not be suitable for use on any other scale of Mercators projection or any other projection. The world maps accompanying this Appendix, depicting RDARA and boundaries are to the correct scale and the transparencies carrying the interference range contours can be directly used on these maps.

3. Change of Scale or Projection.

Should any other Mercator scale be desired, then, by using the coordinates given in the tables shown below, new interference range contours can be drawn to fit the new scales.

It must be remembered that when the new transparencies are constructed, the intersection of the vertical line of symmetry, i.e. the meridian of longitude and the horizontal line of latitude should be at 00° latitude for the 00° contour, 20°N for the 20° contour, 40°N for the 40° contour, etc.

The coordinates shown in the above-mentioned tables are given with reference to the 180° meridian taken as the axis of symmetry for the construction of the contours.

4. Sharing Conditions Between Areas.

The transparencies were constructed on the basis of sharing conditions agreed at the International Administrative Aeronautical Radio Conference (I.A.A.R.C.) of 1948-1949, namely:

MWARA TO MWARA : Bands : 3-6.6 Mc/s -- night

9-11.3 Mc/s -- day

13-18 Mc/s -- time separation

Note: 6.6 Mc/s and 5.6 Mc/s conditions considered

the same.

MWARA TO RDARA : Bands: 3 -5.6 Mc/s -- night

6.6-11.3 Mc/s -- day

13 -18 Mc/s-- time separation

RDARA TO RDARA Bands: 3 - 4.7 Mc/s -- night

5.6-11.3 Mc/s -- day

13 -18 Mc/s -- time separation

The additional contours for day included for 3, 3.5 and 4.7 Mc/s are for determining daylight sharing possibilities.

The material in "Minimum and Maximum Range Charts for Use as a Guide to the Allotment of Frequencies" Annex 1 to Volume 1 of the Report of the First Session of the I.A.A.R.C. (Geneva, 1948) was used in the preparation of the allotment plan.

5. Method of Use.

Take the MWARA or the RDARA maps accompanying this Appendix and select the transparency for the frequency order and sharing conditions under consideration.

Annex 2 to Document No. DT 739-E Page 17

Place the centre of the transparency (i.e., the intersection of the axis of symmetry and the latitude line) over the boundary of the area or at the location of the transmitter. Note the latitude of this point and select the contour corresponding to this latitude. A transmitter located at any point outside the contour will result as defined in paragraph 1 above, in a protection ratio of better than 15 db. Any transmitter located at a point inside the contour will result in a protection ratio of less than 15 db.

For the Northern Hemisphere, the contours should be used in their natural position as published, but for the Southern Hemisphere, the transparency should be inverted. This point should be carefully observed when following the boundaries of the areas which involve the transition of the equator.

6. Data for tracing interference contours.

Editorial note: The material for this paragraph is that given in pages 21 to 24 of the I.A.A.R.C. Final Agreement.

C. Radiated powers

Power (unless otherwise indicated in Parts II and IV)

Al emissions: Ground station

Ground station Aircraft 1.0 kilowatt radiated (peak), 50 watts radiated (peak).

A3 emissions:

Ground station

4.0 kilowatts radiated (peak), 100%

modulated.

Aircraft

200 watts radiated (peak), 100%

modulated

PART II

Editorial Note

This Part of Appendix 16 bis is a reproduction of Annex 8, Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951), with but minor editorial changes to adapt verious titles to the composition of an appendix.

For the above reason, and to avoid bulk, this Part of the Appendix is not reproduced here.

In addition the following amendment is also required. In Annex 8, Volume VII of the Final Acts of E.A.R.C., Article 2, page 22 under General Notes (1), Power, replace the present text as follows:

"Power (unless otherwise indicated):

Al emissions: Ground station Aircraft

1.0 kilowatt radiated (peak), 50 watts radiated (peak).

A3 emissions: Ground station

4.0 kilowatts radiated (peak),100% modu-lated,

 Λ ircraft

200 watts radiated (peak),100% modulated.

PART III

TECHNICAL AND OPERATIONAL PRINCIPLES FOR THE ALLOTMENT OF FREQUENCIES FOR THE AERONAUTICAL MOBILE (OR) SERVICE.

Section I. Available Frequency Bands and Channels.

1. Bands.

The frequency bands available to the (OR) service fall into three distinct categories, i.e.,

- a) bands allocated exclusively to the aeronautical mobile (OR) service,
- b) bands which specifically provide for the aeronautical mobile (OR) service, but which are shared with other services, and
- c) bands for the general mobile services, from which the aeronautical mobile (OR) service is not specifically excluded.

2. Assignable Frequencies.

1) Exclusive Bands.

The frequencies for the bands allocated exclusively to the aeronautical mobile (OR) service are indicated in Part I.

2) Shared Bands.

The channels proposed for allotment to the (OR) service in the shared bands have the same separation as those in the exclusive bands. No specific frequencies were recorded, however, for these shared band channels. The numbers of (OR) allotments proposed in the shared bands were assessed primarily on the basis of the size of the bands and the number of services sharing them.

3. Selection of Frequencies..

1) Exclusive Bands.

All requirements including those common to more than one region were, to the limit of the spectrum space available, accommodated in the bands allocated exclusively to the (OR) service on a worldwide basis. Excess requirements in respect of Region 1 were met, as far as possible, from the band 3,900 to 3,950 kc/s allocated exclusively to the (OR) service in that region.

2) Shared Bands.

The balance of the requirements was accommodated to the maximum extent in the bands mentioned in No.1b) and 1c) of Section I in that order of preference.

Section II Adaptation of Technical Principles.

1. Division of Channels...

In order to utilize the bands more efficiently, it is considered that one A3 channel is capable of satisfying requirements for either one A3, or two or more A1, A3A, or other complex types of transmission. Where a channel is subdivided the partial channels are not to be used by different administrations. In employing the additional channels so derived due care must be exercised to avoid harmful interference to the users of adjacent channels.

2. Modification of Class of Emission.

In view of the necessity on the one hand to avoid harmful interference, and on the other hand, to use the spectrum space to its full capacity changes from one type of emission to another are permissible in those cases where no additional band space is thereby occupied.

3. Allotment of Adjacent (OR) Channels.

Where a country so desired, the allotments to that country were assembled into contiguous channels where geographical considerations permit and where otherwise practicable.

4. Protection Ratios and Sharing.

- 1) In areas where it was found necessary to secure a greater repetition of assignments, the same frequency has been allotted to more than one requirement of an administration even though this may result in a reduction of protection ratio between the emissions of the stations concerned.
- 2) In certain areas where peaks of requirements occur, protection ratios may be lowered by agreement between the countries concerned.
- 3) Certain assignments have been repeated where there is a strong probability of interference between stations of different administrations. This was done in the belief that the working time of any one of the stations so treated would be intermittent.

In these cases each station has an equal right to use the frequency, and no one station or group of stations is given priority.

- 4) A number of frequencies were assigned on a "secondary" basis. In such cases, a station having the use of a frequency as a "primary" assignment is protected from any other station using the same frequency as a "secondary" assignment by the following provisions:
 - a station using a frequency on a secondary basis must be inferior in power to the station operating on a primary basis,
 - such a station must be distant from the station operating on a primary basis by not less than half of the repetition distance required for a protection ratio of 20 db.

Section III. Preparation of the Allotment Plan for the Aeronautical Mobile (OR) Service Bands.

1. Allotment Procedure.

- 1) Requirements of a country to have all or some of the same frequencies for its overseas territories as for the home country were satisfied on condition that maximum economy in the allotment of frequencies was achieved, and that the full possibilities of geographical duplication were taken into account. However, the requirements for overseas territories were considered on exactly the same terms as those of other countries in the same area without giving any priority to the countries requiring the same frequencies in their home and overseas territories.
- 2) Because of problems peculiar to the areas concerned the following arrangements were made:
 - a) European Area of Region 1.

In the European Area of Region 1 the allotment of frequencies in the bands:

3,025 to 3,155 kc/s 4,700 to 4,750 kc/s 5,680 to 5,730 kc/s

was made by effecting a preliminary distribution of all the frequencies of each band (with the exception of one or two so-called reserve frequencies) in each of two parts of the area separated by the western frontiers of P.R. of Boland, Ozechos Tovakia, Roumanian P.R. and F.P.R. of Yugoslavia. In this distribution of frequencies the possibilities of repetition of assignments were taken into account.

Before adopting the final distribution of these frequencies it was verified that the allotments made to the countries bordering the line of partition were acceptable from the point of view of interference. The application of the reserve frequencies permitted complete latitude for carrying out a re-allotment of the unacceptable frequencies.

For the band 6,685 to 6,765 kc/s and 8,965 to 9,040 kc/s, this procedure was inapplicable by reason of the excessive interference ranges which cover practically all of Europe.

b) Southern Area of Region 2 (South America)
The following channels are set aside to meet the (OR) service requirements of Ecuador, Paraguay, Peru and Vene quela:

3, 067	4,703.5	5 , 688
3, 081	4,710.5	5,695.5
3,095	4,731.5	
3,116	4,745.5	
3,130		
3,137	•	

Moreover, the frequency of 3,151 kc/s is available for use in South America by tourist aircraft for air to ground communication.

c) Central Area of Region 2 (Central America and Caribbean Countries)

The channels 3,032, 3,046, 3,053, 3,074,3,130 and 3,151 kc/s are set aside to meet the (OR) service requirements of Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti and Panama.

2. Frequency Allotment Plan.

On the basis of all the foregoing data the (OR) bands allotment plan contained in Part IV below was prepared.

3. Channels Common to (R) and (OR) Services.

The channels common to the (R) and (OR) services, centered at 3,023.5 and 5,630 kc/s are authorized for use world-wide as laid down in No.3 of Section II of Part I.

4. Limitation of Power.

The interested administrations should agree on a reduction in aeronautical station radiated power at night to the extent necessary to make possible night time use of these frequencies.

PART IV

Editorial Note

This Part of Appendix 16 bis is a reproduction of Annex 9, Volume VII of the Final Acts of the Extraordinary Administrative Radio Conference (Geneva, 1951), with but minor editorial changes to adapt various titles to the composition of an appendix.

For the above reason and in order to avoid bulk this Part of Appendix is not reproduced here.

TEXT TO BE INSERTED IN ARTICLE 9 TO GOVERN APPENDIX 16 BIS

At the beginning of Section II of Article 9, add the following new paragraph:

§ 3 bis. Frequencies in the bands allocated to the Aeronautical Mobile Service between 2 850 and 18 030 kc/s (see Article 5) shall be assigned in conformity with the provisions of Appendix 16 bis and the other pertinent provisions of these Regulations.

PUBLIC CORRESPONDENCE

Article 9, Section II, \S 4, in the fourth line, read:

" ... adopted by a conference of the Union to which all interested Members and Associate Members are invited".

RESOLUTION No.

The Administrative Radio Conference at Geneva (1959),

considering :

- 1. that the Plan developed for the use of HF channels for the Aeronautical Mobile (R) Service has been substantially implemented;
- 2. that air operations are subject to continuous changes;
- 3. that these changes will require attention by the Administrations concerned, but
- 4. that, in seeking to satisfy new communication requirements, no decision should be taken that will prevent or handicap the coordinated utilization of those HF (R) band allotments as prescribed in the Plan:
- 5. that the families of high frequencies allotted to the Major World Air Route Areas, Regional and Domestic Air Route Areas and sub-Areas have been chosen considering propagation conditions which will allow for the selection of the most suitable frequencies for the distance involved;
- 6. that it is essential to distribute the communication load as uniformly as possible over the frequencies of the same order;
- 7. that specific steps should be taken to ensure that the correct order of frequency is used;

resolves:

that administrations, individually or in collaboration, take the necessary steps:

- a) to make as great a use as possible of VHF in order to lessen the load on the HF (R) bands;
- b) to make as great a use as possible of antennas of appropriate directivity and efficiency in order to minimize possibilities of mutual interference within an area or between areas;

- c) to coordinate the use of families of frequencies necessary for a given route segment in accordance with the technical principles and in the light of the propagation data available in order that the most appropriate frequencies be used with an aircraft at a given distance from the aeronautical station providing service over the route segment concerned;
- d) to improve operating techniques and procedures and to use the best equipment possible in order to attain the highest possible efficiency in handling airground HF communications;
- e) to collect precise data on the operation of their HF communication systems and having a bearing on the technical and operating standards so as to facilitate such re-examination of this Plan as may be undertaken in the future;
- f) to establish, through regional agreements, the best method to provide the required communications for any new long-distance international or regional air operation which is not or cannot be accommodated within the system of MWARA and RDARA, in such a manner as not to cause harmful interference to the utilization of frequencies as prescribed in the (R) Frequency Plan.

I.F.R.B. PROCEDURE FOR HANDLING ASSIGNENTS MADE PURSUANT TO APPENDIX 16 bis

Working Group 5B2 has agreed the necessity for incorporating the Aeromobile (R) and (OR) Plans in the I.T.U. Radio Regulations. In this way the Plans will be preserved for the future use and regulation of Aeronautical communications and until such time as they may be recast in the light of future technical advances.

Working Group 5B2 wishes to draw the attention of Committee 5A to certain unique features of these allotment Plans which distinguish them from Plans adopted for other services elsewhere in the spectrum. Most important of these features is that of flexibility which enables unforseen operational requirements to be met without departing from the basic concepts on which the Plans are based. This quality of flexibility is of great importance to the aeronautical services, which the Plans were designed to serve, and is one of the features which Working Group 5B2 has been most anxious to see preserved.

However, whilst the conclusions of the Working Group in deciding to incorporate the Plans as part of the Radio Regulations form a notable step in the interests of aviation, nevertheless it is of equal importance that the Radio Regulations should also include instructions to the I.F.R.B. as to the way in which changes of frequency usage made in accordance with these Plans should be dealt with.

Working Group 5B2 fully recognizes that the task of preparing an agreed Procedure for the notification and Registration of Frequencies is proper to Committee 5A, but nevertheless feels that the Working Group set up to deal with the Aeromobile Plans would be neglecting its duty were it not to indicate what, in its opinion as a specialist body, is the manner in which the interests of aviation may best be served in this respect.

To this end the attached paper has been prepared and is submitted for consideration by Committee 5A. This paper describes a procedure for the treatment of Notices in accordance with the Plans which will enable Administrations to avail themselves of the flexibility features and at the same time will ensure the regulation and continuity of the Aeromobile HF Communications service.

Working Group 5B2 invites Committee 5A to adopt the procedures set forth in the attached Annex.

I.F.R.B. PROCEDURE FOR DEALING WITH NOTICES OF ASSIGNMENTS IN THE AERONAUTICAL MODILE SERVICE IN THE FREQUENCY BANDS BETWEEN 2 850 AND 18 030 kc/s ALLOCATED EXCLUSIVELY TO THE AERONAUTICAL MOBILE SERVICE

ARTICLE 11

I.F.R.B. PROCEDURES

MASTER INTERNATIONAL FREQUENCY REGISTER

100

100	the following	ne Board shall enter in the Master Register, as initial data, and categories of assignments reflected by listings in the Master ency Record on the effective date of this Article:
101	•	ach listing for an aeronautical station assignment in a band the Aeronautical Mobile (R) Service between 2 850 and 17 970
102		ne date of 3 December, 1951 shall be entered in Column 2a covided:
103	i)	the frequency corresponds to one of the frequencies specified in Column 1 of the allotment plan for the Aeronautical Mobile (R) Service (Ref. to Appendix 16bis); or the frequency is the result of a permissive change from one type of emission to another in accordance with the provisions of Part I, Section II A, paras 1 (2) and 1 (3) of Appendix 16bis;
104	ii	the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of the same plan;
105	iii	.) the limitations of use set forth in Column 3 of the plan have been appropriately observed; and,
106	iv	the class of station, type of emission, power and hours of use are in accord with those provided for in the General Notes which constitute the heading for the plan.
107	10 19 af	ten the listing is in conformity with Nos. 103, 105, and 106, but not in conformity with 104, the date of 3 December 151 shall be entered in column 2b provided protection is 16 forded to other allotments in the plan as set forth in 15 mendix 16 bis. Part I. Section II. paragraph 5

- Appendix 16 bis is afforded to other allotments in the plan.
- 108
 3. In all other cases, the date of first receipt of the notice by the Board shall be entered in Column 2b.
- 109 4. The date notified to the Board of bringing the assignment into use shall be entered in Column 2c.
- b) Each listing for an aeronautical station assignment in a band allocated to the Aeronautical Mobile (OR) Service between 3025 and 18030 kc/s.
 - 1. The date of 3 December, 1951 shall be entered in Column 2a provided the assignment is in conformity with the primary allotments in the (OR) allotment plan and the conditions specified therein.
 - 2. The date of 3 December, 1951 shall be entered in Column 2a provided the assignment is in conformity with the conditions specified in the (OR) allotment plan but the allotment is in the plan on a secondary basis or the assignment satisfies the requirement for a "secondary assignment" as specified in Part III, Section II, paragraph 4, sub-paragraph 4) of Appendix 16 bis.
 - 3. In all other cases, the date of first receipt of the notice by the Board shall be entered in Column 2b.
 - 4. The date notified to the Board of bringing the assignment into use shall be entered in Column 2c.

* *

PROCEDURE FOR THE EXAMINATION OF NOTICES

Provisions Relating to Notices in the Bands between 2850 and 18030 kc/s allocated to the Aeronautical Mobile Service

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1. The Board shall examine each complete notice of a frequency assignment to a station in the bands between 2850 and 18030 kc/s allocated to the Aeronautical Mobile (R) and (OR) Service with respect to its conformity with the Table of Frequency Allocations, the rules for the allocation of frequencies, and other provisions of these Regulations, except those relating to the probability of harmful interference.

- 2. In the case of a notice of an assignment to a station in a frequency band between 2 850 and 17 970 kc/s allocated to the Aeronautical Mobile (R) Service, the Board shall also examine the notice to determine whether:
- a) the frequency corresponds to one of the frequencies specified in Column l of the allotment plan for the Aeronautical Mobile (R) Service, as contained in Appendix 16 bis, Part II, Section II B, of these Regulations; or the frequency is the result of a permissive change from one type of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Part I, Section II A, para. l of Appendix 16 bis;
- b) the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of that plan;
- the limitations of use set forth in Column 3 of the plan have been appropriately observed;
- 120 d) the class of station, type of emission, power, and hours of use are in accordance with the General Notes which constitute the heading for the plan.
- In the case of a notice which is in conformity with Nos. 117, 119 and 120 but is not in conformity with No. 118, the Board shall assume that the frequency will be used in accordance with the "sharing conditions between areas" specified in Part I, Section II B, para. 4 of Appendix 16 bis.
- 3. In the case of a notice of an assignment to a station in a frequency band between 3 025 and 18 030 kc/s allocated to the Aeronautical Mobile (OR) Service, the Board shall also examine the notice to determine whether:
- a) the assignment is in conformity with the primary allotments in the allotment plan for the Aeronautical Mobile (OR) Service and the conditions specified in Appendix 16 bis, Parts III and IV, of these Regulations;
- b) the assignment is in conformity with or satisfies the requirements for secondary allotments in the allotment plan for the Aeronautical Mobile (OR) Service and the conditions specified in Part III, Section II, paragraph 4, sub-paragraph 4) and Part IV of Appendix 16 bis;
- 124 bis b) bis In applying the provisions of Part III, Section II, paragraph 4, sub-paragraph 4) of Appendix 16 bis the Board shall assume that the frequency will be used on a day-time basis;

125

c) the assignment is the result of a permissive change from one type of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Appendix 16 bis. Part III, Section II, paragraph 1 and 2.

*

* *

RECORDING CHANGES IN FREQUENCY USAGE

Procedure in the Bands between 2 850 and 18 030 kc/s allocated to the Aeronautical Mobile Service

- Depending upon the findings of the Board subsequent to the examinations prescribed in Nos. 115 to 125 above, further action shall be as follows:
- a) For notices of assignments in the bands between 2 850 and 18 030 kc/s allocated to the Aeronautical Mobile (R) and (OR) Service, if the finding is unfavourable with respect to No. 115 above, the Board shall return the notice immediately by airmail to the notifying country with the Board's reasons for the finding and with such suggestions as the Board may be able to offer for the satisfactory solution of the problem.
- b) If, after sixty days, the notifying country re-submits the notice so modified that, after examination, the Board can reach a favourable finding thereon, the assignment shall be recorded in the Master Register with dates of entry in accordance with Nos. 131 to 133 or 135 to 138, as appropriate.
- c) Should the no ifying country, however, insist upon reconsideration of the original notice unchanged, and should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register, the date of receipt of the first notice by the Board being shown in Column 2b and an indication of the finding of the Board in the Remarks Column.
- 130 d) For the bands between 2 850 and 17 970 kc/s allocated to the Aeronautical Mobile (R) Service:
- 131

 1. if the finding is favourable with respect to Nos. 115 to 120 above, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2a;
- 2. if the finding is favourable with respect to Nos. 115, 117, 119 and 120 and is unfavourable with respect to No. 118, but the protection specified in Part I, Section II,

paragraph 5 of Appendix 16 bis is afforded to other allotments in the plan, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2b;

- 3. all other assignments shall be entered by the Board in the Master Register with the date of first receipt of the notice by the Board in Column 2b,
- e) For the bands between 3 025 and 18 030 kc/s allocated exclusively to the Aeronautical Mobile (OR) Service:
- 1. if the finding is favourable with respect to Nos. 115, 123 and 125, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2a;
- 136

 2. if the finding is favourable with respect to Nos. 115,124 and 125, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2b;
- 3. if the finding is favourable with respect to No. 125 and the assignment otherwise meets all the conditions for a primary or a secondary allotment except that the frequency does not correspond numerically with one of the frequencies specified in the (OR) allotment plan, the Board shall enter the assignment in the Master Register with the date of 3 December, 1951 in Column 2a or 2b, as appropriate.
 - 4. all other assignments shall be entered by the Board in the Master Register with the date of first receipt of the notice by the Board in Column 2b.
- 139 **f)** The date notified to the Board of bringing an assignment into use shall be entered in Column 2c in each case of an entry in the Master Register.

138

* ;

GENERAL PROVISIONS RELATING TO THE AFRONAUTICAL MOBILE SERVICE IN THE BANDS BETWEEN 2 850 AND 18 030 kc/s

The examination by the Board pursuant to Nos. 115 to 120 of notices of assignments to stations in bands between 2 850 and 17 970 kc/s allocated to the Aeronautical Mobile (R) Service shall be restricted to

their conformity with Part II of Appendix 16 bis; the technical criteria employed by the Board in its examination of these notices shall be those set forth in Part I of Appendix 16 bis.

The examination by the Board pursuant to Nos. 122 to 125 of notices of assignments to stations in bands between 3 025 and 18 030 kc/s allocated to the Aeronautical Mobile (OR) Service shall be restricted to a determination of their conformity with Parts III and IV of Appendix 16 bis.

Certain other provisions of this Article shall not be applicable to the listings in the Master Register relating to aeronautical stations operating in the above named bands. These are the provisions for the review of findings (Section V) and for studies and Recommendations (Section VII) and those parts of modifications and cancellation of frequency recordings (Section VI) with the exception of Nos. 346a and 347.

Note: The references appearing in this number relate to DT No. 649.

AMENDMENTS TO APPENDIX 16 bis IN ORDER TO ACCOMMODATE THE INTERNATIONAL AIR OPERATIONS OF THE U.S.S.R.

As stated in paragraph 6 of the Chairman's Report, Sub-Working Group 5B2 was confronted at an early stage of its work with a proposal submitted by the Union of Soviet Socialist Republics for amendments in the zone boundaries of the Major World Air Route Areas as defined in Annex 8 of the E.A.R.C. Agreement.

In summary, the basis of the I.A.A.R.C. Plan depends on the definition of areas of the world's surface within which families of radio frequencies are allotted for use by aeronautical ground stations to serve aircraft in flight within these areas. The Major World Air Route Areas (MWARA's), defined in paragraph 4, page 9, Annex 2 of this Report, are described in detail in Appendix 16 bis (not reproduced at this time) and delineated on the Maps attaching thereto. An essential part of the Plan so far as the management of the allotted radio frequencies is concerned is that Administrations assigning frequencies in accordance with its Provisions have the right to claim the status of a 2a date for their registrations if their stations are situated within the MWARA boundaries. The plans are so designed that assignments within these boundaries conforming to the allotments are assured of adequate protection from harmful interference within the limits of the plan.

The use of the same frequencies outside the prescribed areas is permitted within the terms of the Plan when urgent operational requirements so demand by registrations under this category which accrue the status of a 2b date, as distinct from those within the boundaries.

As agreed at the I.A.A.R.C. and adopted by the E.A.R.C., there were no MWARA's containing any of the territories of the U.S.S.R. or of the neighbouring Republics although provision was made for the allotment of frequencies for aeromobile use under the Regional and Domestic Air Route Area (RDARA) Plans and the (OR) Plans.

By Proposal No. 29 ter, submitted to this Conference (page 40 Revision 1) the U.S.S.R. sought an extension of the boundaries of most of the MWARA's by varying amounts into the Union. This proposal presented the Sub-Working Group with the greatest difficulty for many reasons.

The delineation of the Areas and the allotment of frequency families to these Areas was a very difficult task for the original I.A.A.R.C. which had to base its decisions on an enormous amount of detail concerning the numbers of aircraft flying along recognized routes, their operational patterns and practices, etc. The result, in the Plans, represents a delicate balance between the operationally desirable and the technically feasible with the number of frequencies available. From a detailed examination by the Group it was established that amendments to the fullest extent proposed by the U.S.S.R. would be impossible if the protection ratios were to be maintained between the frequencies allotted to respective areas, as the balance would be upset.

To have attempted to meet in full the requirements of Proposal No. 29 ter would have necessitated a complete revision of the Plans for which the necessary information equivalent to that available to the I.A.A.R.C. is not in the possession of any Delegations at this time. It was not overlooked of course that the I.A.A.R.C. devoted a total of about 8 months to this task when it drew up the Plans in 1948/49.

However, from this conclusion the Group nevertheless recognized the validity of the claims of the U.S.S.R. that at this time and to a greater extent in the years to come their aircraft are flying and will continue to fly to other countries and vice versa. The Group therefore considered a detailed proposals submitted by the Delegations of France, the United States and the United Kingdom, the intent of which is to amend Appendix 16 bis to accommodate these international air operations to and from the U.S.S.R. to the greatest extent possible at this time and until the Appendix can be revised.

This proposal is contained in the attached text, to which is directly related the Resolution at Annex 8, to enable the necessary revision to take place at the appropriate time.

The essential objective of this proposal is achieved in three ways. Firstly, by extending the boundaries of two of the most important MWARA's touching the U.S.S.R. territories and the allotment of frequencies for use within these extended areas. This has been done by means of footnotes to the existing descriptions of the relevant MWARA's. The selection of the particular frequencies within these areas has been carefully made to ensure that these will be adequate to satisfy the present and foreseen international air operations in these areas. The frequency family selected for the extended European MWARA, for instance, is the only one suitable for this purpose as the other families of frequencies now allotted to Europe are, by mutual agreement, restricted to the South East and South West of the Area and so inappropriate for use into the U.S.S.R. The extended family is furthermore the least loaded of all the European families and can confidently be assured of satisfying all likely operations to and from the U.S.S.R. into Europe for many years to come.

Secondly, the proposal rectifies a provision in the Plan which was accepted by the I.A.A.R.C., but which is now unnecessary because of changes in the operating practices of airlines. This is the extension into the whole of the European area of all the MWARA's radiating from its boundaries. Again by resort to footnotes these extensions have been cut off. As a result, Administrations in Europe are now placed on an equal footing with the U.S.S.R. with respect to the use of frequencies allotted to MWARA's outside the European Area.

Finally, to ensure the intent expressed in these footnotes that all these changes are of an interim character pending a full revision of the Plans, which is outside the competence of this Conference, the Resolution at Annex 8 has been prepared and is an essential part of the proposal adopted by Sub-Working Group 5B2.

PROPOSED AMENDMENT TO

APPENDIX 16 bis

PART II

SECTION II

ARTICIE 1

A. Description of the Major World Air Route Areas (MWARA) Boundaries

INSERT UNDER

Major World Air Route Area - EUROPE (MWARA - EU)

NEW NOTE as follows: -

Note 1 As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the East of the Area boundaries.

These frequencies, noted in the Frequency Allotment Table as EU (Ext) shall be available for use in the area bounded by the following line: from the coordinate 72°N-30°E through the coordinate 72°N-40°E thence South along the meridian 40°E to the coast of the Black Sea through Tuapse, Sochi and Sukhumi to Ankara rejoining the present boundary of the MWARA-EU.

NEW NOTE as follows: -

Note 2 Particular attention is drawn to the Notes attaching to the descriptions of the Areas - MWARA-ME, MWARA-NA, MWARA-SA and to Resolution No. affecting the availability of frequency allotments within the MWARA-EU.

UNDER Major World Air Route Area - MIDDLE EAST (MWARA - ME)

DELETE present Note in toto.

INSERT NEW Note as follows:-

Note 1 As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose certain frequencies allotted to this area are extended to the North of the Area boundaries. These frequencies, noted in the Frequency Allotment Table as ME(Ext) shall be available for use in the area bounded by the following line: from the junction of the existing area boundary with the meridian 80°E along the meridian 80°E Northwards to the coordinate 50°N-80°E then North West to Moscow thence South West to Kiev and through to rejoin the present boundary at Ankara.

INSERT NEW NOTE as follows: -

Note 2 As a further interim measure pending the revision mentioned in Note 1 above the NWARA-ME shall not extend into the European Area beyound the line connecting the following terminals: Sollum, Alexandria, Cyprus, Ankara.

Annex 7 to Document No D4-739 E-Page 39

UNDER Major World Air Route Area - NORTH ATLANTIC (MWARA-NA)

DELETE present Note 2 altogether.

REPLACE by NEW NOTE as follows:-

Note 2 As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-NA shall not extend into the European Area beyond a line connecting the following terminals: Stavangar, Copenhagen, Amsterdam, Brussels, Paris, Madrid, Lisbon, Casablanca and drawn to the area boundaries.

UNDER Major World Air Route Area - SOUTH ATLANTIC (MWARA-SA)

DELETE present Note altogether

REPLACE by NEW NOTE as follows:-

Note: As an interim measure until such time as the Plan as a whole shall be revised by a Radio Conference convened for the purpose the MWARA-SA shall not extend into the European Area beyond a line connecting the following terminals: Algiers, Madrid, Lisbon.

SECTION 11	<u>A</u>	FR	EQUENCY	ALLOTME	NT TABI	E		
INSERT afte	r EU							
EU-Ext.	2910	4689	. 5	6582	8371	1129	99.5	17906.5
After FE2 D	ELETE .	all entri	es for M	E and M	E(Ext)			
REPLACE by								
ME	3404. 3446.		88 6627	45.5 1	0021	13334.5		17926.5
ME(Ext)	3404.	5 5604	6 62 7	1	0021			
After Pacif	ic Met	. DELETE	all ent	ries fo	r SA ar	nd SA(Ext)		•
REPLACE by:								
SA	2875	3432.5	6612 6679.5 6597	8879.5 89 3 9	1004	8 13274.5		17946.5

PART II SECTION 11B Frequency Allotment Plan

Make corresponding entries and deletions in Column 2 "Authorised area of use" against appropriate frequencies.

RESOLUTION No. RELATING TO THE PREPARATION OF REVISED

ALLOTMENT PLANS FOR THE AERONAUTICAL MOBILE SERVICE

The Administrative Radio Conference, Geneva, 1959,

considering

- 1. that the Frequency Allotment Plans for the Aeronautical Mobile Services produced by the I.A.A.R.C. (Geneva, 1949) and adopted by the E.A.R.C. (Geneva, 1951) have been substantially adopted for inclusion in the Radio Regulations;
- 2. that since the time of the I.A.A.R.C. there have been changes in the route patterns flown by international civil aviation services;
- 3. that the rates of increase of international civil aviation services have differed amongst the various MWARA's;
- 4. that there are now new requirements for frequency allotments to serve the needs of international civil aviation services outside the existing MWARA!s; for example in the areas of the North Pole and in the territories of the U.S.S.R. adjacent to the existing MWARA!s:
- 5. that because of the higher speeds of aircraft there are now new requirements for frequencies to serve the needs of international civil aviation in particular purposes, for example, in those families of frequencies allotted in the Plan for the purpose of providing meteorological information to aircraft in flight;
- 6. that, on the other hand, certain provisions of the I.A.A.R.C. Plans are no longer required, for example, the extension of the MWARA. NSA-1 and NSA-2 families of frequencies into the whole of the European area;
- 7. that a limited number of new provisions have been incorporated into the Plans at this Conference to meet urgent requirements;
- 8. that the Plans contain a measure of flexibility which will enable some but not all new requirements to be satisfied;
- 9. that there are new aeronautical communication techniques under study and development which have a direct bearing on channel widths and on the number of channels required to meet essential communications needs of national and international aircraft operations. These include:
 - a) extensions of the useful communication range and increased application of VHF,

- b) new HF techniques to increase the speed and quantity of communications,
- c) new methods for more expeditious dissemination of meteorological information,
- d) improved selective calling systems;
- 10. that the new communication techniques above, together with anticipated improvements in aeronautical radionavigation techniques, having a direct influence upon the nature and quantity of communications handled and having an impact on spectrum space required should be adequately reflected in the new frequency allotment plans,
- 11. that whereas the present Plans were produced on the basis of a large amount of material relating to the operational requirements, usages and procedures of aeronautical mobile services, it has been impracticable for this Conference to have available and to study the corresponding material essential at this time to effect a complete review of the Aeronautical Mobile Service Plans;
- 12. that many countries did not have available at this Conference the information necessary to determine the extent to which the Frequency Allotment Plans meet current requirements for national and regional air operations;
- 13. that the International Telecommunication Convention, Buenos Aires, 1952, in Article 10, paragraphs 5 and 7, provides that an Extraordinary Administrative Radio Conference may revise the provisions of the Radio Regulations;

is of the opinion

that the Aeronautical Mobile Service Plans contained in Appendix 16 bis of the Radio Regulations will require to be reviewed and Administrations should urgently study the communications requirements of their national and international air operations in order to establish when, in the best interests of aviation, such a review shall be undertaken;

resolves

that an Extraordinary Administrative Radio Conference is convened under the Provisions of Article 10 of the International Telecommunication Convention to review Appendix 16 bis and the provisions of the Radio Regulations associated therewith and to complete its work before the next ordinary Administrative Radio Conference.

CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS
GENEVE, 1959

Document N° DT 740-FES
CORRIGENDUM N° 1
23 novembre 1959

SUB-COMMISSION 7A SUB-COMMITTEE 7A SUBCOMISION 7A

CORRIGENDUM

AU

DEUXIEME RAPPORT DU GROUPE DE TRAVAIL 7A7 A LA SOUS-COMMISSION 7A

(No concerne pas le texte français)

CORRIGENDUM

TО

SECOND REPORT OF WORKING GROUP 7A7 TO SUB-COMMITTEE 7A

Annex 1, page 3, second paragraph, read :

RR 467 - The Secretary General of the Union shall publish the amendments to be made in the documents listed in paragraph 1 of the Present Article. Once a month, Administrations shall inform him, in the form shown for the Lists themselves in Appendix 6, of the additions, modifications or deletions to be made in Lists [IV, VI and VII.] Further, in order to make the necessary additions, modifications and deletions to Lists [I, II and III,] he shall use the data provided by the I.F.R.B., obtained from the information received in application of the provisions of Article [11, paragraph 2.] He shall make the requisite amendments to List [VIII] by using the data he has received for Lists [I to VII.]

CORRIGENDUM

AL

SEGUNDO INFORME DEL GRUPO DE TRABAJO 7A7 A LA SUBCOMISIÓN 7A (No concierne al texto español)

Le Président :

The Chairman: E. Ron.

El Presidente:

M Note: to be brought in line with the French text.

GENEVA, 1959

SUB-COMMITTEE 7A

SECOND REPORT

of Working Group 7A7 to Sub-Committee 7A

The Working Group unanimously recommends:

- · a) the subdivision of the present List of Coast and Ship Stations into two Lists as follows:
 - 1. List of Coast Stations
 - 2. List of Ship Stations,
- b) combining the present List of Radiolocation Stations and the List of Special Service Stations into a new List to be called the "List of Radiolocation and Special Service Stations".

The reasons for the subdivision of the present List of Coast and Ship Stations are: (a) to have more handy publications, (b) to reduce the frequency of publication of data on coast stations, which being more static, will enable increased economy in expenses of the Union. Increased economy will also result from applying the principles laid down in the new paragraph 451 bis regarding ship stations.

The combination of the present List of Radiolocation Stations with the List of Special Service Stations was made possible by the exclusion from publication of the Aeronautical Radiobeacon Stations other than those reliable for use by the maritime radionavigation. We have taken into account the fact that Radiolocation is also a special service and its data are provided by publications from other sources.

The new texts for paragraphs 451 to 469 of the Radio Regulations relating to these Lists are submitted herewith for approval. It should be pointed out that in accordance with the decision of Sub-Committee 7A, paragraph 452 of the Radio Regulations regarding the List of Aeronautical and Aircraft Stations has also to be deleted; this deletion however being outside the terms of reference of the Working Group was not recorded in the attached Annex.

E. Ron Chairman

Annex: 1

New texts proposed for the Radio Regulations

CHAPTER VIII

ARTICLE 20

Service Documents

- 451 (IV) List IV (a) List of Coast Stations, annexed to which is a table and a chart showing the zones and hours of service of ships of the second category (see Appendix 13*). It shall also include a table of inland telegraph rates, limitrophic rates, etc.
- 451 bis List IV (b) * List of Ship Stations: This shall include particulars of ship stations fitted with
 - 1) radiotelegraph installation;
 - 2) radiotelegraph and radiotelephone installations;
 - 3) radiotelephone installation solely of ships making international voyages or communicating with stations of the maritime mobile service other than those of their own nationality.

This List shall contain a table and a chart showing the zones and hours of service of ships of the second category (see Appendix 13*).

453 (VI) List VI List VII

List of /Radiolocation/* and Special Service Stations.
This shall include:

Direction Finding and Radiobeacon Stations of the Maritime Radionavigation Service including Radiobeacons of the

Aeronautical Radionavigation Service reliable for Maritime Radionavigation, Oceanstation Vessel, Directionfinder Calibration Stations as well as stations transmitting Time signals, Regular Meteorological Bulletins, Notices to Navigators, Medical Advice, Standard Frequencies, Epidemiological Bulletins and URSI-grams.

454 - 459 To be deleted.

467 § 2 a)

The Secretary-General shall publish the changes affecting the documents enumerated in \$1 of this Article. Once a month, in the form indicated for the Lists themselves by Appendix 6, the Administrations shall inform him of the additions, modifications and deletions affecting Lists $\angle \overline{1}V$, VI and VII/*. The necessary additions, modifications and deletions affecting Lists $\angle \overline{1}V$, II and III/* shall be obtained by him from the modifications of frequency assignments made in accordance with Article $\angle \overline{1}1$, $\$2/\overline{1}$ * for the purposes of the $\angle \overline{M}$ aster International Frequency Register/*. The necessary changes to List $\angle \overline{V}$ IIII/* shall be obtained by him from the information he receives in regard to Lists $\angle \overline{1}$ to VII/* inclusive.

b) For permanent changes affecting the operation of Radio-location stations /List VI/* see paragraph /No. 1018/**.

In Lists /III, IVa, IVb and the combined Lists VI and VII/ each class of station shall occupy a special section.

^{*} to be treated finally by Committee 8 after approval by Committee 7.

^{**} in paragraph 1018, in the second sentence, the List should read: "List of _Radiolocation_7" and Special Service Stations".

ADMINISTRATIVE RADIO
CONFERENCE

GENEVA, 1959

Document No. DT 741-E 10 November 1959

SUB-WORKING GROUP 4D5

DRAFT REPORT

Sub-Working Group 4D5 to Working Group 4D

- 1. The Sub-Working Group was set up by Working Group 4D at itssession on.....in order to deal with the question of the frequency allocation for Region 1 in the band 100-108 Mc/s.
- 2. The Sub-Working Group held 7 meetings, 3 of which were chaired by the Delegate of the Federal German Republic, Mr. Mohr, during the Chairman's absence. Delegates of the following countries took part in the work of the Sub-Group:

Austria Israel
Belgium Italy
Bulgaria Norway
Czechoslovakia Netherlands
Denmark Portugal
Federal Republic of Portuguese Overseas Provinces

Federal Republic of Portug Germany Spain

France Sweden
Greece United Kingdom
Hungary U.S.S.R.

The Sub-Group was also assisted by Mr. Kari and Mr. Smith of the I.F.R.B. secretariat.

The Sub-Group based its work on the proposals submitted to the Conference. It soon became clear that the main problem which the Sub-Group had to resolve was the proposed introduction in the band 100-104 Mc/s of the broadcasting service, the stations of which will normally have considerably higher powers than those of the mobile service to which the band is at present allocated. In order to overcome this difficulty a power limit of 0.5 kW for the broadcasting stations was proposed and supported by a number of delegates.

Novertheless such a limit proved to be unacceptable to some of the countries wishing to introduce broadcasting and the problem was solved by making the introduction of broadcasting subject to agreements ensuring that no harmful interference will be caused to the mobile services of other countries.

With one exception, the countries planning to use this band for broadcasting have no intention of introducing this service in the immediate future, but desire to have spectrium space available for the future expansion of the service.

Some countries desired to operate fixed services in the band and their willingness to accept a power limit of 100 watts made it possible to allocate the band 100-108 Mc/s additionally to the fixed service in these countries.

4. As a result of its deliberations the Sub-Working Group recommends the maintenance of the Atlantic City allocation for Region 1, but with new and amended footnotes as shown in Annex 1 of this report.

Annex 2 contains a proposal for a Recommendation of the Conference. A number of delegates felt that although the proposed introduction of broadcasting is limited to six countries, there might also be a need in other countries to extend the band for VHF sound broadcasting at a later stage and that a recommendation on the future use of the band might therefore be useful.

However, while not objecting to the Recommendation, the delegates of France, Greece, Portugal, United Kingdom and Sweden did not find the Recommendation necessary, especially as it did not have universal support and as these countries were not at present contemplating the use of the band or any part of it for broadcasting.

- The Sub-Working Group also discussed the question of how the necessary coordination between the new broadcasting service of the countries listed in Footnote a) and the authorized services of other countries could be effected. Some delegates felt that this coordination could best be done at the next European VHF/UHF Broadcasting Conference, but the Sub-Group was not able to form a unanimous opinion on this subject.
- 6. The Delegate of Czechoslovakia reserved his right to express his opinion of Annexes 1 and 2 in Working Group 4D, because similar problems will be presented there by other Sub-Working Groups. In this connection the Delegate made particular reference to the proposed introduction of broadcasting in the band 68-73 Mc/s and 76-87.5 Mc/s in Czechoslovakia and other countries.

Annexes: 2

Frequency band	equency band Region 1				
100 - 108	Mobile except aeronautical mobile (R) 79) 79a) 79b)				

Footnotes

- 193a ADD 79a) In Austria, Belgium, Spain, Israel, Italy and Switzerland, the frequency band 100-104 Mc/s is allocated on a permitted basis to the broadcasting service (Document No. 242 (Rev.2) paragraph 7B). The introduction of the broadcasting service in these countries is subject to special arrangements between the interested and affected Administrations, to ensure that harmful interference is not caused to the mobile services of the other countries.
- 193b ADD 79b) In Denmark, Finland, Greece, Iceland, Italy, Norway, Federal Republic of Germany and Sweden, the frequency band 100-108 Mc/s is allocated additionally (7c) to the fixed service, and in the United Kingdom and the Netherlands will eventually be allocated additionally to that service. The effective radiated power of any station in the fixed service shall not exceed 100 watts.
- In Northern Rhodesia and Southern Rhodesia, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service and the frequency bands 132-144 Mc/s and 146-174 Mc/s are allocated alternatively to the fixed and mobile services. In the Union of South Africa and the Territory of South West Africa, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service, the frequency bands 132-144 Mc/s, 146-156 Mc/s and 165-174 Mc/s are allocated alternatively to the fixed and mobile services, and the frequency band 156-165 Mc/s is allocated alternatively to the maritime mobile service.

Note 71) RR 185 no longer applies to the band 100-108 Mc/s

Λ N N E X 2

DRAFT RECOMMENDATION

The Administrative Radio Conference.

considering

- a) the desirability of having, as far as possible, uniform frequency allocations to the BC services, whereby frequency co-ordination between countries will be facilitated and maximum frequency economy can be obtained,
- b) the probability of increasing requirements for frequencies to VHF sound BC in Region 1,
- c) that any eventual extension of the BC band 87.5-100 Mc/s should be in continuation of this band for technical reasons, in particular in order to avoid complication in receiver manufacture,
- d) the fact that the band 100-108 Mc/s is allocated already to BC in Regions 2 and 3 and in a few countries of Region 1,
- e) the expressed desire of some countries in Region 1 to use the frequency band 100-104 Mc/s for BC;

recommends

- 1. that, taking into account the needs of other services in this band, Administrations of Region 1 study the possibility of introducing at the next Administrative Radio Conference a general allocation to BC in the frequency band 100-104 Mc/s.
- 2. the next European Broadcasting Conference for revision of the Broadcasting Agreement, Stockholm 1952, should take into account the possible extension of the frequency band 87.5-100 Mc/s to 104 Mc/s.

Document No. DT 742-E 10 November, 1959

SUB-WORKING GROUP 5B3

AGENDA

Third meeting of Sub-Working Group 5B3 (Maritime Group)

Friday, 13 November, 1959 at 3 p.m. - Room C

- 1. Examination of draft recommendations drawn up by Small Sub-Working Group 5B3 and Special Sub-Working Group 5B3:
 - la Draft recommendations relating to Annex 6 to the Final Acts of the E.A.R.C. (International Frequency List for the radiotelegraph maritime mobile service in the exclusive bands between 4 000 kc/s and 27 500 kc/s): these drafts are the subject of Chapter II of Document No. DT 731.
 - 1b Draft recommendations relating to Annex 5 to the Final Acts of the E.A.R.C. (Radiotelephone maritime mobile plan in the exclusive bands between 4 000 kc/s and 27 500 kc/s). These drafts are the subject of Chapter III of Document No. DT 731.
- 2. Any other business.

Chairman of Sub-Working Group 5B3:

J. BES

ADMINISTRATIVE RADIO CONFERENCE

Document N°DT 743-E 10 November 1959

GENEVA, 1959

SUB-WORKING GROUP 5A1

Revision of Document N°DT 649

DRAFT

317a ADD

Any frequency assignment, the notice of which reaches the Board more than $\sqrt{30}$ days after the notified date of putting into use shall, where it is to be recorded, bear a remark in the Master International Frequency Register to indicate that it is not in conformity with 317.

Document No DT 743-E Page 2

329 MOD The probability of harmful interference to any service rendered by a station for which a frequency assignment already recorded in the Master International Frequency Register:

329a ADD

a) bears a date in Column 2a, or

329b ADD

b) is in conformity with the provisions of 328a and bears a date in Column 2b, but has not, in fact, caused harmful interference, or

329c ADD

c) is in conformity with the provisions of 328a and bears a symbol in Column 2d or was recorded in the Master Register with a date in this Column, as a result of a favourable finding with respect to 329, or

329d ADD

d) is in conformity with the provisions of 328a and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to 329, but has not, in fact, caused harmful interference to a frequency assignment which is already recorded in the Master Register and which is in conformity with 328a.

- 339wa ADD § 10m. (1) Frequency bands between 3,950 kc/s (4,000 kc/s
 in Region 2) and 27,500 kc/s other than those allocated
 exclusively to the Aeronautical Mobile Service, Maritime
 Mobile Service, Broadcasting Service or Amateur Service.
- 339wb ADD (2) Any frequency assignment to which the provisions of numbers 334a, 334b or 337 apply shall be recorded in the Master International Frequency Register with the relevant date in Column 2d.
- 339wc ADD (3) Any frequency assignment to which the provisions of numbers 338, 339c, 339d, 339h or 339i apply shall be recorded in the Master International Frequency Register with the relevant date in Column 2d and an indication in the Remarks Column of the finding by the Board.

339za ADD § 10p. Date to be entered in Column 2c.

339zb ADD In all cases, the date to be entered in Column 2c shall be the date of putting into use notified by the Administration concerned (see numbers 317 and 317a).

Section IVa - Categories of Frequency Assignments

339zc ADD § 10g (1) Any frequency assignment which bears a date in Column 2a shall have the right to international protection from harmful interference.

(ex 313)

(2) Any frequency assignment which bears a date in Column 2b is recorded in the Master International Frequency Register in order that Administrations may take into account the fact that the frequency assignment concerned is in use; this recording shall not give the right to international protection to the frequency assignment concerned, except as provided for in 329.

339ze ADD (3) Except for frequency assignments which bear a symbol in Column 2d, the date in Column 2c is given for information purposes only.

339zf ADD (4) The existence of a symbol in Column 2d for a particular frequency assignment and of a date in that Column for another assignment is not in itself to be considered as having any significance.

(ex 339)

(5) If harmful interference to the reception of any station operating in accordance with the provisions of these Regulations is caused by the use of a frequency assignment which is not in conformity with 328a, the station using this frequency assignment must immediately suspend operations upon receipt of advice of this harmful interference.

~~~		~~ <i>~</i> ~~
2a	Of registration 1)	
2ъ	Of notification 1)	Da
2 c	Of putting into use	Dates
2d	Of receipt of the notice by the I.F.R.B. when Columns 2a or 2b are not to be used 2)	
		^ ^ ^ ^ ^

	2)	L)
pursuant to No. 272 of the E.A.I	A Lspecial symbol instead of a	See Article 11, Numbers

See Article 11, Section III	pursuant to No. 272 of the E.A.R.C. Agreement	A Lspecial symbol instead of a date indicates an assignment notified
See Article 11, Section III	pursuant to No. 272 of the E.A.R.C. Agreement	A Lspecial symbol instead of a date indicates an assignment notified

See Article 11 (Numbers A, B, 347a and 347b)

~~~	······································	·//~/
13a	Results of examination 3) and investigations 4) by the I.F.R.B.	R
13b	Remarks related to the Finding	Remar
13c	Other Remarks (including dates referred to in Numbers 337, 338, 339d, 339i and 339l)	rks

WORKING GROUP 4D

#### REPORT

#### By Sub-Working Group 4D6 to Working Group 4D

The Group held one meeting at which participated representatives of Australia, the United States of America, France, the Netherlands, Sweden and the United Kingdom.

During this meeting a provisional Revision of Regulation 198 was made and it was decided that the Chairman eventually in consultation with members of the Working Group should modify the text.

Agreement was reached on the following wording.

#### REVISION OF REGULATION 198

The frequency 156.80 Mc/s is the international safety and calling frequency for the Maritime mobile VHF radio telephone service. Administrations will ensure that a guard band of 75 kc/s on either side of the frequency 156.80 Mc/s is provided.

The conditions for the use of this frequency are contained in Act 34.

In the bands 156.025 - 157.425, 160.625 - 160.975 and 161.475 - 162.025 Mc/s Administrations shall give priority to the Maritime Mobile Service on such frequencies in those bands as are assigned to stations of the Maritime Mobile Service by those Administrations.

Any use of frequencies in these respective bands should be avoided in areas where such use might cause harmful interference to the Maritime mobile VHF radio telephone service.

Administrations will select for this service from Appendix 12 bis for use in their ports and coastal waters such frequencies as are needed for intership working, port operations and public correspondence.

Whenever such a frequency is assigned the Administration concerned shall make the necessary notification to the I.F.R.B. so that ships of all nations will know which of these frequencies are available for use in the ports and coastal waters of the different countries.

J. Houtsmuller Chairman.

GENEVA, 1959

Document No. DT 745-E 10 November, 1959

WORKING GROUP 5B

#### REPORT

### of Sub-Working Group 5B4 (High Frequency Broadcasting Service) to Working Group 5B

This report is in three sections :

- SECTION I A recommendation for the adoption of a frequency management procedure for the High Frequency Broadcasting Bands.
- SECTION II Recommendations relating to the Master International Frequency Register.
- SECTION III Summary record of the meetings of Working Group 5B4

#### SECTION I

Sub-Working Group recommends to Working Group 5B the adoption of a procedure for frequency management for the High Frequency Broadcasting bands. The recommended procedure is as follows:

### A PROCEDURE FOR FREQUENCY MANAGEMENT IN THE HIGH FREQUENCY BROADCASTING BANDS

- 1. Periodically, Administrations shall send to the I.F.R.B. advance notice of the projected seasonal schedules of their broadcasting stations operating in the bands allocated to the broadcasting service between 5 950 kc/s and 26 100 kc/s.
- 2. Schedules shall be submitted to cover each of the following seasonal propagation periods:

March Schedule - March and April

May Schedule - May, June, July and August

September Schedule - September and October

November Schedule - November, December, January and

February

Schedules will be changed at Ol.OO G.M.T. on the first Sunday in the seasonal period.

- The first schedule, to become effective on 4th September, 1960, for the September-October period (1960) should be received by the I.F.R.B. by 1 March, 1960. The closure dates for subsequent schedules will be set by the I.F.R.B., so that the advance period will be reduced gradually to the minimum found practicable by the I.F.R.B. Schedules for which the details in Paragraph 6 will not change may be submitted up to a limit of one year in advance. In such cases, confirmation of each schedule is still required by the closure date of submissions for the respective seasonal periods. The I.F.R.B. will take appropriate steps to remind Administrations so that the above can be complied with.
- 4. Two or more Administrations may submit joint schedules containing their agreed projected frequency usage for one or more of the High Frequency Broadcasting Bands.
- The frequencies shown in the schedules must be frequencies that actually will be used for that particular seasonal period and should represent the minimum number necessary to provide satisfactory reception in each of the service areas of the particular programme. It is urged that each Administration prepare its schedules from season to season using wherever possible the same frequencies in any particular band as were used in previous schedules.

- 6. The schedules shall be submitted in a prescribed form containing the following technical data:
  - a) Frequency (kc/s) intended to be used.
  - b) Suggested alternative frequency or frequencies, or the desired band.
  - c) Call-sign or other identification.
  - d) Transmitter location.
  - e) Time (G.M.T.) of operation (and days, if other than daily).
  - f) CIRAF reception zone, or specific area if less than an entire zone.
  - g) Transmitter power into the transmission line.
  - h) Type of Antenna*
  - i) Azimuth, angle of elevation, and absolute gain of the major lobe for directive antennas.
- 7. The frequencies shown in the schedules must be in conformity with RR 327 and RR 328, and to the extent practicable the frequencies chosen should correspond to listings already in the Master International Frequency Register. Those Administrations not having suitable listings in the Master International Frequency Register may suggest any frequency considered appropriate, or may, if they so desire, show only the frequency band.
- 8. Upon receipt of the seasonal schedules, including advices of the continuing validity of schedules for the preceding seasonal period, the I.F.R.B. shall incorporate the proposed frequency usage of all Administrations into a composite schedule to be known as the Tentative High Frequency Broadcasting Schedule for the particular seasonal period. This schedule shall include:
  - a) All specific projected frequency usage where no alternatives were given.
  - b) The selection made by the I.F.R.B. in cases where alternatives were given.
  - c) Frequencies to be suggested by the I.F.R.B. in relation to all services for which no specific frequency was notified, such suggestions to be made with due overall consideration for Paragraph 11, compatibility within the schedule, and possible changes to the projected frequency usage which might be desirable to achieve more equitable satisfaction of Administrations' requirements.
  - *) The nomenclature of the C.C.I.R. book of "Antenna Diagrams" should be used wherever it is applicable.

- d) Such indications of apparent incompatibility within the schedule as the I.F.R.B. can make within the time available.
- 9. The I.F.R.B. shall commence the work outlined in Paragraph 8 sufficiently in advance that the Tentative High Frequency Broadcasting Schedule will be printed and transmitted to Administrations not later than 2 months prior to the date of commencement of the seasonal period.
- High Frequency Broadcasting Schedule on the basis of the Board's current standards for the High Frequency Broadcasting Service, such standards to be under constant review, taking into account the relevant C.C.I.R. recommendations, together with past experience in broadcasting planning and the experience with the new procedure. The I.F.R.B. shall aim at not only identifying, and correcting where possible, conflicts in frequency usage which become apparent in the technical examination, but also to improve the technical aspects of the composite schedule by amendments to be agreed upon in consultation with the Administrations concerned.
- 11. The I.F.R.B. will give special consideration to the requirements of those countries which have no suitable listing in the MIFR in order to accommodate those requirements in the High Frequency Broadcasting Schedule on the same footing as all other requirements.*
- 12. In formulating suggestions to Administrations, the I.F.R.B. shall take into account all available information such as monitoring observations and published data. However, in the case of frequency usage apparently not in conformity with submitted schedule data, the I.F.R.B. shall first confirm its information by reference to the Administration concerned.
- Broadcasting Schedule and any advice from the I.F.R.B., should notify the I.F.R.B. as soon as possible, preferably before the date of commencement of the seasonal period, of any amendments to the Schedule which are intended for implementation.
- 14. Changes in the schedules of High Frequency Broadcasting stations operating in the High Frequency Broadcasting bands, which are to be implemented after the date of commencement of the seasonal period, shall be notified to the I.F.R.B. as soon as possible.
  - *) The final wording of this paragraph is left in abeyance pending the decision of Committee 5 on this subject.

- 15. For changes notified in accordance with Paragraphs 13 and 14, the I.F.R.B. shall complete the same procedure of examination and recommendation as performed for the regular schedule. These amendments and changes in schedules shall be published in the I.F.R.B. weekly circulars.
- After the amendments and changes for the seasonal period, the composite schedule will be published as the Master High Frequency Broadcasting Schedule for that particular seasonal period. In this Master Schedule, symbols will be used to indicate those assignments which were found in practice to be unsatisfactory. The Master Schedule will also include and indicate with suitable symbols any frequency usage data not included in the submitted schedules but which has been taken into account in the examination by the I.F.R.B.
- 17. This recommendation was supported by the majority of the Delegations represented in Sub-Working Group 5B4, but certain Delegations either could not agree or had comments to make on the details of the procedure which are given in full in Annexes 1 and 2 of Section III of this report.

#### SECTION II

#### RECOMMENDATIONS RELATING TO THE MASTER INTERNATIONAL FREQUENCY REGISTER

- 1. The transfer of the Master Radio Frequency Record to the Master International Frequency Register was discussed and it was concluded that if the procedure is adopted, certain principles could be recommended, but that detailed consideration of the transfer could be left to Working Group 5A. Such detailed considerations would include particularly the date of entry into force of the new Register, and the date of cessation of the E.A.R.C. Interim Procedure for notification and registration.
- 2. In this respect, the Sub-Working Group submits the following suggestions:
  - a) All listings in the Master Radio Frequency Record should be transferred to the Master International Frequency Register, complete with column 2 (c) dates.
  - b) No additional listings should be made in the new Register excepting:
    - (i) any special assignments and any adjustments to existing listings arising from action at this Conference, the procedure for which will presumably be determined by the Conference;
    - (ii) new usage established in the Master High Frequency Broadcasting Schedule, which is not covered by existing entries in the new Master Register. These new entries would be given column 2 (c) dates corresponding to the date of commencement of the seasonal period in which the assignment was first used.
- A recapitulative frequency list should be published annually commencing at the end of the first year of implementation of the procedure, showing all frequency usage established in the Master High Frequency Broadcasting Schedules. This list could be issued as a supplement to the new International Frequency List, and it would have a similar though not necessarily identical format. It would include all technical data of transmission, together with symbols to indicate those assignments which were found to be unsatisfactory in practice, as well as symbols to indicate the seasonal periods for which each assignment was used.

#### SECTION III

#### SUMMARY RECORD

# of the Meeting of Sub-Working Group 5B4

- Sub-Working Group 5B4 was set up at the Second Meeting of Working Group 5B on 16 September, 1959, with the following terms of reference:
  - a) to study the draft Plans for the High Frequency Broadcasting Service prepared by the I.F.R.B.;
  - b) to study how the Plans should be dealt with, taking into account any proposals submitted in this connection and the general discussions in Committee 5.
- 2. The Sub-Working Group has held 13 meetings between September and 9 November, 1959.

The Delegations of 58 countries participated in the meetings. The representatives of the following took part in the meetings:

Argentine, Australia, Austria, Belgium, Brazil, British East Africa, Burma, Bulgaria, Canada, Ceylon, China, Colombia, Belgian Congo, Cuba, Denmark, French Overseas Territories, Spain, United States of America, Ethiopia, Finland, France, Ghana, Greece, India, Indonesia, Iran, Israel, Italy, Japan, Korea, Luxembourg, Malaya, Morocco, Mexico, Norway, Libya, New Zealand, Pakistan, Paraguay, Netherlands, Poland, Portugal, Portuguese Oversea Provinces, United Arab Republic, Federal Republic of Germany, Federal People's Republic of Yugoslavia, Roumania, United Kingdom of Great Britain and Northern Ireland, Overseas Territories of the United Kingdom of Great Britain and Northern Ireland, Sweden, Swiss Confederation, Czechoslovakia, Territories of the United States of America, Tunisia, Turkey, Union of South Africa, Union of Soviet Socialist Republics, Uruguay and Observers from the C.C.I.R. and I.B.T.O.

- 3. The Delegation of the United Kingdom nominated Mr. W.J. Chalk, alternatively with Mr. Frank Axon, to serve as reporter of the Group. The Delegations of France and Spain kindly offered to provide assistance on language questions.
- 4. Mr. John H. Gayer and Mr. Tai-Kuang-Wang, Members of the I.F.R.B. and Mr. W. Menzel of the I.F.R.B. Secretariat, were invited to assist the Working Group.
- 5. At the request of the Sub-Working Group, the I.F.R.B. prepared a list of the relevant conference documents. This list is contained in Document No. DT 217.

- The I.F.R.B. was also requested to have published, as a Conference Document (No. 288), Circular-letter No. 2740/59/R of 1 June, 1959. As a result of subsequent discussion, a Corrigendum No. 1 to this document was issued to reflect the specific category in which several delegations wished it to be placed. This document so amended reflects the opinions of the Administrations with regard to the draft I.F.R.B. plans.
- 7. At its second meeting held on 22 September, 1959, the Sub-Working Group set up an Ad Hoc Group with the following terms of reference:

"To study and analyse the Technical Standards used by the I.F.R.B. in the preparation of the draft plans for High Frequency Broadcasting and to submit a report to Sub-Working Group 5B4 by 28 September, 1959."

- 8. The report of the Ad Hoc Working Group is contained in Document No. 311. This report was adopted by the Sub-Working Group at its third meeting, held on 28 September, 1959. It was the opinion of the Sub-Working Group that no further reduction of the Technical Standards was acceptable.
- 9. The Working Group studied the Draft Plan for the High Frequency Broadcasting Service, prepared by the I.F.R.B. and the comments thereon given by Administrations. The Group also considered how the draft Plans should be dealt with. The representative of the I.F.R.B. stated that about 30% of the comments of Administrations could be met but that it was technically impossible to satisfy the desires of all countries. However, the comments related to only a small percentage of the total assignments to the plan.
- 10. When studying how the draft plans should be dealt with, the Group found that it could benefit from the consideration of the proposals on frequency management procedures. Relevant proposals made by the following countries were considered:

#### Reference Country Proposals Nos. 3927-3935 (Yellow Book) United States of America and Document No. DT 459 In reference to United States proposal, Australia Document No. DT 462 Poland Document No. 253 (Rev.) Canada, Ceylon, Colombia, Document No. DT 292 Ethiopia. Pakistan and U.S.S.R.

#### Country

#### Reference

Colombia
Czechoslovakia and United Arab Republic
Morocco

Document No. DT 456 Document No. 412 Proposal No. 4602

11. The Group studied the above proposals and related comments on their implementation.

Each proposal was introduced at the 5th, 6th, 7th, 8th and 9th Meetings of the Group, when questions were raised by delegations, to which answers were given and a discussion took place.

- 12. After the proposals referred to above were discussed by the Sub-Working Group, it found there were, in general, two ways in which it could proceed, as follows:
  - a) to implement the draft Plan in conjunction with a frequency management procedure;
  - b) to begin with a frequency management procedure, based on the present usage of the frequency spectrum and to continue efforts, based on such experience, to achieve planned usage for the High Frequency Broadcasting Service.
  - 13. The Sub-Working Group considered in detail a proposal for frequency management for the high frequency broadcasting service made by the United States Delegation. The proposals as originally made are contained in the Yellow Book. Nos. 3927 - 3935. Further clarifications of these proposals were given in Document No. DT 459. In general, the frequency management procedure proposed by the United States requires that the International Frequency Registration Board act as a coordinator and adviser, using the principles of frequency management to reduce interference in the high frequency broadcasting bands, and to ensure that the available spectrum space is effectively utilized. The steps through which this procedure was to be effected were through the periodical notification of projected seasonal schedules. The schedules for each seasonal period will be furnished to the I.F.R.B. in advance, which, according to frequency management procedures, would effect, through the cooperation of Administrations, the reduction of conflicts in frequency assignments, and would be based on the Master Register to the extent practicable, or upon advice given by the Board.
- The <u>Delegations of Canada and Ceylon</u> proposed the use of the above procedure for frequency management, based on the draft plan prepared for the High Frequency Broadcasting Service and with additional frequencies required being taken up without priority by the different Administrations. The proposals of Canada and Ceylon, as presented to the Working Group are contained in Document No. DT 292, from which it can be seen that the main

differences are that the Canadian Delegation proposed that the draft plan with necessary modifications, should be used as a basic working document to provide a more equitable distribution of frequencies, while Ceylon proposed that those assignments in the draft plan which are found acceptable be considered as basic assignments and other frequency assignments be included, according to the frequency management concept.

The Polish proposal found an interest in the group, as it would provide for the advance notification of frequency assignments seasonally, on the basis of the usage of assignments contained in the MRFR. These schedules would be collected by the I.F.R.B. and published so that each Administration could consider the possibility of interference, and work out bilateral agreements for the conflicts of frequency assignments.

The proposals of Mexico, in the form of a resolution, were to reduce requirements in order that a plan could be drawn up on the basis of the Technical Standards and the principles set down in the International High Frequency Broadcasting Agreement (Mexico City, 1949).

The Delegation of Colombia presented a proposal by which regional plans for the 6, 7 and 9 Mc/s bands could be prepared by this Conference and the frequency management procedure would be used for the higher frequency bands. This proposal, as contained in Document No. DT 456, took into consideration the need to have satisfactory frequency assignments for domestic and regional programmes during the next three years. It was proposed that regional working parties draw up transitional plans which will be used for the next three years for the use of the 6, 7 and 9 Mc/s bands during the daytime for this service. At night time, the lower frequency bands would be utilised for such services.

Sub-Committee 5B was consulted at its meeting held on 13 October, 1959, regarding the procedure to be followed in reference to the report of the Ad Hoc Working Group of Committee 4, as contained in Document No. 270 and the Document of Czechoslovakia and United Arab Republic, No. 412. Working Group 5B decided that these document should be studied by Working Group 5B. Later Committee 5 at its 13th meeting decided that this document should be sent to the appropriate Working Group.

- 15. The consideration of the basis of the United States proposal for frequency management continues.
- 16. At the Eleventh Meeting of the Sub-Working Grbup, held on Monday, 19 October, the Sub-Working Group concluded its discussion on a procedure for frequency management, as contained in Document No. DT 517. It accordingly proceeded to set up an Ad Hoc Group, with terms of reference and composition as follows:

- i) The Ad Hoc Group shall draft the procedure necessary to facilitate frequency management in the High Frequency Broadcasting bands, taking into account the proposals that have been put forward and the discussions which have taken place in 584.
- ii) Composition: Australia
  Colombia
  French Overseas Territories
  Pakistan
  United Kingdom
  United States of America
  U.S.S.R.

The Delegation of Australia was invited, and nominated Mr. Max Strohfeldt as Chairman of the  $\mathbb{A}d$  Hoc Group. I.F.R.B. representatives were also invited to assist the Group.

- 17. At its Twelfth Meeting on 6 November, 1959, the Sub-Working Group considered the principles of the procedure for Frequency Management for the High Frequency Broadcasting Service, as contained in the report of the Ad Hoc Group, Document No. DT 659 and its Annexes 1 and 2. Most of the delegates agreed in principle to the general procedure but many had comments regarding the details. Certain delegates made points of substance and others discussed details of the procedure, and these statements submitted in writing are contained in Annex 1 to this report.
- 18. The final meeting of Sub-Working Group 5B4 was held on 9 November, 1959, when a majority of the delegations agreed that the proposal for "a procedure for frequency management in the High Frequency Broadcasting bands" should be forwarded to Working Group 5B. The recommended procedure, as amended, is given in Section 1. The amendments that were agreed at the 13th meeting were as follows:
  - i) Add to paragraph 5, second line, after "seasonal period" and should represent the minimum number necessary to provide satisfactory reception in each of the service areas of the particular programme.
  - ii) Delete in paragraph 8 c) fourth line, the phrase in parenthesis reading: (relating to essential services).
  - iii) Paragraph 11 should be replaced by the following:

The I.F.R.B. will give special consideration to the requirements of those countries which have no suitable listing in the Master Register in order to accommodate those requirements in the High Frequency Broadcasting Schedule on the same footing as all other requirements.*

^{*} The final wording of this paragraph will be left in abeyance pending the decisions of Committee 5 on this subject.

- 19. At the final meeting, some delegations were unable to accept the document as it stands and asked that their statements on the proposed procedure and the relevant recommendations should be included in the report and these are contained in Annex 2.
- The proposed procedure for frequency management in the High Frequency Broadcasting bands was to be forwarded with a full report on the deliberations and views of the delegations for the consideration of Working Group 5B with the recommendation that it be adopted with any further appropriate amendments by the Conference.

F. Axon

Sven Gejer

Reporter

Chairman

Annexes: 2

#### ANNEX 1

# STATEMENTS MADE AT THE TWELLTH IMPORTING OF SUB-WORKING GROUP 5B4 CONCERNING DOCUMENT No. DT 659 AND ITS ANNEXES 1 AND 2

# ARGENTINA

The Argentine Delegation appreciates the efforts made by the Special Drafting Party. Notwithstanding, it is unable to offer its views at this stage on the principles embodied in Working Document No. 659, because certain of the concepts used therein are not adequately defined. Here we shall rest content with three points:

- a) Annex 1, point 7, when they say that "as far as possible" frequencies will be chosen from entries already appearing in the Master Record: the procedure laid down in this paragraph should be set forth in greater detail.
- b) The concept of "essential services" is far from clear in this document. If it be kept, it should be clarified. A satisfactory definition would, we feel be exceedingly hard to come by.
- c) Nor are the terms of reference to be given to the I.F.R.B. adequately defined. Since the procedure is based chiefly on the work done by the "International Frequency Registration Board", its freedom in this respect should be properly defined.

#### CANADA

#### Alternative Paragraph 7

- 7. "The frequencies shown in the schedule must be in conformity with 337 and 338 and to the extent practicable the frequencies chosen should correspond to frequencies already listed in the I.F.R.B. Draft Plans for the H.F. Broadcasting service.
- " Those Administrations not having suitable listings in the I.F.R.B. Draft Plans or the Master International Frequency Register may suggest any frequency considered appropriate or may, if they so desire, show only the frequency band."

Note: Paragraph 8 and some others would then require minor amendments to recognize the evolving plan. This would apply where the text refers to schedules after they have passed the Tentative Schedule stage.

#### CEYLON

The Delegation of Ceylon proposes the following amendments:

#### Annex l

## Paragraph 6(c)

This should be amended to give a clear indication of the frequencies which carry the same programme to the same areas simultaneously.

#### Reasons

When frequency conflicts occur in the schedules, Administrations and the I.F.R.B. will be in a better position to determine as to which Administration should adjust its frequency.

#### Paragraph 7

Change the words "Master International Frequency Register" to read "Draft High Frequency Plans drawn up by the I.F.R.B."

#### Reasons

- (a) The draft plans of the I.F.R.B. represent a much more equitable distribution of frequencies than the Master International Frequency Register.
- (b) When making initial selections of frequencies for Broadcasting Schedules, the vast majority of countries will know which frequencies to select, without causing harmful interference to others, thus reducing to a very great extent the work of the I.F.R.B.

#### Paragraph 11

Should be recast into two sections, omitting reference to the Master International Frequency Register. In the first part, a list of priorities for Broadcasting services should be laid down. In the second part more precise instructions should be given to the I.F.R.B. to adjust frequency conflicts to assist Administrations requiring such assistance.

#### Annex 2

The Delegation of Ceylon considers that this annex should be withdrawn, as it is not within the terms of reference of the Sub-Working Group 5B4.

#### BELGIAN CONGO

We find the proposals in Working Document No. 659 satisfactory, except for one point which we consider important.

Where paragraph 11 refers to "essential services" we feel that if Administrations' views are taken as the only criterion to decide whether any particular service is essential, the article will not be of much use for, in practice every administration considers its own services essential.

We are prepared to accept this text with the addition of a footnote to the effect that "International broadcasting shall not be considered an essential service."

#### GREECE

The Delegation of Greece approves in principle the procedure for frequency management provided for in Working Document No. 659.

Before it gives its final opinion, however, it would like to have further information about the term "essential services" used in Paragraph 11.

#### INDIA

The Delegate of India said that according to Document No. DT 659, the dates (even 2c) had no significance or weightage and that every operation of every country has to find the appropriate frequency for its operation.

#### ITALY

The Delegation of Italy agrees with the general lines of the method of frequency management proposed in Working Document No. 659.

It hopes the document will enable our Conference to arrive at a satisfactory solution to the very difficult problem of high-frequency broadcasting.

It shares the view previously expressed by the Delegations of France and Portugal that the information to be supplied by Administrations to the I.F.R.B. should include identification of the programme for which each of the frequencies requested will be used.

#### MEXICO

Annex 1 to the Report submitted by the Ad Hoc Drafting Group to Sub-Working Group 5B4 in Document No. 659 limits itself to putting forward the United States proposal in the form of a procedure for putting it into practice in one or other of the many forms suggested during earlier meetings of the Sub-Working Group. The original United States document in favour of an "administration for High Frequency broadcasting frequencies" contained important defects and inconsistencies which may nevertheless be appreciated easily, while in the pr cedure proposed by the Ad Hoc Group there is a vagueness, which it is impossible at times to clarify even by comparing different paragraphs.

The Mexican Delegation hoped that the discussion would make it possible for certain points to be clarified before a decision was taken on the said document, but in view of the statement by the Chairman of the Working Group that it would be understood that any delegation which did not remit its point of view in writing accepted the principles contained in the said document, it considers that it must make known its doubts about the efficiency of the procedure, at least in respect of the countries which do not so far engage in high frequency broadcasting or are in the process of developing it. It therefore expressed its most important doubts, and in doing so now in writing in accordance with the wish of the Chairman of the Working Group, it includes its comments on the explanations provided by the Chairman of the Ad Hoc Drafting Group by way of reply.

In Paragraph 11 of the Annex it is said that the Board "in the case of a service which an Administration regards as essential....shall ....give it special consideration...." Let us assume that next year - supposing that the procedure were then in force - an Administration notified as essential certain assignments for national broadcasting using (as would occur in most cases) frequencies in the lowest bands - namely, 6, 9 and 11 Mc/s. In accordance with the procedure under discussion, the Board would enter these assignments in the Register, and the countries developing international broadcasting would be using higher frequencies. But when the period of low sunspot activity arrives, national broadcasting concerns have to continue using the low frequencies, which would also be required for international broadcasting. What, then, would the Board do? To whom would priority be given, in view of the

impossibility of satisfying the needs of both types of broadcasting? The reply of the Chairman that priority would be given to new countries seems satisfactory, but it would be necessary to incorporate this idea in the text of the procedure if it is not to remain a pious hope.

In Paragraph 7 of Annex 1 it is said that: "Those Administrations not having suitable listings in the Master International Frequency Register may suggest any frequency considered appropriate, or may, if they so desire, show only the frequency band." Let us assume that a new country or one which is so far not engaging in international braodcasting notifies assignments in accordance with the procedure under discussion. The sentence quoted from Paragraph 7 seems to provide, by way of solution, that the Board should accept this request. Although it is to be assumed that this would be done as far as possible, one may reflect on how far it would be possible in practice, since it is well-known that the frequency spectrum is full to bursting. It seems that the Board would have no other alternative than to apply the provision mentioned in the same paragraph that "the frequencies chosen should correspond to listings already in the Master International Frequency Register." Either the satisfaction of the request is merely an illusion, since going by the Register simply means the application of priorities, or the Administrations which have these priorities would renounce some of them. There is no indication that this is likely to happen. In any event, there appears to be a contradiction in the procedure laid down within the same paragraph.

The Chairman of the Ad Hoc Drafting Group replied that: may be assumed that in practice there will be very few cases like this, since international broadcasting only concerns new countries." As the Mexican Delegation pointed out, that criterion, apart from being odd since it does not even appear in the text - is unacceptable, because it would put the new countries in a privileged position with respect to those countries which have been waiting patiently for a real highfrequency broadcasting plan to be worked out and applied, to put into operation their international broadcasting on a firm basis, without laying themselves open to acquiring, installing and operating extremely expensive equipment without much hope of listeners, since they cannot If a poll were count on having frequencies free from interference. taken on this question among the different delegations taking part in the Conference, especially among the many countries which are obliged to operate "out of band", the result would surprise the Chairman of the Ad The most charitable thing to say is that the Hoc Drafting Group. criterion is somewhat unrealistic.

There are some other basic points in the document which seem to be ambiguous, but the Mexican Delegation will continue to hope that they will be clarified in the discussion, if that is possible. In any event, it will only be able to give its final view at the end of the discussion, and reserves its right to speak then.

#### POLAND

The problem of the frequency management procedure in the high frequency bands is of primary importance for all Administrations including People's Republic of Poland, in view of the fact, that all requirements of the Administrations concerned should be met.

The Delegation of the People's Republic of Poland fully appreciating the importance of the problem, has submitted the document No. DT 168 covering our suggestions as to the solution of this difficult problem.

Document No. DT 659 drafted with considerable effort by Ad Hoc Group may be considered as a further step toward this solution. However, it appears that the procedure presented in this document is not free of essential drawbacks, the main of which are:

- 1. The document under consideration does not fully meet the requirements of Sub-Working Group 5B4 (see Addendum to Document No. 501) to facilitate frequency management in the high frequency broadcasting bands. This specially concerns the field of activity of the I.F.R.B.
- 2. The procedure proposed is bound with additional costs as consequence of far more enlarged duties imposed on the I.F.R.B.
- 3. In view of apparent lack of sufficiently impartial technical foundations there are reasons to doubt whether the proposed procedure could be adopted as sound base for satisfactory solution of frequency conflicts arising in the broadcasting service.

In this situation the opinion of our Delegation is that the procedure for frequency management in high frequency broadcasting bands, as stated in Document No. DP 659, must be subject to appropriate amendments to be acceptable to all Delegations.

#### PORTUGAL

The Portuguese Administration is extremely interested in broadcasts not only to Portuguese-speaking listeners, but also to all listeners interested in the development of Portuguese culture.

Due to the geographical peculiarities of Portugal, which, as is universally known, consists of fragments of national territory scattered throughout the world, it is absolutely vital to the existence of the Portuguese nation to have HF broadcasting to minister to its territories and to bind them closely together.

Happily, Portugal, notwithstanding its 800 years of existence, is a country still developing vigorously, and the National Portuguese Broadcasting Corporation strives its utmost in the pursuit of the objects mentioned above.

We nevertheless view with considerable concern the way in which the work of this Conference is proceeding, so far as the solution of HF broadcasting problems are concerned.

All efforts which may be made to solve this singularly important problem will be welcome and will obtain corresponding support from the Portuguese Delegation.

We consider that the method outlined in Working Document No.DT 659 Annex 1, is at present the only one likely to achieve success, and we are therefore disposed to support it.

Nevertheless, we believe it essential that, among the data to be supplied by countries to the I.F.R.B., mentioned under No. 6 of Document No. DT. 659, IDENTIFICATION OF PROGRAMMES should be included, so as to make it possible to judge the number of frequencies used by a single country, for a single programme and for a single destination, together with indications of the kind of programme transmitted (News, Cultural, Educational, Commercial, etc.)

We think it is also essential to define very strictly the SERVICES REGARDED AS ESSENTIAL, which, in our view, should be those used for the broadcasting of one national programme delivered in the languages of the country and intended for daily news or educational purposes for the peoples of the country, regardless of how its territory is composed.

Another important, though not essential, service, to which some priority should be given, is the broadcasting of <u>one</u> news or cultural programme, in any language, for international consumption by the peoples in the world interested in the development of the originating country's culture, on condition that this programme be broadcast on a reasonable number of frequencies.

The Portuguese Delegation considers it essential to reach an agreement on H F broadcasting during this Conference.

Otherwise, countries will be obliged to continue the policy of increasing the power and number of their transmitters to meet their essential needs, with all the accompanying disadvantages for broadcasting itself and for other radio services.

#### PORTUGUESE OVERSEA PROVINCES

The Delegation of the Portuguese Oversea Provinces is in full agreement with the statement by the Delegate of the Belgian Congo on the adoption of a footnote stating that international broadcasting cannot be considered an <u>essential service</u>.

We cannot accept that such a service should take precedence over national services.

We emphasize this point, believing it to be of capital importance.

## FRENCH O.P.T.A.

The general method advocated in Working Document No. 659 would be acceptable to my Administration if greater scope were given to the I.F.R.B. in the first stage of the method, thus allowing the provisional schedule to be drafted in the most satisfactory form before it is passed on to Administrations.

My Administration feels that this is one of the most effective elements in the method and that it should be supported as fully as possible.

It is also essential for the different frequencies used for any given programme to be clearly indicated. Under the existing arrangements, several frequencies are often used in one and the same band. If it were possible under the proposed system to have a single well-protected frequency, then the other frequencies should be freed for other purposes.

#### TURKEY

Turkey agrees with the general principles set out in Document No. DT 659, but we have some reservations, especially concerning paragraphs 3 and 11 of Annex 1. Paragraph 3 of Annex 1 wisely allows I.F.R.B. to evolve a practicable period for submission of subsequent schedules, but it seems to us that a limitation should be imposed on the period which the I.F.R.B. can choose, so that Administrations do not suddenly find themselves in an embarrassing position and under pressure. Paragraph 11 stresses the essential character of a service too much for the liking of most present in the group. On our part, we consider all our services equally essential as we could not afford to indulge in noneessential activities as a country with limited funds in comparison to

the requirements of its over-all plans of development. Concerning paragraph 6 of Annex 1, the formulation decided in this group for the form of notice should be brought in line with the decisions of Sub-Committee 5A. Lastly, we do not think the I.F.R.B. plans should be thrown out altogether.

#### UNION OF SOVIET SOCIALIST REPUBLICS

The Soviet Delegation has made a careful study of the procedure worked out by the Ad Hoc Group on high-frequency broadcasting. (Document No. DT 659).

In the opinion of the Soviet Delegation such a procedure would necessitate a considerable reinforcement in the staff and equipment of the Union, accompanied by a significant increase in expenditure. At the same time high-frequency broadcasting would not be improved.

In practice Administrations will be compelled to draw up andforward alist to the I.F.R.B. of the operations of their radio stations four to seven ments before they are due to be brought into use. The I.F.R.B. will combine the separate list into one general list and add frequencies as it judges fit for those countries which do not have any frequencies that have been notified.

This addition of frequencies will be carried out arbitrarily by the I.F.R.B. on the basis of unconfirmed technical standards and theoretical considerations of a general nature: therefore the provisional combined list cannot be free from significant shortcomings, which it will not be possible to eliminate in the period of from one and a half to two months provided for extra agreements. Administrations which discover extra frequencies in the list capable in their opinion of causing harmful interference will need to replace them by others.

When the lists are brought into use the I.F.R.B. and the Administrations will be faced with numerous unsolved conflicts.

Administrations responsible for the quality of broadcasting and relying on the information they receive from listeners or from monitoring services will be compelled to take measures themselves to eliminate interference. This may be done by replacing some notified frequencies by others and thus in practice the provisional list will be altered and all the work done will turn out to be largely useless.

The above-mentioned reasons compel the Soviet Delegation to refuse to accept the above procedure and it cannot approve Document No. DT 659.

#### ANNEX 2

# STATEMENTS MADE AT THE THIRTEENTH MEETING CONCERNING THE RECONTENDED PROCEDURE FOR FREQUENCY MANAGEMENT

#### 1. CANADA Statement on Document No. DT 659, November 9, 1959

It has been stated, verbally, that the I.F.R.B. Draft Plans will be made use of in preparing the proposed Master High Frequency Breadeasting Schedules.

In that case, we believe the Draft Plans deserve mention in Document No. DT 659.

These Draft Plans can be regarded as a series of Master Schedules. They have been condemned, without trial, for several reasons whereas their only major weakness is lack of currency. However, currency can be incorporated in the Plans by the management procedure which we are discussing.

The question of frequency conflicts brings to light the advantages of unified frequency planning. If a central body, such as the I.F.R.B., were given some discretion in frequency-schedulling they could foresee and avoid many of the conflicts which we are laboriously trying to provide for.

It is noteworthy that the question of "essential" or "priority" services did not seem to arise during the formulation of the Draft Plans. These plans accommodate approximately 25% more channel-hours than the channel-hours in actual day-to-day use. Therefore, central frequency-planning holds most promise for most Administrations. This is because the channel-hours segments must be fitted together like pieces of a jig-saw puzzle. Only a representative body like the I.F.R.B. would be given all the pieces to work with. The pieces are, of course, the current broadcasting schedules from all Member countries.

# 2. CANADA Proposed changes to Annex 2 to Document No. DT 659 (page 7)

- Para. 1 delete (reference to 2c dates) all after the word "Register".
- Para. 2b Commence second sentence with "all entries would .... etc." replacing the words (These new).

#### 3. CEYLON

The Delegation of Ceylon has followed with keen interest the discussions which took place at the last two meetings of Committee 5B4, on the Frequency Management Proposal for High Frequency Broadcasting, and wish to make the following observations:

On a point raised by the Delegation of India as to the necessity of transferring 2(c) dates to the new Master International Frequency Record, as suggested in Appendix II to Document No. DT 659, the explanation given by the Chairman of the Ad Hoc Working Group of Committee 5B4, clearly indicated that the promoters of the Frequency Management Procedure are themselves not too certain that this procedure is a workable proposition.

Several Delegations, notably the Delegation of the French Overseas Territories, proposed the inclusion of an additional paragraph to Appendix I of Document No. DT 659, to provide for the eventuality of a failure in the proposed Frequency Management Procedure for High Frequency Broadcasting.

The Delegation of the Federal Republic of Germany thereupon pointed out, quite correctly, that the inclusion of safety regulations would in no way help to clear the chaos that would result, should the Frequency Management Procedure prove a failure in actual practice, as the success or failure of such a procedure can only be determined by an Administrative Radio Conference.

The Delegation of Ceylon shares the anxiety expressed by several other Delegations, and is of the view that, should the Frequency Management Procedure fail, it will entail countries having to interview the International Frequency Registration Board, as settlement of frequency conflicts that would arise would be impossible through correspondence.

The Delegation of Ceylon therefore strongly supports the proposal put forward by the Delegation of Colombia, that this Conference should fix a date - not later than the Spring of 1962 - for the summoning of a "Service Conference" as was proposed, or an Extraordinary Administrative Radio Conference, for the purpose of reviewing the Frequency Management Procedure and other matters which Administrations may wish to bring up.

The Delegation of Ceylon would be grateful if the above comments are included in the Report of Committee 5B4 to Committee 5.

#### 4. BELGIAN CONGO

Of the various texts proposed, our Delegation prefers the new wording of \$ 11 submitted by the Delegate of Australia.

However, we cannot give our unreserved support to that proposal, for it takes no account of our statement that priority should be given to national broadcasting services, which was seconded in a very clear manner by the Delegation of Portugal at our last meeting.

Moreover, Mr. Chairman, we are unable to approve your suggestion (or Mr. Axon's), for we feel that expressions such as "new and developing countries" should be deleted, if we are to avoid a recurrence of the difficulties of definition which arose over the question of "essential services".

#### 5. BELGIAN CONGO

On the whole, we regard the proposals in Document No. DT 659 as satisfactory except for the instructions to the I.F.R.B. for the settlement of disputes.

Although the new wording of paragraph 11 of that document eliminates the ill-defined notion of "essential service", which we had incidentally suggested should be more clearly defined, we nevertheless remain convinced of the need to lay down precise measures to be applied by the I.F.R.B. in order to reduce over-crowding of the high-frequency spectrum and to satisfy Administrations which do not have sufficient frequencies to operate their broadcasting stations.

Such measures must take account of the necessary priority for national requirements, of the need to reduce the number of frequencies used for the transmission of a single programme. etc.

Our Delegation reserves the right to revert to this question in Committee 5.

# 6. THE DELEGATION OF THE DIFFERENT STATES AND TERRITORIES REPRESENTED BY THE FRENCH OVERSEAS POSTAL AND TELECOMMUNICATION AGENCY

An extra paragraph, possibility on failure of procedure,

- para. 17 In the event of a failure of the procedure for the High Frequency Broadcasting Service, that procedure shall be annulled and the other parts of the present regulations shall then come into force relating to those sections for which no plans have been drawn up.
- 7. THE DELEGATION OF THE FRENCH O.P.T.A. said at the end of the discussion that its general agreement in principle announced at the beginning of the discussion applied to the original Document No. 659. In view of the subsequent modifications to paragraph 11, it no longer had so favourable an opinion.

#### 8. INDIA

The Delegate of India suggested the deletion of the words "complete with Column 2 (c) dates" from paragraph 1 of the "Recommendations relating to the Master International Frequency Register".

#### 9. MALAYA

The Malayan Delegation has always supported the concept that High Frequency Broadcasting should be worked on a planned basis. However, observing that the Frequency Management Procedure as found in Document No. DT 659 has the following elements embodied in it, viz a) the gradual progress towards planned frequency usage in High Frequency Broadcasting; b) the opportunity of enhancing international co-ordination and good-will and c) the possibility of the High Frequency Broadcasting interests of the new and developing countries being satisfied, the Malayan Delegation sees no objection to the principles of this procedure at the moment.

#### 10. NETHERLANDS

As for paragraph 1, Annex 1 of Document No. DT 659, the Netherlands proposed to change the November period from four to three months (from the third Sunday in November until the third Sunday in February).

In relation to paragraph 3 of the same Annex, the Netherlands asked whether it is possible for the I.F.R.B. or any other organization to provide short-term propagation predictions eight or ten months in advance. At least it is thought necessary that the I.F.R.B. will give an indication as to what sunspot number will be applied when examining a given schedule. This is to prevent anomalies between the frequencies as determined by Administrations and by the I.F.R.B.

#### 11. CZECHOSLOVAKIA AND U.S.S.R.

These D_clegations suggested that paragraph 12 in its present form had no meaning and suggested the addition of the words "for the preceding period" after the first sentence.

#### 12. U.S.S.R.

The Delegate of the U.S.S.R. stated that his Administration was not prepared to accept the Document No. DT 659 either in its original or its revised form. The Delegate of the U.S.S.R. expressed the view that the Frequency Management Procedure should make provision for the I.F.R.B. to take into account the priority of national broadcasting over international broadcasting in settling any conflicts which may arise.

# ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

COMMITTEE 5

#### AGENDA

#### Fourteenth Meeting - Committee 5

Procedure for frequency registration and International Frequency List

Friday, 13 November 1959, 9 a.m. in Room B

- 1. Consideration of the Summary Record of the Thirtcenth Meeting of Committee 5 (Document No. 467)
- 2. Progress Report of Ad Hoc Group 5
- 3. Progress Report of Working Group 5A
- 4. Progress Report of Working Group 5B and its Sub-Working Groups
- 5. Consideration of final documents from Working Groups
- 6. Any other business.

Dr. Joachim Chairman GENEVE, 1959

Document No DT 747-FES 10 novembre 1959

GROUPE DE TRAVAIL 4E
WORKING GROUP 4E
GRUPO DE TRABAJO 4E

# ORDRE DU JOUR

# Quatorzième séance du Groupe 4E (960 à 10 500 kc/s)

Jeudi 12 novembre 1959, à 9 heures, Salle C

- 1. Suite de l'examen du projet de rapport à la Commission 4 (Document Nº 654 Rev.)
- 2. Divers.

# A G E N D A

# Fourteenth Meeting of Working Group 4E (960 - 10 500 kc/s)

Thursday, 12 November, 1959 at 09.00 hours - Room C

- 1. Continuation of consideration of the draft Report of Committee 4 (Document No. 654, Rev.)
- 2. Any other business.

#### ORDEN DEL DIA

# 14. a sesión del Grupo de trabajo 4E (960 - 10 500 kc/s)

Jueves, 12 de noviembre de 1959, a las 9 de la maĥana - Sala C

- 1. Continuación del examen del proyecto de informe a la Comisión 4 (Documento N.º 654. Rev.)
- 2. Otros asuntos.

Le Président :

The Chairman: G. C. Braga

El Presidente:

Document No. DT 748-E 11 November 1959

SUB-COMMITTEE 7C

## AGENDA

#### Seventeenth Meeting of Sub-Committee 7C

Friday, 13 November 1959 at 0900 hours - Room D

- 1. Summary Record of the Twelfth Meeting (Document No. 510).
- 2. Summary Record of the Thirteenth Meeting (Document No. 516).
- 3. Summary Record of the Fourteenth Meeting (Document No. 517).
- 4. Summary Record of the Fifteenth Meeting (Document No. 531).
- 5. Summary Record of the Sixteenth Meeting (Document No. 541).
- 6. Draft Final Report of Sub-Committee 7C (if available).
- 7. Any other business.

G. Van A. Graves Chairman

# ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 6A

#### RADIO REGULATIONS

## Chapter I, Article 1, Terms and Definitions

The following is a proposal which I would like to submit to Working Group 6A concerning the arrangement of Terms and Definitions in Article 1. A new Section VI, Operating Terms, has been proposed by France and French OPTA (Proposal No. 31, page 41, I.T.U. Yellow Book). In my opinion it is not desirable to break the terms into many sections as it complicates the search for desired terms and makes cross-reference between related terms more difficult. For example, a station is defined by the service in which it operates, so that at least two references in different parts of the list are required. Also, to a person reading the Regulations it is not always obvious as to which Section he should refer for a particular term. Footnote 6 of proposed new Appendix 3 on Frequency Tolerances (Document No. 414) refers to "radar stations". No such stations are defined. The present and proposed definitions for "radar" refor to a "system", yet the present definition is not in Section V, Systems and Equipment, but is in Section I, General. In fact, 5 of the 18 definitions now in Section I refer to systems. An attempt to divide the new terms into the six sections produced similar difficulties.

As a result of the above and other problems, I should like to submit for the consideration of Working Group 6A the following arrangement, in which the terms are grouped by related subjects and related services. This is generally consistent with the context in which the terms are found in the Regulations.

#### Preamble:

#### Section I - SYSTEMS, SERVICES AND STATIONS

Telecommunication
Telecommunication Channel
General Network of Telecommunication Channels
Telecommunication Circuit
One-way Operation
Simplex Operation
Duplex Operation
Semi-duplex Operation

Radio Waves

Radio

Radiocommunication

Telegraphy

Frequency Shift Telegraphy

Frequency Shift

Four-Frequency Diplex Telegraphy

Telegram

Radiotelegram

Telemetering

Radiotelemetering

Telephony

Telephone Call

Radiotelephone Call

Television

Facsimile

Phototelegraphy

Phototelegram

Station

Fixed Service

Fixed Station

Aeronautical Fixed Service

Aeronautical Fixed Station

Radio Relay System

Tropospheric Scatter

Ionospheric Scatter

Broadcasting Service

Broadcasting Station

Mobile Service

Land Station

Mobile Station

Aeronautical Mobile Service

Aeronautical Station

Aircraft Station Land Mobile Service Base Station Land Mobile Station Maritime Mobile Service Port Operations Service Coast Station Ship Station Survival Craft Station Radiodetermination Radiodetermination Service Radiodetermination Station Radionavigation Radionavígation Service Radionavigation Station Radionavigation Land Station Radionavigation Mobile Station Aeronautical Radionavigation Service Maritime Radionavigation Service Radiolocation Radiolocation Service Radiolocation Station Radiolocation Land Station Radiolocation Mobile Station Radiogeodetic Survey Service Radar Primary Radar Secondary Radar Instrument Landing System (ILS) Instrument Landing System Localizer Instrument Landing System Glide Path Marker Beacon

Radio Altimeter

Radio Direction Finding Radio Direction Finding Station Radiobeacon Station Safety Service Space Service Earth-Space Service Space Station Earth Station Objects in Space Radio Astronomy Radio Astronomy Service Meteorological Aids Service Radiosonde Amateur Service Amateur Station Standard Frequency Service Standard Frequency Station Time Signal Service Ionospheric Station Experimental Station Special Service

#### Section II - TECHNICAL CHARACTERISTICS AND PROCEDURES

Distribution of Frequency Bands
Allocation (of a Frequency Band to a Service)
Allotment (of Frequencies to an Area or a Country)
Frequency Allotment Plan
Assignment (of a Frequency to a Station)
In-band Assignment
Out-of-band Assignment
Appropriate Band
Master Radio Frequency Record
Master International Frequency Register

Prior Operation Future Operation Quasi-Conforming Operation Change in Frequency Usage Assigned Frequency Characteristic Frequency Reference Frequency Frequency Tolerance Frequency Band Assigned to a Station Frequency Band Occupied by an Emission Occupied Bandwidth Necessary Bandwidth Double Sideband Emission Single Sideband Emission Independent Sideband Emission Reduced Carrier Emission Out-of-band Radiation of an Emission Spurious Emission

International Frequency List Examination for Conformity

Monitoring
Radio Noise
Natural Radio Noise
Atmospheric Radio Noise
Cosmic Radio Noise
Man-Made Noise
Signal
Modulation

Amplitude Modulation

Intermodulation Products

Harmful Interference

Harmonic Emission
Parasitic Emission

Frequency Modulation Phase Modulation Pulse Modulation Keying Radio Transmitter Main Transmitter Reserve Transmitter Emergency Transmitter Power, Necessary Qualification of Peak Envelope Power of a Radio Transmitter Mean Power of a Radio Transmitter Effective Radiated Power Gain of an Antenna Isotropic or Absolute Gain of an Antenna Relative Gain of an Antenna Gain Relative to a Short Vertical Antenna Antenna Directivity Diagram

Chairman, Working Group 6A

E. W. Allen

Document No. DT 750-E 11 November, 1959

GENEVA, 1959

WORKING GROUP 4D

#### REPORT

#### Sub-Working Group 4D2 to Working Group 4D

Frequency bands for ionospheric scatter: Sub-Working Group was appointed at the third meeting of Working Group 4D on 18 September, 1959, the terms of reference being to consider the desirability or otherwise of allocating special bands for ionospheric scatter technique.

The Sub-Working Group held eight meetings in all.

The following countries were represented in the Group: Austria, Australia, Brazil, Canada, China, Spain, United States of America, France, India, Italy, Japan, New Zealand, Netherlands, Portugal, Federal Republic of Germany, United Kingdom of Great Britain and Northern Ireland, Sweden, Switzerland and the Union of Soviet Socialist Republics. The Sub-Working Group was assisted by Mr. M. S. Kari of the I.F.R.B. Secretariat.

The Sub-Working Group discussed the possibility of allocating special bands in which the systems using ionospheric scatter could be accommodated. The Group has agreed to specify only one band for the purpose on world-wide basis, and four others on Regional basis, in the band 29.7-41 Mc/s. As regards the band 41-68 Mc/s, it was not possible to specify any particular band for the purpose, and the operation, if any, of systems using this technique in this band was agreed to be regulated by means of footnotes only. Particular concern was expressed about interference to the broadcasting service in this band, and as will appear from the Annex, this has been covered by means of adequate provisions in the footnotes.

The proposal from the U.S.S.R. for accommodating systems using ionospheric scatter technique in the frequency band 56.75-57.75 Mc/s could not be discussed in the Sub-Working Group.

The conclusions reached in the Sub-Working Group are shown in the Annex. The Delegations of Brazil and of the Federal Republic of Germany reserved their right to comment further on footnote No.3.

H. Shinkawa Chairman

Annex: 1

#### ANNEX

Frequency band (Mc/s)	Allocation to services				
	World-wide	Regional			
		Region l	Region 2	Region 3	
29.7 - 41	a) Fixed b) Mobile 1) 2) 3)				

1) Systems designed to use ionospheric scatter or other fixed service systems designed to operate over distances exceeding 800 km shall confine their emissions to the following bands:

32.6 - 33 Mc/s 34.6 - 35 Mc/s - Regions 2 and 3 36.2 - 36.6 Mc/s - Region 1 36.4 - 36.8 Mc/s - Regions 2 and 3 39 - 39.4 Mc/s - Region 1

and shall have priority in Region 2 in the bands available for use in that Region.

- 2) The operation of stations designed to use ionospheric scatter is permitted only under arrangements to be agreed between Administrations concerned or affected.
- 3) Ionospheric scatter stations existing on 1 January, 1960 may continue to operate on their present assignments.
- 4) In the case of frequency bands limited to a particular region, the provisions of paragraph 90 shall apply and Administrations shall avoid beaming such transmissions towards other regions unless specifically co-ordinated otherwise.

Frequency band (Mc/s)	World-wide	Region 1	Region 2	Region 3
41-68		41-47 a) Broad- casting * b) Fixed c) Mobile 2)	41~50 a) Fixed b) Mobile 2) 3) 5)	41-44 a) Fixed b) Mobile 2) 5)
		47-68 Broadcasting		a) Fixed b) Mobile c) Broad- casting 2) 3) 5)
			50-54 Amateur	50-54 Amateur
			54-74.6 a) Fixed b) Mobile c) Broad- casting (Cont'd)	54-68 a) Fixed b) Mobile c) Broad- casting 2) 3)

⁵⁾ Systems designed to use ionospheric scatter which may cause harmful interference to the broadcasting service are not permitted.

^{*} In Region 1 the broadcasting service is the primary service. Fixed and mobile services are secondary services as defined in Document No. 242 (Rev. 2) 7A.

# CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No. DT 751-FES CORRIGENDUM No. 1 12 novembre 1959

COMMISSION 4 COMMITTEE 4 COMISIÓN 4

#### ORDRE DU JOUR

24ème séance - Commission 4 (Tableau de répartition des bandes de fréquences)

Vendredi, 13 novembre 1959, 15 heures - Salle A

Ajouter le nouveau point suivant:

Examen du 2ème rapport du Groupe de travail 44 concernant les Articles 6, 7 et 9 du Règlement des radiocommunications. (Document N° 506 du 31 octobre 1959).

#### **AGENDA**

Twenty-fourth Meeting of Committee 4 (Frequency Allocations)
Friday, 13 November 1959 at 3 p.m. - Room A

ADD new item

Consideration of the Second Report by Working Group 4/ concerning Articles 6, 7 and 9 of the Radio Regulations (Document No. 506 dated 31 October, 1959).

#### ORDEN DEL DIA

24. a sesión de la Comisión 4 (Distribución de las bandas de frecuencias)

Viernes, 13 de noviembre de 1959, a las 3 de la tarde - Sala A

Añádase el nuevo punto siguiente:

Examen del 2º informe del Grupo de trabajo 4/1, relativo a los Articulos 6, 7 y 9 del Reglamento de Radiocomunicaciones (Documento N.º 506 del 31 de octubre de 1959).

Le Président :

The Chairman : Gunnar Pedersen

El Presidente:

GENEVE, 1959

Document N° DT 751-FES 12 novembre 1959

COMMISSION 4 COMMITTEE 4 COMISION 4

#### ORDRE DU JOUR

# 24ème séance - Commission 4 (Tableau de répartition des bandes de fréquences)

Vendredi 13 novembre 1959, 15 heures - Salle A

1. Examen des points en suspens du Document N° 457. (3ème rapport du Groupe de travail 4B)

(a) Bande de fréquences 510-525 kc/s (USA et MEX)

- (b) Suppression du nouveau renvoi 28a) RR 142a (deuxième votation).
- 2. Examen du 4ème rapport du Groupe de travail 4B à la Commission 4 (Document N° 521) relatif à la bande de fréquences 1605-4000 kc/s.
- 3. Examen du rapport du Groupe spécial relatif à la méthode future d'attribution des fréquences (Document N° 525) et de la proposition de la République Fédérale d'Allemagne (Document N° 528).
- 4. Divers.

#### AGENDA

## Twenty-fourth Meeting of Committee 4 (Frequency Allocation)

Friday, 13 November, 1959, at 3 p.m. - Room A

1. Consideration of outstanding points from Document No. 457.

(Third Report by Working Group 4B)

- (a) Frequency band 510-525 kc/s (USA and MEX)
- (b) Deletion of new footnote 28a) RR 142a (second votation).
- 2. Consideration of the Fourth Report by Working Group 4B to Committee 4 (Document No. 521) concerning the frequency bands 1605-4000 kc/s.
- 3. Consideration of the Report by Working Group 4 Ad Hoc on future frequency allocation policy (Document No. 525) and of the proposal by the Federal Republic of Germany (Document No. 528).
- 4. Any other business.

#### ORDEN DEL DÍA

# 24. a sesión de la Comisión 4 (Distribución de las bandas de frecuencias)

Viernes, 13 de noviembre de 1959, a las 3 de la tarde - Sala A

1. Examen de los puntos pendientes del Documento N.º 457 (Tercer informe del Grupo de trabajo 4B).

(a) Banda de frecuencias 510-525 kc/s (USA y MEX)

- (b) Supresión de la nueva nota 28a) RR 142a (segunda votación).
- 2. Examen del 4º informe del Grupo de trabajo 4B a la Comisión 4 (Documento N.º 521), relativo a la banda de frecuencias 1605-4000 kc/s.
- 3. Examen del informe del Grupo de trabajo especial 4, relativo a la futura política de distribución de frecuencias (Documento N.º 525) y de la proposición de la República Federal de Alemania (Documento N.º 528).
- 4. Otros asuntos.

Le Président

The Chairman : Gunnar Pedersen

El Presidente :

GENEVA, 1959

WORKING GROUP 4D

## REPORT

#### Sub-Working Group 4D8 to Working Group 4D

- 1. The Sub-Working Group held five meetings. Its terms of reference were: to consider and make recommendations concerning the proposals contained in DT No. 122, Add. 11, for the band 216 235 Mc/s first in Region 1 and secondly those for a world-wide allocation.
- 2. The Delegations of the following countries were represented at the meetings:

Austria, Belgium, Bulgaria, Czechoslovakia, Denmark, the Federal Republic of Germany, France, Greece, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the Union of South Africa, U.S.S.R., the United Kingdom and the United States of America.

- 3. The Sub-Working Group had the welcome assistance of Mr. Smith and Mr. Kari of the I.F.R.B.
- 4. The Group discussed the band 216 235 Mc/s dividing it into two parts, 216 223 and 223 235 Mc/s, taking into account Chapter I of the Final Protocol to the European Broadcasting Agreement (Stockholm, 1952) and its final Recommendation. As a result at the end of the third meeting, two working papers (DT 678 and DT 679) were produced. These contained tentative allocations and proposals for the two bands. During the discussions at the third meeting, the <u>Delegate of Portugal</u> made a statement which he desired to have recorded. That statement appears as Annex 2 to this Report.
- During the fourth meeting, the two working papers, suitably amended by agreement, were accepted as showing the Region 1 plan for the band under discussion. Their content appears in Annex 1 to this Report.
- 6. The <u>Delegate of the United States</u> withdrew Proposals Nos. 3360, 3361 and 3362. This rendered unnecessary any further discussion on world-wide allocations in this band.
- 7. The Delegate of the Union of South Africa reserved his position and advised the Chairman that he would return to the question of allocations in the band 216 235 Mc/s.

- 8. In the absence of a delegate of British West Africa, the meeting was unable to reach a conclusion on Proposal No. 5193 (Document No. 84).
- 9. The Delegates for Albania, Bielorussian S.S.R., Bulgaria, Czechoslovakia, Hungary, Poland, Roumania, Ukranian S.S.R., and the U.S.S.R. decired to see the following text in place of note 90f) in Annex 1:

"Albania, the Bielorussian S.S.R., Bulgaria, Czechoslovakia, Hungary, Poland, Roumania, the Ukranian S.S.R., and the U.S.S.R. use broadcasting in the band 223-230 Mc/s as a service with equal rights to the aeronautical radionavigation service."

The Delegates for Belgium, Denmark, France, Italy, the Netherlands, Portugal, the Federal Republic of Germany, the United Kingdom and Sweden were not able to agree to the above wording of note 90f).

The <u>Delegate for Denmark</u> made the observation that the form of language used in note 90f) in Annex 1 to the present report is unclear and not proper to a footnote in the frequency allocation table.

U. Mohr Chairman

Annexes: 2

# ANNEX 1

# PROPOSED ALLOCATIONS FOR THE BAND 216 - 235 MC/S

Frequency Band Mc/s	Region l
216 - 223	Aeronautical radionavigation 90a) 90b) 90c) Broadcasting 90d) 91)
223 - 235	Aeronautical radionavigation * Fixed Mobile 90b) 90d) 90e) 90f) 91)

204a ADD 90a) The aeronautical radionavigation service will be operated only in Denmark, France, Greece, the Netherlands, Portugal, the United Kingdom, Sweden and the Union of South Africa and Territory of South West Africa.

The broadcasting service will be introduced in such a way so as not to reduce the service areas existing on (°) December, 1959, or such lesser areas as may exist thereafter for the aeronautical radionavigation service of the above-mentioned countries.

The agreement of these countries as applicable, will be obtained before new broadcasting stations are brought into operation which could cause harmful interference to the acronautical radionavigation service.

The countries employing the aeronautical radionavigation service must not operate airborne equipment during flights over countries in which the band is used exclusively for the broadcasting service.

- 204b ADD 90b) In France and in Italy the provisions of note 1) above apply to the band 216 225 Mc/s.
- 204c ADD 90c) In Italy the band 216 223 Mc/s is additionally allocated to the fixed service.
- 204d ADD 90d) In the United Kingdom the band 216 225 Mc/s is used only for aeronautical radionavigation services and on a secondary basis for the radiolocation service.

^(°) Date of Final Acts of the Geneva Conference.

#### Footnotes continued:

- 204e ADD 90e) In Austria and Switzerland the band 223 230 Mc/s is allocated on a permitted basis for broadcasting only and the band 230 235 Mc/s is used by the fixed and mobile services only.
- 204f ADD 90f) Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania and the U.S.S.R. favour broadcasting in the band 223 230 Mc/s as a service with equal rights to the aeronautical radionavigation service.
- 205 MOD 91) In Northern Rhodesia and Southern Rhodesia the band 220 225 Mc/s is allocated for the Amateur Service.

#### Note:

RR 203 and RR 204 are deleted.

## $V \ M \ M \ E \ X \ \ S$

#### STATEMENT BY THE DELEGATE OF PORTUGAL

Mr. Chairman,

The Portuguese Administration studied carefully the problem of allocating the band 216 - 223 Mc/s to the Aeronautical Radionavigation and BC services on an equality of rights, as it seems has been decided by the majority of delegations present on the Sub-Working Group 4D8.

First of all, Sir, we feel that dealing with so important a matter as to share a band allocated after a long time to a safety of life service with BC service, it is impossible to refer to a majority or a minority. What must be considered here is if this Sub-Working Group is prepared to agree that tomorrow hundreds of human lives should be endangered or not.

To the best of memory, Sir, this will be the first time such a so astonishing decision is taken upon.

Any we must say, Sir, that we don't know how it is possible to operate on an equality of rights those two services. Therefore, looking around, we see here such an assembly of clever and well qualified telecommunication experts that we are forced to decide perhaps by our weak mind! We put forward again the example offered before of what will happen when an aircraft still using radio navigation aids on this band must fly over Europe w with a lot of BC and TV stations operating on this particular band and we should be very pleasured if any delegation present could be so kind to teach us on this matter.

On the other hand, Sir, the Portuguese Administration is well in favour of the development of TV and BC services, because we think they fulfil very important purposes on extending the friendship between nations and contributing to higher standards of education, this is to say to a better and peaceful way of life. This is the reason why we are extending as much and as quickly as possible our own TV and BC nets. But that doesn't mean that those services must be allowed to cause harmful interference to one another.

At last but not at least, Mr. Chairman, we feel of the discussions having taken place on this Sub-Committee that the delegations with definite requirements would not oppose a compromise solution maintaining the status quo with a recommendation as outlined by the Swiss Delegation which we think would satisfy everybody, because that one is really the only reasonable solution for the problem we are facing now.

On this assumption, Sir, the Portuguese Delegation cannot accept the solution new proposed, and reserves its rights to come back again to this subject later.

Two points yet, Mr. Chairman:

- 1) We request our statement to be included in the report of this Sub-Committee calling the attention of all delegations to this particular problem.
- 2. If the United Kingdom and Swiss Delegations see no objection, the suggested United Kingdom footnote and the text of the suggested Swiss recommendation be also included in that report.

Document No DT 754-FES 12 novembre 1959

COMMISSION 6 COMMITTEE 6 COMISION 6

#### ORDRE DU JOUR

## 13ème séance de la Commission 6 (Technique)

Vendredi 13 novembre 1959, 9 heures - Salle C

- 1. Compte rendu de la 10ème séance (Document Nº 536).
- 2. Rapport du Président du Groupe de travail 6A.
- 3. Rapport du Président du Groupe spécial de rédaction.
- 4. Règlement des Radiocommunications :
  - a) Recommandation N° 3 Proposition N° 4599 (Etats-Unis)
  - b) Recommandation No 4 Proposition No 3062 (Inde)
  - c) Recommandation Nº 7.
  - d) Recommandation No 8.
- 5. Divers

#### AGENDA

## Thirteeth Meeting - Committee & (Technical)

Friday. 13 November. 1959 at 0900 hours - Room C

- 1. Summary Record of Tenth Meeting (Document No 536).
- 2. Report of Chairman of Working Group 6A.
- 3. Report of Chairman of Ad Hoc Drafting Group.
- 4. Radio Regulations
  - a) Recommendation No 3 Proposal No 4599 (U.S.A.)
  - b) Recommendation No 4 Proposal No 3062 (India)
  - c) Recommendation No 7.
  - d) Recommendation No 8.
- 5. Other Matters.

# ORDEN DEL DIA

# 13. a sesión - Comisión 6 (Técnica)

Viernos, 13 de noviembre de 1959, a las 9 de la mañana, Sala Co

- Informe de la 10^a sesión (Documento Nº 536). l.
- Informe del Presidente del Grupo de trabajo 6A. 2.
- Informe del Presidente del Grupo especial de redacción. 3.
- 4. Reglamento de radiocomunicaciones :
  - a) Recomendación Nº 3 Proposicion Nº 4599 (Estados Unidos) b) Recomendación Nº 4 Proposicion Nº 3062 (India)

  - c) Recomendación Nº 7.
  - d) Recomendación Nº 8.
- 5. Otros asuntos.

Le Président :

The Chairman: M.N. Mirza

El Presidente:

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 755-E 12 November, 1959

WORKING GROUP 6A

#### DEFINITIONS

The following new definition and amendments to existing definitions requested by Committee 7 are submitted for consideration:

- ADD Survival Craft Station: A mobile station in the maritime or aeronautical mobile service located on board any lifeboat, liferaft or other survival craft, or otherwise provided solely for survival purposes.
- 24 MOD <u>Maritime Mobile Service</u>: A mobile service in which coast stations, ship stations and survival craft stations participate.
- 25 MOD <u>Aeronautical Mobile Service</u>: A mobile service in which aeronautical stations, aircraft stations and survival craft stations participate.
- 41. MOD <u>Coast Station</u>: A land station in the maritime mobile service.
- 42 MOD <u>Aeronautical Station</u>: A land station in the aeronautical mobile service. In certain instances an aeronautical station may be placed on board a ship.
- 45 MOD Ship Station: A mobile station in the maritime mobile service located on board a vessel, other than a survival craft, which is not permanently moored.

GENEVA, 1959

Document No. DT 756-E 12 November, 1959

SUB-COMMITTEE 7A

#### FOURTH REPORT

#### BY WORKING GROUP 7A4 TO SUB-COMMITTEE 7A

The aim of this report is to shew the progress made in Working Group 7A4 in its work of revising Nos. 412 to 418 and 420 to 445 of Article 19, and in its examination of the relevant proposals.

The provisions of Section V, Article 13, together with references to Recommendation 323 of the C.C.I.R. (Los Angeles, 1959) having been included in Article 19 in the form of two new sections (see the Working Group's second report), Section I in the existing Regulations, comprising Nos. 412 to 418, will become Section III.

Similarly the existing Section II (No. 419: Allocation of International Series) will become Section IV, and is the subject of our reports 1-3 and 5.

The present Section III, comprising Nos. 420 to 445, becomes Section V.

The Annex hereinafter summarizes the outcome of the work done on the new Sections III and V. This annex includes those paragraphs in Article 19 on which the Working Group could not agree after considerable discussion. These are referred back to Sub-Committee 7A. The annexing includes, too, the texts on which agreement was possible.

Agreement was reached either on the maintenance of the texts of the present Regulations or on amended texts, taking into account all or part of the proposals made on them.

The texts adopted by the Working Group and proposed to the Sub-Committee call for the following considerations:

- the Delegation of South Africa requested that an indication should be made in the report to the effect that it has not been able to be present at all the meetings of the Working Group and therefore it reserved its position on certain points and in particular with regard to the insertion in No. 413 of a reference to the new text proposed under No. 411.

- the Indonesian Delegation requested that it should be indicated that it had not been able to support the general agreement on the new drafting of No. 416.

During its eighth meeting on 10 November, the Group examined a proposal by the Chairman of Working Group 7A7 to delete from the fourth paragraph of No. 429 the following phrase which appears in the Annex: "as it appears in the international documents."

When this new amendment was taken into consideration, the text of this clause read as follows:

- "the name of the ship preceded, if necessary, by the name.... (the rest without change)"

It was not possible to arrive at an agreement in Working Group 7A4 during the discussion of this proposal and in the absence of Mr. RON it was decided to submit it for examination to Sub-Committee 7A.

Chairman,

M. Sannier

Annex: 1

### $A \quad \mathbb{N} \quad \mathbb{N} \quad \mathbb{E} \quad \mathbb{X}$

#### CHAPTER VII

#### Identification of Stations

#### Article 19

147 ES 442 94		and and and and and and		
TITLE	MOD	Section III.	Assignment of Call Signs	The present Section the title has been a

#### 412 NOC \$1 (1) Existing RR text

- 413 MOD (2) However, it is not compulsory to assign call signs from the international series to stations which are easily identified by other means (see No. 411c) and whose signals of identification or characteristics of emission are published in international documents.
- 414 MOD §2 (1) When a fixed station uses more than one frequency in the international service, each frequency can be identified by a separate call sign, formed as laid down in numbers 421 and 422 and used solely for this frequency.
- 415 MOD (2) When a broadcasting station uses more than one frequency in the international service, each frequency can be identified by a separate call sign used solely for this frequency or by some other appropriate means, such as announcing the name of the place and frequency used.
- 416 MOD (3) When a land station uses more than one frequency, such frequencies may, if desired, be identified by separate call signs.

#### Observations

The present Section I of which the title has been amended by Working Group 7A4 at the suggestion of the Drafting Group.

Proposal No. 4018 withdrawn.

Proposal No. 4019 withdrawn. The Working Group proposes to insert in number 413 a reference to the new text proposed in number 411c of the new Section II (see 2nd Report of Working Group 7A4)

Present text supplemented in accordance with Proposal No. 1404 and amended with reference to Proposal No. 4024 which was changed with the aim of making the provisions optional.

Present text amended in accordance with Proposal No. 4204 in order to make the provision optional.

Proposal No. 1405.

Proposal No. 4025 withdrawn.

Proposal No. 4026 not seconded. Present text supplemented by Proposal No. 1407. New draft to be reviewed with regard to the numbering of the lists which will be kept by Sub-Committee 7A.

Drafting Proposal No. 4027. If the correction propose which has been forwarded to Committee 8 is accepted, it will concern several numbers of the Regulations

Present Section II becomes Section IV.

Proposal No. 4032 withdrawn as a result of the United States decision on Proposal No. 4029.

Proposal No. 4033 withdrawn.

(3b) It is recommended that coast stations use a joint call sign for each frequency series 1).

417 MOD §3 (1) Each country shall choose the call signs of its stations from the international series allocated to it, and shall, in accordance with Article 20, notify to the Secretary-General of the Union the call signs which it has assigned together with the information which is to appear in Lists I to VII inclusive.

These notifications do not include call signs assigned to amateur and experimental stations.

418 NOC (2) Existing RR text.

TITLE MOD Section IV. Allocation of International Series

419 MOD §4 - note - has been the subject of reports Nos. 1 - 3 and 5 of Working Group 7A4.

TITLE MOD Section V. Formation of Call Signs

420 NOC §5 - Existing RR text

421 NOC a) Existing RR text.

¹⁾ By "frequency series" is meant a group of frequencies, each of which belongs to one of the different frequency bands between 4 000 and 23 000 kc/s that are allocated exclusively to the maritime mobile service.

Proposals Nos. 5200 (Document No. 88) and 1419 withdrawn. No agreement possible in Working Group 7A4.

Proposal No. 4035 discussed after its support by Norway. Approval of the status quo.

Proposal No. 4036 discussed after being supported by the Netherlands.
Approval of the status quo.

Examination of Proposals Nos. 4021 to 4023 - 4037, 1421 to 1424.

Agreement in Working Group 7A4 to submit for examination in Sub-Committee 7A the text opposite subject to the addition of a new paragraph to No. 429 referring to survival craft on board ships which use radiotelephony (with reference to No. 425).

Proposal No. 4038 supported by the Federal Republic of Germany. No agreement possible in Working Group 7A4.

Proposal No. 1425 unsupported. No agreement possible in Working Group 7A4.

Examination of Proposal No. 1427 after being supported by the United Kingdom.

Agreement to submit the text opposite for examination in Sub-Committee 7A.

- 422 NOC b) Text for consideration by Sub-Committee 7A.
- 423 NOC c) Existing RR text.
- 424 NOC d) Existing RR text.
- 425 MOD e) The call sign of the ship followed by two digits (other than 0 or 1) in the case of lifeboats, liferafts and other survival craft.

  ebis) The call sign of the parent aircraft including five letters followed by one digit (other than 0 or 1) in the case of lifeboats, liferafts and other survival craft. This provision does not apply to stations which transmit automatic distress signals.
- f) Text to be considered by Sub-Committee 7A.
- 427 NOC g) Existing RR text.
- 428 ... \$6 (1) Text to be considered by Sub-Committee 7A.
- 429 MOD (2) Ship stations using radiotelephony may use as a call sign - a call sign established
  - a call sign established in conformity with No. 423;
  - a call sign consisting of two or three letters followed by four digits (other than the digit 0 or 1 where they immediately follow a letter)

- the name of the ship as it appears in the international documents, preceded, if necessary, by the name of the owner and on condition that there is no possible confusion with distress, urgency and safety signals.
- 429a ADD \$2b In the case of lifeboats, liferafts and other survival craft on board ships using radiotelephony, the call sign shall be formed in accordance with the provisions of No. 425 \$e.
- 430 MOD (3) Aeronautical stations using radiotelephony may use as a call-sign
  - the name of the airport or geographical name of the place followed, if necessary, by a suitable word indicating the function ensured.
- 431 MOD (4) Aircraft stations using radiotelephony may use as a call-sign
  - a call-sign established in conformity with No. 424, which may be preceded by a word designating the owner or the type of aircraft;
  - a combination of characters corresponding to the official registration marks assigned to the aircraft;
  - a word designating the air line, followed by the flight number.
- 43la ADD (4bis) In the exclusive aeronautical mobile frequency bands, aircraft stations using radiotelephony may use other methods of identification after special agreement between Governments on condition that they are internationally known.

Proposal No., 1428 examined. New text proposed.

Existing text amended and amplified from similar proposals: Nos. 1429, 1430, 1431, 1432 and 1433.

New text proposed on the lines of Proposal No. 1434 amended.

431ъ	ADD	life boar the	raft d ai call	r) In the case of lifeboats, s and other survival craft on rcraft using radiotelephony, -sign shall be formed in accord to the provisions of No.425 e bi
432	NOC		(5)	Existing RR text
433	NOC		(5)	Existing RR text
434				Text to be studied by Sub- e 7A.
435			a	) do
436			ъ	) do
437			(2)	do
438	NOC	<b>§</b> 8	(1)	Existing RR text
439	NOC		(2)	Existing RR text
440	NOC		a)	Existing RR text
441	NOC		ъ)	Existing RR text
			,	
442	NOC		c)	Existing RR text
443	NOC		(3)	Existing RR text
			/ \	

(4) Existing RR text

Existing RR text

444

445

NOC

NOC §9

Provision similar to that of No. 429a submitted for study to Sub-Committee 7A further to a proposal by India, supported by is) France and the United Kingdom.

Proposal 1435 not adopted. As a result of confusion between the texts of the proposals in the various languages, Working Group 7A4 has preferred the status quo.

Proposal No. 1436 not adopted.

No agreement was possible on this set of numbers after examination of the set of relevant proposals:

Proposals Nos. 4040, 4041, 1437, 1438, 1439, 1440, 1441 and 4042.

Proposal No. 4043 withdrawn further to the decision of the United States delegation concerning Proposal No. 4029.

With drafting amendment to the English text. Proposal No. 4044

Proposal No. 4045 withdrawn further to the decision of the United States delegation concerning Proposal No. 4028

# ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

Document No. DT 757-E

ADDENDUM No. 1

14 November, 1959

WORKING GROUP 4B

#### ADDENDUM

In the Annex to the Report of Sub-Working Group 4B2 to Working Group 4B, the Footnotes 2b) and 7a) are to be modified to read as follows:

- 111b ADD 2b) In Albania, Bulgaria, Poland, Czechoslovakia and the U.S.S.R. the frequency band 80-150 kc/s is allocated on a secondary basis to the Aeronautical and Land Mobile Services while within and between these countries these services shall have equal right to operate.
- 116a ADD 7a) In Albania, Bulgaria, Poland, Czechoslovakia and the U.S.S.R. the frequency band 130-150 kc/s is allocated on a secondary basis to the Radionavigation service while within and between these countries this service shall have equal right to operate.

K.A. Williams
Chairman

Document No. DT 757-E 12 November, 1959

#### WORKING GROUP 4B

#### REPORT

## Sub-Working Group 4B2 to Working Group 4B

- 1. Sub-Working Group 4B2 was assigned terms of reference to study proposals to modify the frequency allocation table within the limits 70-150 kc/s. In carrying out its mandate the Sub-Working Group has held five meetings and has completed a detailed examination of all proposals referred to it by Working Group 4B.
- 2. The following Delogations participated in the work of the Subgroup:

France Portugal Argentina Federal Republic of Germany Australia India Austria Ireland Ukrainian S.S.R. Bolgium Italy United Kingdom Brazil Japan Sudan Sweden Canada Mexico Belgium Congo Norway Switzerland Denmark New Zealand U.S.S.R. United States of Pakistan Venezuela America Paraguay

- 3. At its first meeting Commander L.R. Raish, U.S.N. of the Delogation of the U.S.A. agreed to serve as Rapporteur and Mr. John H. Gayer, member of the I.F.R.B. offered to assist the Sub-Working Group.
- It was evident at a very early stage in the discussions that many obstacles stood in the way of unanimous agreement, either Regionally or World-wide. In order to provide opportunity for interested Delegations to hold extra-mural meetings with a view towards reconciliation of their divergent points of view and conflicting requirements, the Chairman called several long adjournments. It was hoped that by adopting this course the work of the Sub-Group would be facilitated and an earlier, more widely acceptable, if not universally agreeable solution might be reached. However, this hope was not realised and, on the basis of the majority opinion expressed in the Sub-Working Group, the compromise Table of Frequency Allocations, attached as Annex 1, was eventually drawn up.
- 5. The following reservations were recorded:
  - a) The <u>Delegate of the United Kingdom</u> reserved the right to make further reference to the entire band 70-130 kc/s.

- b) The <u>Delegate of Italy</u> reserved the right to make further reference to the question of affording priority to the Radionavigation service in the band 90-110 kc/s in the Mediterranean Area.
- c) The <u>Delegate of the United States of America</u> reserved his position with regard to footnotes 2) and 7) as they may affect U.S.A. operations in Region 3.
- d) The <u>Delegates of France and Portugal</u> reserved their positions with regard to the allocation to the Fixed Service in the band 130-150 kc/s
- e) The Delegate of the United Kingdom reserved his position with regard to the band 130-150 kc/s.
- 6. The <u>Delegate of India</u> expressed concern as to the interpretation which might be placed by the <u>Drafting Committee upon the word "exclusive"</u> in footnotes 2) and 7) in the light of the provisions of Document No. 242. He requested that the attention of Working Group 4B be drawn to this matter.

#### 7. Chairman's Remarks

With reference to paragraph 6 above there is an undoubted contradiction in terms between the wording used in the opening phrase of footnotes 2) and 7) and the sub-paragraphs a) and b) of those footnotes. The Chairman suggests that the following texts may be worth consideration as alternatives for footnotes 2) and 7).

Footnote 2). In the frequency bands 70-72 kc/s and 84-86 kc/s Radionavigation employing c.w. systems only shall be the primary service except:

- a) In Japan Radionavigation shall be a permitted service.
- b) In Pakistan Radionavigation shall be a secondary service.

Footnote 7). In the frequency bands 112-117.6 kc/s and 126-129 kc/s Radionavigation employing c.w. systems only shall be the primary service except:

- a) In Japan throughout these bands and in the Federal Republic of Germany in the band 115-117.6 kc/s Radienavigation shall be a permitted service.
- b) In Pakistan throughout these bands and in France in the band 115-117.6 kc/s Radionavigation shall be a secondary service.

K.A. Williams
Chairman

### A N N E X

D		Allocation to	services	
Frequency band (kc/s)	World-wide		Regional	
(KC/S)	worla-wide	Region l	Region 2	Region 3
70-90	2a)	a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavi- gation 2) (CW systems) 2b)	a) Fixed* b) Maritime mobile* (coast tele- graph Al and Fl) c) Maritime radionavi- gation* 2c) (CW systems) d) Radioloca- tion	a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavi- gation 2) (CW systems)

- 111 MOD
- 2) The frequency bands 70-72 kc/s and 84-86 kc/s are reserved for the exclusive use of CW systems of radionavigation except that in these bands:
  - a) in Japan radionavigation shall be a permitted service (Document No. 242 (Rev.2));
  - b) in Pakistan, radionavigation shall be a secondary service (Document No. 242 (Rev.2)).
- llla; ADD
- 2a) The intermittent use of very low power (under 10 Watts) hydrographic survey systems is authorized in the band 86-135 kc/s provided any harmful interference from other authorized services is accepted and harmful interference is not caused to other services;
- 111b ADD
- 2b) In Poland and the U.S.S.R., in the frequency band 80-150 kc/s is allocated additionally to the land and aeronautical mobile services. However, these services shall not cause harmful interference to the Regional and/or World-wide authorized services.
- llle ADD
  - 2c) The establishment and operation of maritime radionavigation stations shall be subject to arrangements between Administrations having other services which may be affected. However, the fixed and maritime mobile services shall not cause harmful interference to maritime radionavigation stations when so established.
  - * In Region 2, the fixed, maritime mobile and aeronautical radionavigation services are the primary services. The radiolocation service is a secondary service according to paragraph 7A of Document No. 242 (Rev.2)

	or the manual formation and the same and the same	Allocation	to services	
Frequency band			Regional	
kc/s	World-wide	Region 1	Region 2	Region 3
90 - 110	2a)	a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavi- gation 3) 2b)	a) Fixed * b) Maritime mobile * (coast tele- graph Al and Fl) c) Radionavi- gation *3) d) Radio- location 2b)	a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavi- gation 3) 2b)

- 112 MOD
- 3) The development and operation of long distance radionavigation systems are authorized in this band, which will become exclusively allocated, wholly or in part, for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services. If a pulse radionavigation system is employed the pulse emissions must nevertheless be confined within the band and must not cause harmful interference outside the band to stations operating in accordance with the Regulations. During the period prior to the international adoption of any long distance radionavigation system;
  - a) in Regions 1 and 3 the operation of specific radionavigation stations shall be subject to arrangements between Administrations having authorized services which may be affected. Once established under such arrangements radionavigation stations shall be protected from harmful interference;
  - b) in Region 2 the radionavigation service shall have priority (Document No. 242 (Rev.2)).
- In Region 2, the fixed, maritime mobile and radionavigation services are the primary services. The radiolocation service is a secondary service according to paragraph 7A of Document No. 242 (Rev. 2).

Emocranav		Allocation	to services	
Frequency band	World-wide		Regional	
kc/s	wor.ra-wrae	Region l	Region 2	Region 3
110 - 130	2a) RR 233 (Rev	a) Fixed b) Maritime mobile (calling frequency 143 kc/s Art. 33) c) Radionavigation 4) (c.w.systems) 2b)	a) Fixed* b) Maritime mobile* (calling frequency 143 kc/s. Art.33) c) Maritime radionavigation* 2c) (c.w.systems) d) Radiolocation	a) Fixed b) Maritime mobile (calling frequency 143 kc/s. Art. 33) c) Radionavigation 4) (c.w. systems)

- 113 MOD 4) The frequency bands 112 117.6 kc/s and 126 129 kc/s are reserved for the exclusive use of c.w. systems of radionavigation except that:
  - a) in Japan throughout these bands and in the Federal Republic of Germany in the band 115 117.6 kc/s radionavigation shall be a permitted service (Document No. 242 (Rev. 2));
  - b) in France in the band 115 117.6 kc/s and in Pakistan throughout these bands radionavigation shall be a secondary service . (Document No. 242 Rev.2)).

In Region 2, the fixed, maritime mobile and maritime radionavigation services are the primary services. The radiolocation service is a secondary service according to paragraph 7A of Document No. 242 (Rev.2)

	Allocation to services			
Frequency band Mc/s	World-wide	Regional		
		Region 1	Region 2	Region 3
130 - 150	2a) RR 233(Rev.)	a) Maritime mobile* (ship tele- graph) (calling frequency 143 kc/s. Art. 33) b) Fixed 7 2b) 7a)	a) Fixed 7) b) Maritime mobile (calling frequency 143 kc/s. Art. 33)	a) Fixed 7) b) Maritime mobile (calling frequency 143 kc/s. Art. 33)

114 SUP 5)

115 SUP 6)

116 NOC 7) The fixed service is authorised provided no harmful interference is caused to ship telegraphy in the North Atlantic and Mediterranean Areas.

116a ADD 7a) In Poland and the U.S.S.R. the frequency band 130 - 150 kc/s is allocated additionally to the radionavigation service. However, this service shall not cause harmful interference to the regional authorised services.

^{*} In Region 1, the maritime mobile service is the primary service. The fixed service is a permitted service according to paragraph 7B of Document No. 242 (Rev. 2).

WORKING GROUP 4E

#### REPORT

#### Working Group 4E Ad Hoc to Working Group 4E

1. The Working Group held three meetings which were attended by Delegates of the following countries:

Australia Netherlands
Belĝium New Zealand
Canada United Kingdom
United States Sweden
of America Mexico
France U.S.S.R.
Italy

and by Observers of the International Astronomical Union.

- 2. The Ad Hoc Group worked under the following terms of reference:
  - a) to deal with the proposals for Radio Astronomy in the frequency bands between 960 10 500 Mc/s;
  - b) to deal with the appropriate footnotes regarding the U.S.S.R. Proposals Nos. 5327, 5329 and 5333.
- 3. The proposals for Radio Astronomy contained the following requirements:
  - a) a frequency band between 1 645 1 675 Mc/s to cover the emissions of the OH-line (U.S.S.R. Proposal No. 5322).

There was little support for this proposal because of the general feeling in the Group that as the very week CH- omissions were, up until now, never heard, and it could not be foreseen if and when this would be the case, an allocation to the Radio Astronomy Service could, for the time being, not be favored. Furthermore, the existing usages in this band seem to make a practical solution difficult.

The <u>Delegate of the United States</u> drew attention to Document No. 452 under which method the United States could agree to an allocation to Radio Astronomy for the band 1 660 - 1 670 Mc/s if world-wide agreement could be reached.

The <u>Delegate of the United Kingdom</u>, whilst agreeing that at the present time no definite arrangements could be made, felt that there should be a footnote inserted indicating the possible future usage of this band for Radio Astronomy so that Administrations should keep it in mind in their future planning.

The Sponsor of the proposal (U.S.S.R.) however, did not, in view of the general feeling, insist on the adoption of the proposal.

b) a frequency band around 2 500 Mc/s and proposed by the United Kingdom (2 296 ± 4 Mc/s), Netherlands (2 560 ± 5 Mc/s) and the United States of America (2 504 ± 4 Mc/s).

Unanimous agreement was reached on the allocation of the frequency band 2 690 - 2 700 Mc/s on a world-wide basis for the Radio Astronomy Service as an additional service to the existing services in the Allocation Table.

c) a frequency band around 5 000 Mc/s as proposed by the United Kingdom (5 260 ± 10 Mc/s), Netherlands (5 120 ± 10 Mc/s) and the United States of America (4 695 ± 5 Mc/s).

Unanimous agreement was reached on the allocation of the frequency band 4 990 - 5 000 Mc/s on a world-wide basis for the Radio Astronomy Service as an additional service to the existing services in the Allocation Table.

d) a frequency band around 10 000 Mc/s as proposed by the United Kingdom (10 000 ± 10 Mc/s), Netherlands (10 240 ± 10 Mc/s) and the United States of America (10 560 ± 10 Mc/s).

As in Working Group 4G world-wide agreement was achieved on the frequency band 10 690  $\pm$  10 Mc/s the proposals were no further studied.

- e) a United States proposal for a frequency band 8 400 8 415 Mc/s for allocation on a world-wide basis was withdrawn by lack of support.
- The U.S.S.R. Proposals Nos. 5327, 5329 and 5333 were for national requirements only. No special protection outside the territory of the U.S.S.R. was asked for. However, the U.S.S.R. asked for the inclusion in the Allocation Table of a footnote to draw the attention of neighboring countries to this usage.

The following footnote would cover the U.S.S.R. point of view:

"In the U.S.S.R. the bands 3 165 - 3 195 Mc/s, 4 800 - 4 810 Mc/s, 5 800 - 5 815 Mc/s and 8 680 - 8 770 Mc/s are also used for Radio Astronomy observations. Neighbouring countries in assigning frequencies in these bands should bear in mind this usage."

5. The last item to be considered was the amount of protection to be given to Radio Astronomy for the services sharing the agreed frequency bands and for extra-band radiations. The agreed text drawn up in Working Group 4G1 (Document No. 714 refers) was discussed. The Working Group agreed that this footnote should also apply to the agreed bands 2 695 Mc/s ± 5 Mc/s and 4 995 Mc/s ± 5 Mc/s. A majority of the Working Groups supported a change in the wording of this footnote so as to read:

"The frequency bands 2 690 - 2 100 Mc/s, 4 990 - 5 000 Mc/s
.... are allocated additionally to the radio astronomical
service. In making assignments to stations of other authorized
services in these bands, Administrations are urged to take
all practicable steps to protect Radio Astronomy observations
from harmful interference, however, the protection afforded
the radio astronomical service from extra-band radiations
shall be no greater than that afforded other radio services
operating in accordance with the Table of Frequency Allocations."

J. H. R. van der Willigen Chairman of Working Group 4E Ad Hoc GENEVE, 1959

Document No. DT 759-FES 12 novembre 1959

SOUS-COMMITTEE 7B SUB-COMMITTEE 7B SUBCOMISION 7B

### ORDRE DU JOUR

### 23ème séance de la Sous-Commission 7B

# (Procédures radiotélégraphiques et radiotéléphoniques dans le service mobile)

Samedi 14 novembre 1959, 9 heures - Salle F

- Approbation du compte rendu de la 20ème séance (séance mixte 7B 7C) (Document N° 541).
- 2. Approbation des textes du Document Nº 495.
- 3. Approbation des textes du Document Nº 539.
- 4. Divers.

#### AGENDA

#### Twenty-third Meeting of Sub-Committee 7B

(Radiotelegraph and Radiotelephone Procedure in the Mobile Services)

Saturday, 14 November, 1959 at 9 a.m. - Room F

- 1. Approval of Summary Record of the Twentieth Meeting (Joint Meeting with Sub-Committee 7C) (Document No. 541).
- 2. Approval of texts in Document No. 495.
- 3. Approval of texts in Document Mo. 539.
- 4. Any Other Business.

# orden del día

# 23.^a sosión de la Subcomisión 7B

# (Procedimientos radiotolográfico y radiotolográcios on los servicios móviles)

Sábado, 14 de noviembre do 1959, a las 9 de la mañana - Sala F

- 1. Informe de la 20.º sesión (sesión mixta 7B 7C) (Documento N.º 541).
- 2. Textos contenidos en el Documento N, º 495.
- 3. Textos contenidos en el Documento N.º 539.
- 4. Otros asuntos.

Le Président The Chairman R.M. Billington El Presidente GENEVE, 1959

SOUS-COMMISSION 7A SUB-COMMITTEE 7A SUBCOMISION 7A

### ORDRE DU JOUR

#### Séance de la Sous-Commission 7A

Vendredi 13 novembre 1959, à 15 heures - Salle D

- Approbation du 2ème rapport du Groupe de Travail 7A4 (Document Nº 709 -Annexe 709 Rev.)
- 2. Approbation du 3ème rapport du Groupe de Travail 7A4 (Document Nº 721)
- 3. Nº 294 de la C.A.E.R.
- Resolution Nº 8 de la C.A.E.R. 4.
- Resolution Nº 7 des Actes finals de l'Accord de la Conférence radiotéléphonique de la Mer Baltique et de la Mer du Nord
- 6. Divers.

#### AGENDA

#### Meeting of Sub-Committee 7A

Friday, 13 November, 1959, at 3 p.m. - Room D

- Approval of 2nd Report of Working Group 7A4 (Document No. 709 -Annex 709 Rev.)
- Approval of 3rd Report of Working Group 7A4 (Document No. 721)
- No. 294 of the E.A.R.C.
- Resolution No. 8 of the E.A.R.C. 4.
- 5. Resolution No. 7 of the Final Acts of the Baltic and North Sea Radiotelephone Conference
- 6. Any other business.

#### ORDEN DEL DÍA

#### Sesión de la Subcomisión 7A

Viernes, 13 de noviembre de 1959, a las 3 de la tarde - Sala D

- 1. 2.º informe del Grupo de trabajo 7A4 (Documento N.º 709 - Anexo 709 Rev.)
- 2. 3er informe del Grupo de trabajo 7A4 (Documento N.º 721)
- N.º 294 de la C.A.E.R.
- 4. Resolución N.º 8 de la C.A.E.R.
- Resolución N.º 7 de las Actas finales del Acuerdo de la Conferencia Radiotelefónica del Mar Báltico y del Mar del Norte.
- 6. Otros asuntos.

Le Président :

The Chairman:

El Presidente:

P. Bouchier

SUB-COMMITTEE 7A

#### DRAFT REPORT

## by Ad Hoc Working Group 7A to Sub-Committee 7A

#### FORMATION OF CALL-SIGNS

The Working Group had to study the problem of the formation of call-signs raised in a plenary meeting of Committee 7 by the Delegation of the Republic of the Philippines and recalled in Document No. 456.

It met on 4 and 10 November. Delegations of the following countries were present:

Canada
Denmark
United States of America
France
Israel
New Zealand
Portugal
Republic of the Philippines
United Kingdom of Great Britain and Northern Ireland
U.S.S.R.

Mr. Kunz, of the General Secretariat, was also present.

Explanations were given by Mr. Sannier (France), Chairman of Working Group 7A4 (Article 19) and Mr. Kunz. There was a long exchange of views on the possible solutions. The Working Group is now submitting to Sub-Committee 7A for approval the annexed draft resolution which it has unanimously (?) approved.

P.C.M. Bouchier Chairman

Annex: 1

## $\Lambda$ N N E X

### Draft Resolution on the formation of call-signs

The (Administrative Radio Conference)

#### considering

- a) the Recommendation relating to a new method of generating call-signs (Atlantic City, 1947);
- b) the fact that no new proposal has been placed before the Administrative Radio Conference, Geneva, 1959;
- c) Document No. 456 submitted by the Republic of the Philippines;
- d) the increasing demand for call-signs justified by the increased number of countries which are Members of the International Telecommunication Union or by the increased requirements of Administrations of countries which are already Members;
- e) the information supplied by the General Secretariat as regards allocations of call-signs since 1947 and the possibilities of the current system of forming call-signs;

#### believing

- a) that call-signs already in use should, as far as possible, not be changed;
- b) that, however, the current system of forming call-signs may not be adequate to meet all the requirements submitted between the present time and the next Administrative Radio Conference;

#### resolves

- that, should the existing call-sign series formed of three letters or a figure and two letters be exhausted, recourse may be had to series formed of a letter, a figure and a letter. In no case may the figure be 0 or 1;
- 2. that the method advocated in 1. above shall not be applicable to series beginning with one of the following letters: B F G I K M N R U W.

# Annex to Document No. DT 761-E Page 3

- 3. that the General Secretariat shall issue a circular letter urging the Administrations of Members of the Union:
  - 3.1. to make the maximum use of the possibilities of the series at present allocated to avoid further requests as far as possible;
  - 3.2. to review the call-sign allocations they have so far made so as to free any series that can be freed and place them at the disposal of the Union;
- 4. that any Administration of a Member of the Union may, if it so desires, obtain help and advice from the General Secretariat in order to meet the requirements of economy which should be the rule in the matter in question;
- 5. that if, nevertheless, before the next Administrative Radio Conference, all the possibilities of the present system of forming callsigns as amended by 1. and 2. above are exhausted, the General Secretariat shall issue a circular-letter:
  - 5.1. explaining the position;
  - 5.2. urging the Administrations of Members to send in their proposals for possible solutions;
- 6. that, from the information thus assembled, the General Secretariat shall prepare a report, together with its own comments and suggestions, if any, for submission to the next Administrative Radio Conference.

GENEVE, 1959

Document No DT 762-FES 12 novembre 1959

GROUPE DE TRAVAIL 4B WORKING GROUP 4B GRUPO DE TRABAJO 4B

#### ORDRE DU JOUR

# 11ème séance - Groupe de travail 4B (Tableau de répartition de bandes de fréquences - 9 à 4 000 kc/s

Vendredi, 13 novembre 1959, à 09.00 heures - Salle B

- 1. Examen du Document N° DT 696 concernant le Núméro 146 du RR (Loran 1950 kHz) afin de compléter le 4ème rapport du Groupe de travail 4B à la Commission 4, (Document N° 521, Page 6).
- 2. Rapport du Sous-Groupe de travail 4B2 concernant la bande de fréquences 70 150 kHz. (Document Nº DT 757).
- 3. Divers.

#### AGENDA

# Eleventh Meeting of Working Group 4B (Table of Frequency Allocations - 9 to 4 000 kc/s)

Friday, 13 November, 1959, at 9.00 a.m. - Room B

- 1. Consideration of Document No. DT 696 concerning RR 146 (Loran 1950 kc/s) to complete the Fourth Report of Working Group 4B to Committee 4 (Document No. 521, Page 6).
- 2. Report by Working Group 4B2 concerning 70 150 kc/s (Document No. DT 757).
- 3. Any other business.

# ORDEN DEL DÍA

# 11. a sesión del Grupo de trabajo 4B (Cuadro de distribución de frecuencias - 9 a 4 000 kc/s

Viernes, 13 de noviembre de 1959, a las 9 de la mañana - Sala B

- 1. Examen del Documento N.º DT 696 relativo al Número 146 del RR (Loran 1950 kc/s) para completar el 4.º informe del Grupo de trabajo 4B a la Comisión 4 (Documento N.º 521, Página 6).
- 2. Informe del Subgrupo de trabajo 4B2 relativo a la banda de frecuencias 70 150 kc/s (Documento N.º DT 757).
- 3. Otros asuntos.

Le Président :

Chairman : H. L. Sastry

El Presidente:

Document No. DT 764-E 16 November, 1959

SUB-COMMITTEE 7B

## Proposed Addendum to

Sub-Committee 7B Report on Appendix 9 (Document No. 522)

The attached Annex shows the Q Code groups as they are to appear in Section 1B of Appendix 9.

R. M. Billington Chairman, Sub-Committee 7B

Annex: 1

## $\mathtt{ANNEX}$

# APPENDIX 9, SECTION 1

# B. LIST OF SIGNALS ACCORDING TO THE NATURE OF QUESTIONS, ANSWER OR ADVICE

	Abbre- viations	Question	Answer or Advice
		Name	
NOC	QRA		
		Route	
NOC	QRD		
		Position	
NOC	QRB		
NOC	QTH		
NOC	QTN		
		Quality of Signals	
NOC	QRI		
MOD	QRK		
		Strength of Signals	
MOD	QRO		
MOD	QRP		
NOC	QSA		
NOC	QSB		
		Keying	
NOC	QRQ		
NOC	QRR		
NOC	QRS		
Moc	QSD		

	Abbre- viations	Question	Answer or Advice
		Interference	
MOD	QRM		
MOD	QRN	•	
		Adjustment of Frequency	
NOC	QRG		
NOC	QRH		
MOD	QTS		
		Choice of Frequency and/or Class of Emission	
иос	QSN		
ADD	୍ଟ୍ୟ		
NOC	QSU		
мос	QSV		
NOC	QSW		
иос	QSX		·
		Change of Frequency	
NOC	QSY		
		Establishing Communication	
NOC	QRL		
MOC	QRV		
NOC	QRX		
NOC	QRY		
MOC	QRZ		
NOC	QSC		

	Abbre- viations	Question	Answer or Advice
ADD	QSR		
NOC	Ì		
ADD			
		Time	
NOC	QTR		
NOC	QTU		
		Charges	
NOC	QRC		
MOD	QSJ		
		Transit	
NOC	QRW		
NOC	QS0		
NOC	QSP		
NOC	QSQ		
NOC	QUA		
NOC	QUC		
		Exchange of Correspondence	
ADD	QRJ		
NOC	QRU		
NOC	QSG		
NOC	QSI		
MOD	QSK		
NOC	QSL		
NOC	QSM		

	Abbre- viations	Question	Answer or Advice
MOC	QSZ	,	
MOD	QTA		
MOC	QTB		
NOC	QTC		
MOC	QTV		
MOC	QTX		
		Movement	
MOD	QRE		
MOC	QRF		
ADD	QSH		
MOC	QTI		
MOD	QTJ		
MOD	QTK		
-IOD	QTL		
ADD	QTM		
Joc	QTN		
NOC	QTO		
ioc	QTP		
MOD	QUG		
MOD	QUJ		
AOC	QUN	(MOD in French text)	
SUP	QUX		
		Meteorology	
GCI	QUB		

	Abbre- viations	Question	Answer or Advice
NOC	QUH		
NOC	QUK		
NOC	ĆUL		
		Radio Direction-finding	•
NOC	QTE		
MOD	QTF		
NOC	QTG		
SUP	QUV		
		Suspension of Work	·
NOC	QRT		
MOD	QUM		
		Urgency	
NOC	QUD		
MOD	QUG		
		Distress	
NOC	QUF		•
		Search and Rescue	·
ADD	QSE		
ADD	QSF		
ADD	QTD		
ADD	QTW		
ADD	QTY		
ADD	QTZ		
	To the state of th		<b>!</b>

1	Abbre- viations	Question	Answer or Advice
	QUI		
	QUN	(MOD in French text)	
:	QUO		
!	QUP		
1	QUQ		
	QUR		
:	QUS		·
)	QUT		
)	QUU		
)	QUW		
)	QUY		·
		Iden <b>t</b> ifi <b>c</b> ation	
)	QTT		

## CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

GROUPE DE TRAVAIL 4E WORKING GROUP 4E GRUPO DE TRABAJO 4E

#### ORDRE DU JOUR

#### Quinzième séance du Groupe 4E (960 à 10 500 kc/s)

Samedi, 14 novembre 1959, à 9 heures - Salle E

- 1. Suite de l'examen du projet de rapport à la Commission 4 (Document N° 654 Rev.) (Document N° 478, page 4 Troisième Rapport Groupe spécial : Attributions de fréquences à la recherche spatiale)
- 2. Divers.

#### AGENDA

### Fifteenth Meeting of Working Group 4E (960 - 10 500 kc/s)

Saturday, 14 November, 1959 at 09.00 hours - Room E

- 1. Continuation of consideration of the draft Report of Committee 4 (Document No. 654, Rev.) (Document No. 478, page 4 also refers Third Report Ad Hoc Group on Frequency Allocations for Space Research)
- 2. Any other business.

## ORDEN DEL DÍA

## 15. a sesión del Grupo de trabajo 4E (960 - 10 500 kc/s)

Sabado, 14 de noviembre de 1959, a las 9 de la mañana - Sala E

- 1. Continuación del examen del proyecto de informe a la Comisión 4 (Documento N.º 654, Rev.) (Documento N.º 478, página 4 Tercer informe del Grupo especial: Atribución de frecuencias para investigaciones espaciales)
- 2. Otros asuntos.

Le Président :

The Chairman: G. C. Braga

El Presidente:

# ADMINISTRATIVE RADIO GONFERENCE

GENEVA, 1959

Document, No. DT 766-E
ADDENDUM No. 1
16 November, 1959

WORKING GROUP 5A

## APPENDIX 1

Herewith the form of notice to be inserted, as page 4, in Document No. DT 766-E

G. FURM OF NOTICE*

#### FOR USE WHEN NOTIFYING TO THE INTERNATIONAL FREQUENCY REGISTRATION BOARD A FREQUENCY ASSIGNMENT

	FOI									
		OR A CHANG	GE TO AN ASSUGNMENT RECORDS	ED IN THE MAST	TER INTERNATIO	NAL FREQUEN	CY REGISTE	<u>a</u>		
Notifying Administration			(Se	e Article 11	) .					
					•					
									, Notice	No
									(e) . Date	
kc/s								ד		•
			, .							
Mc/s		(b) New		(c) Change of	,		i) Deletion			
Assigned Frequency		assign	ment	` character	ristics	(6	an assi	gnment		
				of a reco	nt in the					
•	•	•		Master Re	egister			<u> </u>		· · · · · · · · · · · · · · · · · · ·
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									<del></del>	I.F.R.B. use
Date of putting into use	-	3	Call Sign (Identification	nn)					:	
				·,				•		
				Δb				4c		•
Name	of Transmitting S	tation			Country		_		Longitude and latitude of	f the transmitter site
	<del></del>			T	<del></del>	·		· · · · · · · · · · · · · · · · · · ·		
Locality(ies) or Area(s)	Length of	Class of	Class of emission,	Power		mitting ant		Maximum hours	Megacycle Order of	Supplementary Information
with which communication is established	circuit (km)	Station and	necessary bandwidth and description of	(in kW)	cha	racteristics	9	of operation of the circuit	the other frequencies normally utilized for	
	,	Nature of Service	transmission	(P m p)	Azimuth of maximum	Angular width	Antenna	to each local-	the same circuit	
		Service	•		radiation	of	gain (db)	ity or area (G:M.T.)		
·					,	radiation main lobe				,
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		Name am	d postar address	tration				•		

ADMINISTRATIVE RADIO CONFERENCE GENEVA, 1959

WORKING GROUP 5A

#### APPENDIX 1

- A. Basic characteristics to be furnished for notification under No. 314 of the Regulations.
- B. Basic characteristics to be furnished for notification under No. 315 of the Regulations.
- C. Form of Notice.
- D. General Instructions for using the Notice.

# A. BASIC CHARACTERISTICS TO BE FURNISHED FOR NOTIFICATION UNDER NO. 314 OF THE REGULATIONS

Column 1 Assigned frequency

Column 2c Date of putting into use

Column 3 Call Sign (Identification)

(This is not a basic characteristic for stations referred to in No..............)

Column 4a Name of transmitting station

Column 4b. Country in which the transmitting station is located

Column 4c Longitude and latitude of the transmitter site

Column 5a Locality(ies) or Area(s) with which communication is established.

(This is not a basic characteristic for land, radionavigation land, radiolocation land, standard frequency......stations)

Column 5b Length of circuit (km)

(This is a basic characteristic only for land, radionavigation land, radiolocation land, standard frequency stations)

Column 6 Class of station and nature of service

Column 7 Class of emission, necessary bandwidth and description of transmission

Column 8 Power (in kW)

Column 9a Azimuth of maximum radiation

Column 10 Maximum hours of operation of the circuit to each locality or area (G.M.T.)

Column 11 Megacycle order of the other frequencies normally utilized for the same circuit.

(This is a basic characteristic only for fixed stations within the range 4 000 kc/s to 30 000 kc/s)

Supplementary information: reference frequency or frequencies, if any.

## B. BASIC CHARACTERISTICS TO BE FURNISHED FOR NOTIFICATION UNDER No. 315 OF THE REGULATIONS

Column 1	Assigned Frequency
Column 2e	Date of putting into use
Column 4a	The letter "R"
Column 4b	Country in which the receiving (land) station is located
Column 4c	Longitude and Latitude of the site of the receiving (land) station
Column 5a	Name of the receiving (land) station
Column 5b	Maximum distance in kms between mobile stations and the receiving (land) station
Column 6	Class of mobile stations and nature of service
Column 7	Class of emission of mobile stations and necessary bandwidth
Column 8	Highest power used by the mobile stations
Column 10	Maximum hours of operation of the mobile stations

(Insert here the form of notice)

#### D. GENERAL INSTRUCTIONS

- 1. A separate notice shall be sent to the I.F.R.B. for notifying:
  - Each new frequency assignment,
  - Any change in the characteristics of a frequency assignment recorded in the Master International Frequency Register, (hereinafter called the Master Register),
  - Any total deletion of a frequency assignment recorded in the Master Register.
- 2. Frequencies prescribed by the Radio Regulations for common use, such as 500 kc/s, 2 182 kc/s, should not be notified. (See No. 316).
- 3. Separate entries, in Columns 6 to 10, should be made for the various basic characteristics when they do not apply to the assignment as a whole, for instance when the class of emission or the power differs according to the localities or areas of reception.

#### GENERAL NOTES

- a) The name of the notifying Administration should be indicated.
- b) Indicate in this box by the letter "X" when the notice reflects:
  - the first use of a frequency by a station,

or

- the first use of an additional frequency by a station.
- c) Indicate in this box by the letter "X" when the notice reflects a change in the characteristics of a frequency assignment recorded in the Master Register.
  - (1) In the case where existing particulars (including the frequency) are changed, the new characteristics in the appropriate place should be underlined; the original characteristics which have been changed should be shown in brackets underneath or at the side.
  - (2) In the case where the change is an addition to existing particulars, the additional characteristics should be shown in the appropriate place and should be underlined.

- (3) In the case where the change is a cancellation of a particular characteristic or characteristics, this should be shown in the appropriate place by a dash and, underneath or at the side, the characteristics which have been cancelled should be shown in brackets.
- d) Indicate in this box by the letter "X" when the notice reflects a deletion of an assignment, in all of its notified characteristics.
- e) The serial number of the notice and the date the notice is sent to the Board shall be shown here.

## NOTES CONCERNING INFORMATION TO BE ENTERED IN THE NOTICE PERTAINING TO SPECIFIC COLUMNS OF THE MASTER REGISTER

#### Column 1 - Assigned Frequency

- 1. Indicate the assigned frequency as defined in Article 1, in kc/s up to 30 000 kc/s inclusive, and in Mc/s above 30 000 kc/s.
- 2. This information is a basic characteristic

#### Column 2c - Date of putting into use.

- 1. In the case of a new assignment, insert the date (actual or foreseen, as appropriate) of putting the frequency assignment into use.
- 2. Whenever the assignment is changed in any of its basic characteristics, as defined in this Appendix except in the case of a change in Column 3, 4a or 11, then the date to be indicated shall be that of the latest change (actual or foreseen, as appropriate).
- 3. This information is a basic characteristic.

#### Column 3 - Call Sign (Identification)

- 1. Indicate the Call Sign or other identification used in accordance with Article 19.
- 2. This information is a basic characteristic, except for stations referred to in No. /Illa.l/or when the frequency assignment is used for reception in the circumstances described in No. 315.

- Column 4 Name and Location of Transmitting Station
  - 4a. Indicate the name of the locality by which the transmitting station is know or in which it is situated.
  - 4b. Indicate the country in which the station is located. Symbols from the Preface to the International Frequency List should be used.
  - 4c. Indicate the geographical coordinates (in degrees and minutes) of the transmitter site.

However, when the frequency assignment is used for reception by a land station in the circumstances described in No. 315, the indication to be given in Column 4 is as follows:

- Aa. The letter "R".
- 4b. The country in which the receiving (land) station is located.
- 4c. The geographical coordinates (in degrees and minutes) of the site of the receiving (land) station.

The information to be supplied for Columns 4a, 4b and 4c is a basic characteristic.

- <u>Column 5a</u> Locality(ies) or Area(s) with which communication is established.
  - 1. Indicate in this column only the locality(ies) or area(s) to which the frequency is normally used.
  - 2. For fixed stations, indicate the name of the locality by which the receiving station is known or in which it is situated.
    - a) Reception points may be grouped and entered collectively as areas in this column if all other basic characteristics of the frequency assignment are the same with respect to each such point and provided the area is well-defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view.
    - b) Similarly, in the case of one-way simultaneous transmissions to multiple points, representative points outlining the area being served may be indicated, but it should be specified as Supplementary Information that this is simultaneous transmission.

- c) In the case of a network composed of stations intercommunicating on the same frequency, the symbol ZN shall be entered in Column 6a. When the same frequency is used for two or more networks of the same Administration, each network should be identified by a separate letter following the network symbol ZN, e.g. ZN-A, ZN-B, etc. It is necessary to notify only sufficient stations to define the area of operation, provided that that area is well defined and sufficiently small to make it easy to forecast the conditions of the use of the frequency from the propagation point of view. Each such station shall be the subject of a separate notice.
- 3. For land, radionavigation land, radiolocation land, standard frequency,...... stations, it is not necessary to indicate any information in this column.
- 4. For broadcasting stations, the areas of reception should be indicated. Each area should be either a country or one of the zones indicated on the map annexed to this Appendix.
- 5. For reception by a land station in the circumstances described in No. 315, the name of the locality by which the receiving (land) station is known or in which it is situated, should be indicated.
- 6. This information is a basic characteristic, except for paragraph 3 above.

#### Column 5b - Length of circuit (km)

- 1. The length of the circuit in km should be indicated in this column.
- 2. For reception by a land station in the circumstances described in No. 315, the maximum distance between the mobile stations and the receiving (land) station should be indicated.
- 3. This information is not a basic characteristic except in the case of paragraph 2 above, and in the case of land, radio-nagivation land, radiolocation land, standard frequency, stations, In these latter cases, the distances shown shall represent the service ranges.

#### Column 6 - Class of station and nature of service

- 1. Indicate the class of station and nature of service performed, using the symbols shown in Appendix 7.
- 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the class of station and nature of service applicable to the mobile stations should be indicated.
- 3. This information is a basic characteristic.
- <u>Column 7</u> Class of emission, necessary bandwidth and description of transmission
  - 1. Indicate, for each locality or area of reception shown in Column 6a, the class of emission, necessary bandwidth and description of transmission, in accordance with Article 2 and Appendix 5.
  - 2. When the frequency assignment is used for reception in the circumstances described in No. 315, the particulars to be indicated are those applicable to the mobile stations.
  - 3. This information is a basic characteristic.

#### Column 8 - Power (in kW)

- 1. According to the class of emission and description of transmission, the power supplied to the antenna transmission line shall be indicated as follows:
  - a) the carrier power in the case of a broadcasting emission (See No. 63a).
  - b) the mean power in the case of a full carrier emission other than a broadcasting emission (See No. 63).
  - c) the peak envelope power in the case of a reduced carrier emission or of a pulse modulated emission (See No.61).

In any case, the appropriate symbol P, Pm or Pp shall follow the indication of the value of the power (See No. 60).

2. The power normally used to each locality or area of reception shown in Column 5a shall be indicated.

- 3. When the frequency assignment is used for reception in the circumstances described in No. 315, the power of the mobile stations should be indicated. If not all of the mobile stations use the same power, the highest power should be indicated.
- 4. This information is a basic characteristic.

#### Column 9 - Transmitting antenna characteristics

#### Column 9a - Azimuth of maximum radiation

- 1. If a directive transmitting antenna is used, indicate the azimuth of maximum radiation of the transmitting antenna in degrees (clockwise) from True North.
- 2. If a transmitting antenna with non-directional characteristics is used, insert ND in this column.
- 3. This information is a basic characteristic, except when the frequency assignment is used for reception in the circumstances described in No. 315.

#### Column 9b and 9c

If, the radiation characteristics of the antenna concerned differ from those recommended by the C.C.I.R., the following information should be notified in Columns 9b and 9c:

Column 9b - Angular width of radiation main lobe

The total angle in the horizontal plane, in degrees, within which the radiation power in any direction is not more than 3 db less than the power radiated in the direction of maximum radiation, should be indicated.

#### Column 9c - Antenna gain (db)

The relative gain of the antenna in the direction of maximum radiation for the assigned frequency should be indicated. (See No. 65b).

- Column 10 Maximum hours of operation of the circuit to each locality or area (G.M.T.)
  - 1. When the frequency assignment is used for reception in the circumstances described in No. 315, the maximum hours of operation are those relating to the mobile stations.
  - 2. As complementary information, indicate by a letter "I" any part of the period during which the operation of the circuit is intermittent.
  - 3. This information is a basic characteristic, except for paragraph 2 above.
- <u>Column 11</u> Megacycle Order of the other frequencies normally utilized for the same circuit
  - 1. If the notified frequency is the only frequency used for the particular circuit, the indication "Nil" shall be inserted in this column.
  - 2. In the case of a meteorological or press broadcast transmission intended to cover a large area, the separate notice made for each frequency assignment required for transmission to each specific part of this area should indicate "Nil" in this Column, subject to the condition that the specific area notified in Column 5a satisfies the conditions laid down in sub-paragraph 2a relating to this column.
  - 3. In cases other than those mentioned in paragraphs 1 and 2, the megacycle order of the other frequencies normally used for the circuit over the whole of the solar cycle shall be indicated. For this purpose, the megacycle order shall be calculated according to the following ranges:

<u>Range</u>	Megacycle order		
4 000 <b>-</b> 5 999 kc/s	5		
6 000 - 7 999 kc/s	7		
/			
28 000 - 29 999 kc/s	29		

4. This information is a basic characteristic for fixed stations stations between 4000 kc/s and 30 000 kc/s.

Column 12a - Operating Administration or Company*

This information is not a basic characteristic, <u>but it is</u> recommended it be supplied in cases where the same agency operates in more than one country.

- <u>Column 12b</u> Postal and telegraphic address of the Administration responsible for the station.*
  - 1. The addresses required are those to which communication should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of the circuit (See Article 14).
  - 2. This information is not a basic characteristic.

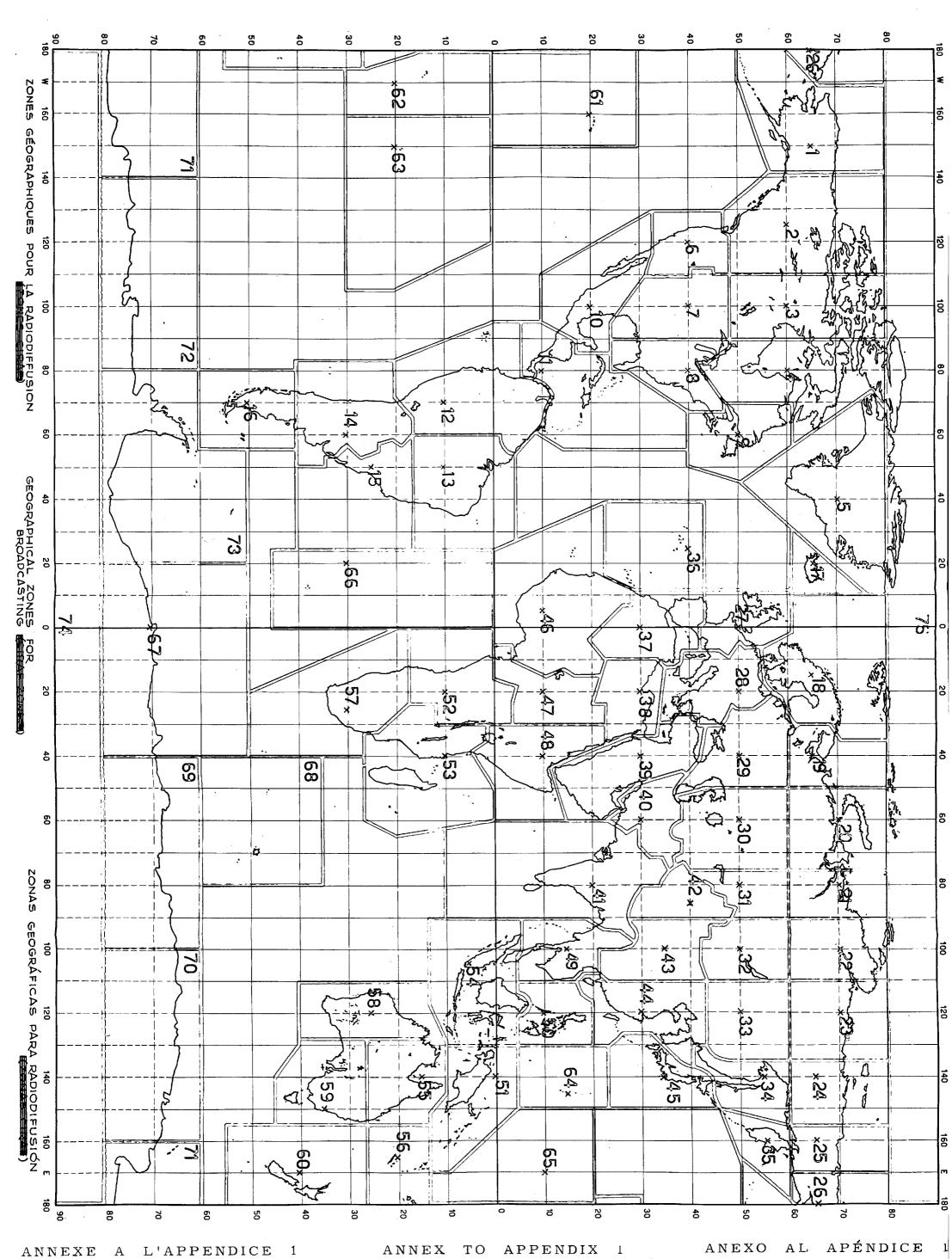
#### Supplementary Information

Any supplementary information supplied by the Administration should be indicated within the frame provided in the notice.

- 1. If the assignment is made in application of a Regional or Service Agreement, the relevant Agreement shall be indicated in the appropriate place; otherwise, insert the indication "Nil".
- 2. Indicate after the symbol COORD/.... the name of any Administration with which coordination has been effected for the use of the frequency; if no coordination has been effected, the indication "Nil" should be inserted.
- 3. In any case where there are one or more reference frequencies in a particular transmission (e.g. in the case of (a) the frequency of the reduced carrier in an independent or single sideband emission, and (b) the frequencies of the audio and video carriers in a television emission), such reference frequencies shall be supplied.
- 4. Any other information which the Administration considers to be relevant should be indicated, such as, for example, an indication that the assignment concerned would be operating in accordance with No. 88 of the Radio Regulations, or information concerning the use of the notified frequency if such use is restricted or if the frequency is not used during all the time which is possible according to propagation conditions.
- 5. Only the information specified in paragraph 3 above is a basic characteristic; it is recommended, however, that the information under paragraphs 1 and 2 above be supplied.

#### Annex: 1

^{*} Where this information already appears in the Preface to the International Frequency List, the appropriate reference number or letter may be used.



GENEVA, 1959

Document No. DT 767-E 13 November, 1959

WORKING GROUP 7A7

#### AGENDA

#### Meeting of Working Group 7A7

Saturday, 14 November, 1959, 9 a.m. - Room D

1. Appendix 6, List of Ship Stations.

- 2. Transfer of Part A, Part B and Part C of the present List of Coast and Ship Stations into the new List of Coast Stations and List of Ship Stations along with their relative notes as may be modified or supplemented.
- 3. Consideration of paragraphs 477 to 483 of the Radio Regulations.
- 4. Revision of particulars of fixed stations.

5. Proposals relating to Radiolocation and Special Service Stations.

E, Ron Chairman

Annex: 1

#### A N N E X

#### ADDITIONAL TEXTS

- RR 460 Call signs assigned from theinternational series to stations included in Lists .... are published in two volumes:
  - l. List VIII-A*. Alphabetical List of Call Signs of stations used in the Maritime Mobile Service (Coast, Ship, Radiolocation and Special Service Stations).

This List is preceded by the Table of Allocation of Call Signs given in Article 19* and a Table of Signals characterising the emissions of radio beacons used by the Maritime Mobile Service.

RR 460-bis 2. List VIII-B*. Alphabetical List of Call Signs of stations other than Amateur Stations, Experimental Stations and stations of the Maritime Mobile Service.

This List*xis preceded by the Table of Allocation of Call Signs given in Article 19 and a Table indicating the form of call signs assigned by each Administration to its Amateur and Experimental Stations.

- RR 472 \$6. The List of Coast Stations shall be re-published every three years and kept up-to-date by recapitulative supplements every six months.
- RR 472-bis The List of Ship Stations shall be re-published every year without supplements.
- RR 474 §8. The Alphabetical List of Call Signs of stations used in the Maritime Mobile Service (Lists ..... *) shall be re-published at intervals determined by the Secretary-General and kept up-to-date by recapitulative supplements every three months.
- RR 474-bis

  The Alphabetical List of Call Signs of stations other than

  Amateur Stations, Experimental Stations and stations of the Maritime Mobile

  Service (Lists ... *) shall be re-published every two years and kept

  up-to-date by recapitulative supplements every three months.

^{*} To be treated by Committee 8.

#### WORKING GROUP 6A

#### A G E N D A

### Seventeenth Meeting of Working Group 6A (Definitions)

Tuesday, 17 November 1959, at 0900 hours - Room C

- 1. Summary Record of the Fifteenth Meeting, Document No. 529.
- 2. Summary Record of the Sixteenth Meeting, Document No. 561.
- 3. Decision of Committee 6 on the need for terms Nos. 69m, 69n, 69o, 69p, and 69q on Radio Noise, etc.
- 4. Decision of Committee 6 on the inclusion of a request for a definition of Emission in the recommendation to the C.C.I.R. on emission designators, Document No. DT 624.
- 5. Remaining terms to be defined:
  - (a) Document No. DT 536
  - (b) Documents Hos. DT 755 and DT 643
  - (c) No. 22a Tropical Broadcasting Service Proposal No. 103, page 57 Rev. 1, ITU Book (India)
  - (d) No. 71 Racon
- 6. Arrangement of Terms and Definitions in Article 1, Document No. DT 749.
- 7. List of deleted terms (references Document No. 326 and Addenda 1 and 2).
- 8. Other matters.

E. W. Allen Chairman

GENEVA, 1959

Document No. DT 769-E 13 November, 1959

WORKING GROUP 4D

#### REPORT

#### Sub-Working Group 4D5 Working Group 4D

- 1. The Sub-Working Group was set up by Working Group 4D at its fifth session on 2 October in order to deal with the question of the frequency allocation for Region 1 in the frequency band 100-108 Mc/s.
- The Sub-Working Group held 7 meetings, 3 of which were chaired by the Delegate of the Federal German Republic, Mr. Mohr, during the Chairman's absence. Delegates of the following countries took part in the work of the Sub-Group:

Austria Israel
Belgium Italy
Bulgaria Norway
Czechoslovakia Netherlands
Denmark Portugal

Federal Republic of Portuguese Overseas Provinces

Germany Spain
France Sweden
Greece Switzerland
Hungary United Kingdom

U.S.S.R.

The Sub-Group was also assisted by Mr. Kari and Mr. Smith of the I.F.R.B. secretariat.

The Sub-Group based its work on the proposals submitted to the Conference. It soon became clear that the main problem which the Sub-Group had to resolve was the proposed introduction in the frequency band 100-104 Mc/s of the broadcasting service, the stations of which will normally have considerably higher powers than those of the mobile service to which the band is at present allocated. In order to overcome this difficulty a power limit of 0.5 kW for the broadcasting stations was proposed and supported by a number of delegates.

Nevertheless such a limit proved to be unacceptable to some of the countries wishing to introduce broadcasting and the problem was solved by making the introduction of broadcasting subject to agreements ensuring that no harmful interference will be caused to the mobile services of other countries. With one exception, the countries planning to use this band for broadcasting have no intention of introducing this service in the immediate future, but desire to have spectrum space available for the future expansion of the service.

Some countries desired to operate fixed services in the band and their willingness to accept a power limit of 25 watts made it possible to allocate the frequency band 100-108 Mc/s additionally to the fixed service in these countries.

4. As a result of its deliberations the Sub-Working Group recommends the maintenance of the Atlantic City allocation for Region 1, but with new and amended footnotes as shown in Annex 1 of this report.

Annex 2 contains a proposal for a Recommendation of the Conference. A number of delegates felt that although the proposed introduction of broadcasting is limited to six countries, there might also be a need in other countries to extend the band for VHF sound broadcasting at a later stage and that a recommendation on the future use of the band might therefore be useful.

However, while not objecting to the Recommendation, the delegates of France, Greece, Portugal, United Kingdom and Sweden did not find the Recommendation necessary, especially as it did not have universal support and as these countries were not at present contemplating the use of the band or any part of it for broadcasting.

- The Sub-Working Group also discussed the question of how the necessary coordination could be effected between the new broadcasting service of the countries listed in Footnote 79a) and the services of other countries operating according to the allocation Table. The view in the Sub-Working Group was that this coordination could be effected either at the next European VHF/UHF Broadcasting Conference or directly between interested and affected Administrations. The Chairman referring to the necessity to determine which countries are affected pointed out that this problem would not exist if the coordination were effected at a European Conference.
- The Delegates of Albania, Bulgaria and Czcchoslovakia reserved their right to express their opinion of Annexes 1 and 2 and in particular footnotes 79a) and 79b) in Working Group 4D, because similar problems will be presented there by other Sub-Working Groups. In this connection the Delegate of Czechoslovakia made particular reference to the proposed introduction of boradcasting in the frequency band 68-73 Mc/s and 76-87.5 Mc/s in Czechoslovakia and other countries. The delegate of the U.S.S.R. was opposed to the Recommendation because his country has no intention of using this band for broadcasting.

#### ANNEX

Frequency band	Region l				
100 - 108	Mobile except aeronautical mobile (R) 79) 79a) 79b)				

- MOD 79) In Northern Rhodesia and Southern Rhodesia, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service and the frequency bands 132-144 Mc/s and 146-174 Mc/s are allocated alternatively to the fixed and mobile services. In the Union of South Africa and the Territory of South West Africa, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service, the frequency bands 132-144 Mc/s, 146-156 Mc/s and 165-174 Mc/s are allocated alternatively to the fixed and mobile services, and the frequency band 156-165 Mc/s is allocated alternatively to the maritime mobile service.
- 193a ADD 79a) In Austria, Belgium, Spain, Israel, Italy, Switzerland and if necessary in the Netherlands and the Federal Republic of Germany, the frequency band 100-104 Mc/s is allocated on a permitted basis to the broadcasting service (Document No. 242 (Rev.2) paragraph 7B). The introduction of the broadcasting service in these countries is subject to special arrangements between the interested and affected Administrations, to ensure that harmful interference is not caused to the services of the other countries operating in accordance with the frequency allocation table.
- 193b ADD 79b) In Denmark, Finland, Greece, Iceland, Italy, Norway, Federal Republic of Germany and Sweden, the frequency band 100-108 Mc/s is allocated additionally (7c) to the fixed service and in the Netherlands and the United Kingdom will eventually be allocated additionally to that service. The effective radiated power of any station in the fixed service shall normally not exceed 25 watts. In case higher powers are used the introduction of the fixed service is subject to special arrangements between interested and affected Administrations.

Note 71) RR 185 no longer applies to the frequency band 100-108 Mc/s

#### ANNEX 2

#### DRAFT RECOMMENDATION

The Administrative Radio Conference,

#### considering

- a) the desirability of having, as far as possible, uniform frequency allocations to the BC services, whereby frequency co-ordination between countries will be facilitated and maximum frequency economy can be obtained,
- b) the probability of increasing requirements for frequencies to VHF sound BC in Region 1,
- c) that any eventual extension of the BC band 87.5-100 Mc/s should be in continuation of this band for technical reasons, in particular in order to avoid complication in receiver manufacture,
- d) the fact that the frequency band 100-108 Mc/s is allocated already to BC in Regions 2 and 3 and in a few countries of Region 1,
- e) the expressed desire of some countries in Region 1 to use the frequency band 100-104 Mc/s for BC;

#### recommends

that Region 1 Administrations consider the possibility of proposing a new allocation to services in the frequency band 100-108 Mc/s at the next Ordinary Administrative Radio Conference, with especial reference to broadcasting requirements.

## ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 770-3

SUB-COMMITTEE 7A

#### AGENDA

#### Thirtieth meeting of Sub-Committee 7A

Monday, 16 November 1959, at 9 a.m. - Room D

- 1. Statement by the Chairman on the time limit for completion of the Sub-Committee's work and the working methods to be adopted.
- 2. Third report by Working Group 7A4 (Document No. DT 721).
- 3. Fourth report by Working Group 7A4 (Document No. DT 756).
- 4. Resolution No. 8 of the E.A.R.C.
- 5. Resolution No. 7 of the Final Acts of the Baltic and North Sea Radiotelephone Conference.
- 6. Proposals on Article 15.
- 7. Proposals on Article 25 left in suspense until completion of work by Working Group 7A2.
- 8. Proposal No. 4101 of the United States of America on Article 26 (see summary record, Document No. 246).
- 9. Any other business.

Chairman,

P. Bouchier

ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

WORKING GROUP 4G

#### DRAFT REPORT

#### from Working Group 4G to Committee 4

In response to a request made by the Delegate of Switzerland, and to better acquaint Committee 4 with the problems confronting Working Group 4G in regard to its efforts to reduce the number of footnotes appended to the table, this report contains, sequentially, (1) a summary record of the 4 November meeting of Working Group 4G, (2) a summary record of the 5 November meeting of WG4G1, (3) a summary record of the 9 November meeting of WG4G, (4) a summary record of the 11 November meeting of WG4G2/Region 1, (5) a summary record of the 12 November meeting of WG4G, and, as an appendix to the present report, the draft final report of Working Group 4G to Committee 4, Document No. 449 (Rev.).

#### 1. Summary Record of the 4 Hovember mooting of Working Group 4G

First considered were the various proposals for the radio astronomy service contained in Documents Nos. 183 and 452. Tentative agreement was reached on the frequency bands 10 680-10 700 Mc/s, 15 350-15 400 Mc/s, 19 300-19 400 Mc/s and 31 800-32 000 Mc/s with the understanding that they would not be shown in the table of frequency allocations but would be the subject of a footnote to be drafted along the same lines as those being developed in Working Groups 4D and 4E for the same service.

Next considered was the possible reduction in the number of footnotes appended to the draft table contained in Document No. 449. There appeared but five possible ways of effecting such a reduction; (1) operation under No. 88 of the Radio Regulations, (2) insertion of parenthetical statements in the table containing pertinent information now found in footnotes, (3) reconsideration of the proposals made by individual administrations to align them with the proposals of others, (4) adopting regional allocations to insert in the table those services now catered for in footnotes, and (5) consolidation of several footnotes into one footnote where the difference between them is only in the frequency band to which they apply.

Operation under No. 88 was rejected by the delegates of those countries mentioned in the footnotes under consideration.

The  $\underline{\text{U.S.A.}}$  proposed inserting the phrase "(doppler navigators)" after the aeronautical radionavigation allocation in the band 13 250-13 400 Mc/s as a means of deleting footnote 117b). While agreeing in

principle, agreement was not reached by the Group on the precise wording of the phrase to be inserted. Action was postponed pending discussions outside the meeting by those delegations most directly concerned.

It was agreed footnote 117a) should be retained since the proposed broadcast service between 11 500 and 12 500 Mc/s could not be covered by No. 88. The footnote was also not susceptible to a Region 1 treatment since broadcasting in that band was supported only by Austria, France, the Netherlands and the Federal Republic of Germany and such an allocation in the table would not be a true reflection of the use intended for the band.

The <u>Delegate of Sweden</u> requested that the name of his country be deleted from footnotes 117c), 117e), and 117g) and that footnote 117k) be modified to read as follows:

"In Sweden, the frequency bands 13 400-14 000 Mc/s, 15 700-17 700 Mc/s, 23 000-24 500 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services."

The change was adopted.

The <u>United Kingdom Delegation</u> stated footnote 117n) was intended to offset what was considered an inadequate allocation to the radio-navigation service and proposed a modification of the bands between 23 000 and 33 400 Mc/s to provide more space for that service thus permitting the deletion of footnote 117n). Counter proposals were offered by the U.S.A., the U.S.S.R. and the Chair but none was agreeable to all.

At this point Working Group 4Gl was established to arrive at a compromise allocation between 23 000 and 33 400 Mc/s and to review the possibility of changing the proposals of individual countries between 10 500 and 40 000 Mc/s in order to reduce the requirement for footnotes. The U.S.A., U.S.S.R., U.K. and France were specifically invited to attend and a general invitation was extended to all others wishing to attend.

The <u>Delegations of France</u>, <u>Sweden</u> and <u>Austria</u> supported a Swiss proposal to re-open the I.S.M. question, selecting a frequency in the 21 000-22 000 Mc/s Amateur band in lieu of the previously, and unanimously, agreed frequency 22 125 Mc/s. These same Delegations proposed that WG4G1 consider this matter but it was opposed by the <u>Delegations of the U.S.A.</u>, <u>U.K., U.S.S.R., Canada, New Zealand</u> and by the <u>Chair</u> as being beyond the terms of reference of WG4G1 in that such a discussion could have no bearing on the reduction of footnotes to the table.

#### 2. Summary Record of the 5 November meeting of Working Group 4Gl

Working Group 4Gl completed a study of the frequency band 10 500- 40~000~Mc/s with a view to reducing the number of footnotes appended to the

draft table contained in Document No. 449, which was returned to Working Group 4G by Committee 4 with the directive to (1) attempt to reduce the number of footnotes therein and (2) attempt to accommodate the requirements of the radio astronomy service in the band 10 500-40 000 Mc/s.

The U.S.A., U.K., U.S.S.R. and France participated in the work of the Group.

In summary, the actions taken by WG4G1 resulted in the following recommendations, all of which are reflected in Document No. 449 ( $R_{\rm e}v$ .) which is associated with this document.

a) Amend the proposed allocation of frequencies between 23 000 and 33 400 Mc/s in Document No. 449 to read as shown below, which permits the deletion of footnote 117n) and the latter portion of footnote 117j) /note that footnotes have been renumbered to correspond with those contained in Document No. 449 (Rev.)/.

23 000-24	250	Radiolocation
		117d)
24 250-25	250	Radionavigation 117h)
		117i)
25 250-31	500	a) Fixed b) Mobile
		117a)
31 500-31	800	a) Space * b) Earth-Space *
		c) Fixed
Z1 OAA ZZ	400	d) Mobile
31 800-33	400	Radionavigation

- b) Delete footnotes 117e), 117g), 117h), 117o), and the first portion of 117j) by combining their contents with those of 117c) of Document No. 449 to produce a new 117c), reading as follows:
  - 117c) In Albania, Bulgaria, Hungary, Roumania, Poland, Czechoslovakia and the U.S.S.R., the frequency bands 13 250-13 500 Mc/s, 14 175-14 400 Mc/s, 15 400-17 700 Mc/s, 21 000-22 000 Mc/s, 23 000-24 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services.
- c) Combine the contents of footnotes 117m) and 117p) of Document No. 449 to create a new footnote 117i) to read as shown below, thus permitting deletion of footnote 117p).

117i) In Japan, the frequency bands 24 250-25 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the meteorological aids service.

Attention is invited to the fact that the <u>Delegate of the U.S.S.R.</u> urged WG4Gl to insert in the table itself, either on a world-wide or regional basis, those services now catered for in the several footnotes appended to the draft table of Document No. 449. This suggestion was rejected on the ground that the number of countries involved in the footnotes was insufficient to be representative of the total wishes of Region 1, let alone the entire world. It was the consensus of the Group that such an allocation would portray a false picture of the allocation desired by the majority of countries concerned and that such a procedure should not be followed merely for the sake of reducing the total number of footnotes to the table.

#### 3. Summary Record of the 9 November meeting of Working Group 4G

(Note: This meeting considered Document No. DT 714 and was attended by the following thirteen delegations:
Australia, Austria, Bielorussia, Canada, U.S.A., Indonesia, Japan, U.S.S.R., Sweden, France, Bulgaria, U.K. and Switzerland.)

The <u>Delegation</u> of the <u>U.S.S.R.</u> stated that they had had insufficient time to study Document No. DT 714 but had concluded the footnotes had not been reduced sufficiently. <u>Bulgaria</u>, exercising the proxy of Albania, supported this contention and reserved its comment on the overall document.

The <u>Delegation of the United Kingdom</u> declared Document No. DT 714 and its attachments fully acceptable. The <u>Delegations of Canada and the U.S.A.</u> supported the position of the U.K. and proposed that Document No. DT 714 and the substance of the attached draft Document No. 449 (Rev.) not be modified.

The <u>Delegations of Sweden and Switzerland</u> stated that they, in some cases, could support Region 1 allocations in those bands proposed for world-wide allocations in Document No. 449.

The <u>Delegation of the U.S.A.</u> requested that footnote 117a) dealing with the radio astronomy service be modified by deleting the expression "are allocated additionally to the radio astronomy service" and inserting instead the phrase "may be used by the radio astronomy service". This change was agreed tentatively along with other editorial changes but it was agreed that the final form of the note would parallel that footnote for the radio astronomy service coming out of Working Groups 4D and 4E.

The Delegation of the U.S.S.R. then proposed that the band 13 250-13 400 Mc/s be allocated on a regional basis so that the fixed and mobile services could be added to the existing world-wide aeronautical radionavigation allocation, in Region 1. This proposal was supported by Bulgaria but was opposed by eight other delegations and did not carry.

The band 13 400-14 000 Mc/s was then discussed at length in view of a U.S.S.R. proposal to allocate it on a regional basis, making it available for the fixed, mobile and radiolocation services in Region 1. This proposal to change the world-wide allocation was supported by Albania, Bulgaria, Bielorussia, Switzerland and the U.S.S.R. but was opposed by the U.K., France and the U.S.A. Various alternative proposals followed, including a change of band limits in footnotes 117c) and 117e), the sharing of the band in Region 1 by the radiolocation and radionavigation services, and proposals to do away with all of, or portions of, footnotes 117c), 117d), and 117e) by making different Region 1 allocations.

The Delegate of the United Kingdom stated that a Region 1 allocation to radionavigation and radiolocation in the band 13 400-14 000 Mc/s would necessitate a footnote declaring that only radiolocation would be used in the United Kingdom.

Switzerland proposed that the U.S.S.R. consider deleting its footnote permitting fixed and mobile in the band 13 250-13 400 Mc/s but the U.S.S.R. stated the two aeronautical radionavigation bands 13 250-13 400 Mc/s and 15 400-15 700 Mc/s should be considered together. The U.S.S.R. then proposed that the previously agreed 15 400-15 700 Mc/s aeronautical radionavigation band be moved to 16 200-16 500 Mc/s but received no support. The U.S.S.R. delegation stated more time was necessary to consider 13 250-13 400 Mc/s.

The <u>U.S.A.</u> Delegation then proposed that Document No. 449 (Rev.) be adopted as it was, with full opportunity for the discussion of **problem** areas at Committee 4. <u>Canada</u> and <u>Australia</u> supported the proposal. By a vote of 8 to 4 the Working Group adopted that proposal.

The <u>Delegate of Switzerland</u> re-opened the matter of provisions for I.S.M. at 21 125 Mc/s and was supported by the <u>Delegate of Sweden</u>. No other support was forthcoming, however, so these delegations reserved the right to discuss the matter further at Committee 4.

The <u>U.S.S.R.</u> then proposed the establishment of an ad hoc group to study Region 1 problems in the band 10 500-40 000 Mc/s. On the basis of a 4 to 3 vote, Working Group 4G2 for Region 1 was established with S. M. Myers (U.S.A.) as Chairman.

4. Summary Record of the 11 Movember meeting of Working Group 4G2/Region 1.

A band by band review of the draft table in Document No. DT 714 was undertaken.

The names of Denmark and Italy were added to footnote 117b). A proposal by <u>Switzerland</u> to move the proposed broadcasting band in the footnote from 11 500-12 500 Mc/s up to 12 250-13 250 Mc/s and to put it in the table for Region 1 was not approved.

No change was proposed for the world-wide aeronautical radionavigation band 13 250-13 400 Mc/s except that the <u>Delegate of Switzerland</u> suggested that the U.S.S.R. delete that portion of 117c) permitting fixed and mobile in that band. Footnote 117c) was not, however, modified to that extent.

As had been proposed earlier in Working Group 4G, Sweden agreed to delete that portion of 117d) permitting fixed and mobile 13 400-14 000 Mc/s in favour of radionavigation, after the U.S.S.R. had agreed to change her radionavigation proposal from 13 500-14 000 Mc/s to 13 400-14 000 Mc/s. It was also proposed that the allocation table be changed to show radiolocation and radionavigation for Region 1.

At this point the <u>United Kingdom Delegation</u> proposed that the Working Group discontinue its work and send Document No. DT 714 back to Working Group 4G on the ground that it was acceptable in its present form. The <u>Delegates of the Union of South Africa and Portugal</u> supported that proposal.

In order to determine the feeling of the Group on this point, i.e., to see if the majority favoured that action or a continued band-by-band examination, a show of hands was requested. After approximately one and one half hours of discussions it was decided by a 9 to 8 vote to return Document No. DT 714 to Working Group 4G and to terminate the work of Working Group  $4G2/R_{\rm e}$ gion 1.

Before adjourning, the <u>Delegates of Sweden and the U.S.S.R.</u> requested that Working Group 4G be advised of what had taken place at the meeting of Working Group 4G2. <u>Bulgaria</u> requested that the same report indicate that the Bulgarian Delegation was opposed to a voting procedure that was being espoused by certain unnamed delegations for use in future Committee meetings. It was not clear to the Chair what these procedures were nor by whom they were being advanced.

The meeting adjourned at 11:10 p.m.

#### 5. Summary Record of 12 November meeting of Working Group 4G

The <u>Chairman</u> reported to the Group what had transpired the previous evening at the meeting of Working Group 4G2 and stated it was his intention to forward to Committee 4 with the report of Working Group 4G that supplementary material mentioned in the opening paragraph of this document. It was further proposed by the Chair, despite the earlier decision to send Document No. DT 714 to Committee 4, that the Group attempt to reach agreement on the band 13 400-14 000 Mc/s and make such editorial amendments as might be necessary to the remaining footnotes appended to the draft table in that document.

The <u>Delegate of Switzerland</u> proposed the deletion of footnote 117e) and the Region 1 allocation of the band 13 400-14 000 Mc/s to radionavigation on a primary basis and radiolocation on a secondary basis. Following a prolonged discussion during which agreement could not be reached, the Delegate of Switzerland withdrew his proposal and stated that if the band limits of footnote 117e) could be expanded to 13 400-14 000 Mc/s, he would like to have the name of his country included in that footnote. Sweden was also reported as being able to accept that condition to accommodate its radionavigation requirements. The <u>Delegate of the U.S.S.R.</u> could not agree, however, to change the frequency limits in footnote 117e) and that proposal also failed.

At this point, further consideration of the band 13 400-14 000 Mc/s was discontinued and the remaining footnotes were examined from an editorial standpoint. None required modification.

The <u>Delegate of Sweden</u> reserved final comment on footnote 117d) expressing an intention to discuss it further at Committee 4. He also expressed doubt about whether Airport Surface Movement Indicators should be classified as radiolocation or radionavigation devices and reserved the right to discuss the point further.

The <u>Delegate of the U.S.S.R.</u>reserved his right to discuss later the proposed allocation in the band 31 800-33 400 Mc/s, objected to designating the earth-space and space services as priority services in the 15 000 and 31 000 Mc/s bands, and stated he might find it necessary to discuss some of the proposals contained in Document Ne. 106 at the meeting of Committee 4.

The Delegate of Switzerland reserved comment on the band 13 400-14 000 Mc/s and the footnote 117g) for I.S.M. at 22 125 Mc/s.

S. M. Myers Chairman, Working Group 4G

Appendix: 1

#### COMMITTEE 4

#### REPORT

#### Working Group 4G to Committee 4

- In carrying out its mandate, Working Group 4G has completed a detailed examination of the proposals concerning the allocations of frequency bands above 10 500 Mc/s referred to it by Committee 4. The Group has held ten meetings, the last four of which were devoted primarily to minimizing the number of footnotes appended to the draft Table of Frequency Allocations.
- 2. The following Delegations participated in the work of the Group:

Argentina	Finland	Norway	Ukraine
hustralia	France	New Zealand	Roumania
Austria	French OPTA	Pakistan	United Kingdom
Bielorussia	Greece	Paraguay	Sweden
Bulgaria	India	Netherlands	Switzerland
Canada	Indonesia	Philippines	Czechoslovakia
China	Italy	Portugal	Union of South Africa
Denmark	Japan	Federal Republic	U.S.S.R.
UlS.A.		of Germany	

- 3. At its first meeting, Mr. W. B. Hawthorne (U.S.A.) was nominated Rapporteur and Mr. Boris Iastrebov, Member of the I.F.R.B., was invited to assist the Working Group.
- Regulations; the Working Group has, therefore, drawn up the following draft new Table which it recommends for adoption by Committee 4. For the purpose of the present report each service for which allocation in any given band is on a primary basis, in the context of Document No. 242 (Rev. 2) paragraph 7 (A), has been designated by an asterisk. In this connection, the following additional remarks may be helpful:
  - a) where a band is allocated to three or more services, of which two or more are on the basis of priority over the other service(s) the two or more primary services are indicated by asterisks; these primary services would operate on the basis of equality between themselves and each would have priority over the other service(s), against which no asterisk appears; and

## Document No. 449-E (Rev.) Page 2

b) where a band is allocated to two services, one of which has been designated as the primary service, the primary service is indicated by an asterisk.

It follows that where a band is allocated to two or more services on an equal basis, or the band is allocated to one service only, no asterisk appears.

- 5. Although the recommendations contained in the Annex hereto result from general agreement in the Working Group the following specific reservations have been made:
  - a) The delegate of Sweden reserved final comment on footnote 117d) expressing an intention to discuss it further at Committee 4. He also expressed doubt as to whether Airport Surface Movement Indicators should be classified as radiolocation or radionavigation devices and reserved the right to discuss that point later.
  - b) The delegate of the U.S.S.R. reserved on the proposed allocations in the band 31 800-33 400 Mc/s, objected to designating the earth-space and space services as priority services in the 15 000 and 31 000 Mc/s bands, and stated he might find it necessary to discuss some of the proposals contained in Document No. 106 at the meeting of Committee 4.
  - c) The Delegate of Switzerland reserved on the band 13 400-14 000 Mc/s and the footnote 117g) for ISM at 22 125 Mc/s, indicating he wished to discuss them further at Committee 4.

S. M. Myers Chairman, Working Group 4G

Annex: 1

### ANNEX

	n. dag after place to another distance in the control of the contr	Allocation t	o services	en devendens des gelen de			
Frequency band	在中心的,我们就是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	Regional					
(Mc/s)	World-wide	Region 1	Region 2	Region 3			
10 500-10 550		10 500-10 550 a) Fixed* b) Mobile* a) Radio- location		10 500-10 550 Radiolocation (Limited to CW devices)			
10 550-10 700	a) Fixed* b) Mobile* c) Radio- location 117a)						
10 700–13 250	a) Fixed b) Mobile 117b)						

- 231a ADD 117a) The frequency bands 10 680-10 700 Mc/s, 15 350-15 400 Mc/s, 19 300-19 400 Mc/s and 31 300-31 500 Mc/s may be used by the radio astronomy service. In making assignments to stations of authorized services in these bands, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference, however, the protection afforded the radio astronomy service from extra-band radiations shall be no greater than that afforded other radio services operating in accordance with the Table of Frequency Allocations.
- 231b ADD 1176) In Austria, Denmark, France, Italy, the Netherlands, the Federal Republic of Germans and in Sweden, the frequency band 11 500-12 500 Mc/s is allocated additionally to the broadcasting service.

^{*}The fixed and mobile services are the primary services. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.) paragraph 7A.

		Allocation to	o services		
Frequency band	World-wide	Regional			
(Mc/s)	world-wide	Region 1	Region 2	Region 3	
13 250-13 400	Aeronautical radionavigation (Doppler navigational aids)				
13 400-14 000	Radiolocation 117c) 117d) 117e)				
14 000-14 400	Radionaviga- tion 117c)				
14 400-15 150	a) Fixed b) Mobile				
15 150-15 250	a) Space* b) Earth-Space* c) Fixed d) Mobile				
15 250-15 400	a) Fixed b) Mobile ll7a)				

- 231c ADD 117c) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the frequency bands 13 250-13 500 Mc/s, 14 175-14 400 Mc/s, 15 400-17 700 Mc/s, 21 000-22 000 Mc/s, 23 000- 24 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services.
- 231d ADD 117d) In Sweden, the frequency bands 13 400-14 000 Mc/s, 15 700-17 700 Mc/s, 23 000- 24 250 Mc/s and 33 400-36 000 Mc/s are allocated additionally to the fixed and mobile services.
- 231e ADD 117e) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia, and the U.S.S.R., the frequency band 13 500-14 000 Mc/s is allocated additionally to the radionavigation service.

^{*}The space and earth-space services are the primary services. The fixed and mobile services are secondary services as defined in paragraph 7A of Document No. 242 (Rev. 2).

Theorem on the mal		Alloca	ation to servi	ices
Frequency band Mc/s	World-wide	Regional		
	WOIId-Wide	Region 1	Region 2	Region 3
15 400 - 15 700	Aeronautical radionavigation 117c) 117f)			And the state of t
15 700 - 17 700	Radiolocation 117c) . 117d)			
17 700 - 21 000	a) Fixed b) Mobile 117a)			
21 000 - 22 000	Amateur 117c)			
22 000 - 23 000	a) Fixed b) Mobile 117g)		·	
23 000 - 24 250	Radiolocation 117c) 117d)			,

- 231f ADD 117f) The frequency bands 960 1 215 Mc/s, 1 535 1 660 Mc/s, 4 200 4 400 Mc/s, 5 000 5 250 Mc/s and 15 400 15 700 Mc/s are reserved on a world-wide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground based facilities.
- 231g ADD 117g) The frequency 22 125 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 125 Mc/s of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

Frequency band	nervijenske	Allocation to services				
Mc/s	World-wide	Regional				
	worro-mrde	Region 1	Region 2	Region 3		
24 250 - 25 250	Radionavigation 117h) 117i)					
25 250 <b>- 31</b> 500	a) Fixed b) Mobile 117a)					
31 500 - 31 800	a) Space * b) Earth-Space* c) Fixed d) Mobile					
31 800 - 33 400	Radionavigation					
33 400 - 36 000	Radiolocation 117c) 117d) 117i)		·			
36 000 - 40 000	a) Fixed b) Mobile					
above 40 000	not allocated					

- 231h ADD 117h) In the frequency band 24 250 25 250 Mc/s, ground-based radionavigation aids are not permitted except where they operate in the cooperation with airborne or shipborne radionavigation devices.
- 231i ADD 117i) In Japan, the frequency bands 24 250 25 250 Mc/s and 33 400 36 000 Mc/s are allocated additionally to the meteorological aids service.

^{*)} The space and earth-space services are the primary services. The fixed and mobile services are secondary services as defined in paragraph 7A of Document No. 242 (Rev. 2).

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA. 1959.

Document No. DT 772-E 14 November, 1959

WORKING GROUP 4D

#### REPORT

### of Sub-Working Group 4D4 (Region 1) to Working Group 4D

1. The Sub-Working Group was set up on 29th September 1959 to consider, and make recommendations on, the future allocation of the Band 68 - 88 Mc/s in Region 1. The Sub-Group held eight meetings. The following Delegations participated in its work:

Austria Italy
Bulgaria Netherlands
Czechoslovakia Spain
Denmark Sweden
Federal Republic of Germany Switzerland
France United Kingdom
Greece U.S.S.R.

The Sub-Group was also assisted by Mr. R. Smith of the I.F.R.B.

- 2. Proposals for the future allocation of the band under consideration are given in Document No. DT 122, Addenda 3 and 4. These proposals fall into the following broad categories:
  - i) those involving the operation of aeronautical-radionavigation services in parts of the band;
  - ii) those involving the operation of fixed and/or mobile services in parts of the band;
  - iii) proposals for the operation of broadcasting stations in the U.S.S.R., Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania in the ranges 68 73 Mc/s and 76 88 Mc/s; also in British West Africa in the range 86 87.5 Mc/s.

Cognisance was also taken of proposals from France and Morocco (Nos. 497 and 3455) involving the operation of Meteorological Aids in the band 68.0 - 68.5 Mc/s; but the Delegate of France kindly agreed to deal with this particular requirement on a purely national basis and it is hoped that the Delegation of Morocco will agree to do likewise. Finally, the Sub-Group took into account Proposals Nos. 3544 and 3546, submitted by the United Kingdom, involving the inclusion of Footnotes to the frequency table authorising the operation of the radiolocation service, in the United Kingdom, in the range 82 - 87 Mc/s, and of the mobile

(excluding aeronautical mobile) service in the range 87.5 - 88 Mc/s. Proposal No. 3545 was withdrawn by the United Kingdom.

The Sub-Group reached agreement on the allocations that need to be made to accommodate the services mentioned in paragraph 2 (i) and (ii) above. Agreement was, moreover, reached on the use of the bands 68 - 73 Mc/s and 76 - 88 Mc/s for broadcasting in the U.S.S.R., and on the use of the band 86 - 87.5 Mc/s for broadcasting in British West Africa. It was also agreed that Footnotes should be appended to the Frequency Table covering the requirement of the United Kingdom to use the Band 82 - 87 Mc/s for the radiolocation service and the band 87.5 - 88 Mc/s for the mobile (excluding aeronautical mobile) service.

A suggested frequency allocation table, with associated Footnotes, meeting these requirements, is given in the Annex 1.

- 4. The Sub-Group was, however, unable to reach agreement on the use of the bands 68 73 Mc/s and 76 87.5 Mc/s, for broadcasting, in Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania (Proposals Nos. 595, 5297, 5299 and Document No. 329 refer). The Delegates of Austria Denmark, Greece, Federal Republic of Germany and Sweden were opposed to the operation of broadcasting stations in these frequency ranges, in the countries concerned, because of the serious risk of harmful interference to low-power fixed and land-mobile services already operated, or to be operated, by their Administrations. It was explained that in many of these countries the bands allocated at Atlantic City for fixed and mobile services in this range were seriously congested. Moreover, the introduction of high-power broadcasting stations in the bands 68 70 Mc/s, 72.8 74.8 Mc/s and 78 80 Mc/s (at present allocated for aeronautical radionavigation) would seriously impede the use of these bands for fixed and mobile purposes (as has been proposed by many European countries).
- The Delegates of Austria, Denmark, Greece. Federal Republic of Germany and Sweden were not prepared to agree to the operation of broadcasting stations in the frequency ranges 68 73 Mc/s and 76 87.5 Mc/s subject to local and more detailed agreement between Administrations concerned, because they saw little prospect of being able to reach agreements that would adequately safeguard their fixed and mobile services and, at the same time, meet the essential needs of the countries desiring to use the bands for broadcasting. In their views the two services are not compatible. The Delegate of the Federal Republic of Germany said he would require that any such arrangements should be based on a median field strength to be protected for the mobile service at the limit of the service area (border of the country) of 5 microvolts per metre taking into account a protection ratio of wanted to unwanted signal (exceeded for 10% of the time) of 6 db.

- 6. On the other hand, it was explained by the Delegates of Bulgaria Czechoslovakia and the U.S.S.R. that the use of the bands 68 - 73 Mc/s and 76 - 88 Mc/s, for broadcasting, in their countries, and also in Albania. Hungary. Poland and Roumania, represented a most important requirement. They drew attention to Proposals 404 - 406, formulated by the I.B.T.O. and submitted by Czechoslovakia and Roumania (page 131 of the Yellow Book) in which the reasons underlying their needs in the range 68 - 73 Mc/s were stated. They agreed that there would need to be collaboration with neighbouring Administrations in order to minimise harmful interference to low-power fixed and land-mobile services in other countries but considered that problems of that kind could be resolved given the necessary cooperation. They advocated detailed discussions with each of the countries concerned and expressed willingness to negotiate agreements with such countries either at the present Conference or subsequently. They considered that the claims of broadcasting to the use of the bands 68-70~Mc/s, 72.8-74.8~Mc/s and 78-80~Mc/s in countries that are members of I.B.T.O., should be considered equally with those of the fixed and mobile services in deciding the future allocation of these bands. They also pointed to the need to ensure that harmful interference was not caused to the reception of broadcast transmissions due to the operation of fixed and mobile services in neighbouring countries.
- Consideration was also given to the possibility that the use of the bands 68 73 Mc/s and 76 87.5 Mc/s for broadcasting might be accepted, subject to agreement on frequency assignments and other technical characteristics for each broadcasting station at the next European VHF Broadcasting Conference. It was recognized that, in principle, a decision in this matter was appropriate to the present Administrative Radio Conference, especially as not only broadcasting but also fixed and land-mobile services were concerned. However, it appeared unlikely that there would be sufficient time at the present Conference to reach any such agreements. It was therefore agreed that the possibility of taking this matter to conclusion at the next Broadcasting Conference should be specially mentioned in this report since there are possibilities that further discussion in #orking Group 4D may pave the way for a solution along those lines.

- The Sub-Group also discussed the possibility that the 8. field intensities to be protected in respect of the broadcasting, fixed and land-mobile services might be laid down in the Regulations, possibly by incorporation in a special Footnote that would make acceptance of the use of these bands for broadcasting dependent upon separate agreements between Administrations concerned, Several draft texts were considered but it was not possible to reach agreement on the terms of a Footnote that would meet all points of view. In this connexion, special mention should be made of a proposal submitted by the Delegate of Czechoslovakia at the last meeting of the Sub-Group. This proposal, based on C.C.I.R. recommendations and other published technical data, is given in Annex 2, and was supported by some Delegates; a number of Delegates said they would like to study the proposal further before offering any comment. Some others said they did not find the proposal acceptable. It was agreed that the proposal should be brought to the notice of Working Group 4D since it may include features that will assist in arriving at a solution.
- 9. The <u>Delegate of the U.S.S.R.</u>, with support from some other Delegates, stressed that his Delegation could agree to the important changes proposed in the table of frequency allocations only on condition that the interests of all countries were taken into account. He proposed the inclusion of an additional Footnote (which would become 66 (?) in Annex 1) either on the lines of that given in Annex 2 or on the lines indicated under 66 (?) in Annex 1.
- In summary, the Sub-Group was unable to reach agreement on the use of the bands 68 73 Mc/s and 76 87.5 Mc/s for broadcasting in Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania. However, subject to the reservation in paragraph 9 above, the Sub-Group was able to reach agreement on the remaining proposals that it was asked to examine and considers that so far as these Proposals are concerned the requirements of countries would best be met by the adoption of the frequency table and Footnotes shown in Annex 1; but of course, the table and Footnotes do not take account of the full requirements of broadcasting.
- 11. The Sub-Group did not consider any proposals concerning allocations in this range of the spectrum for radio-astronomy since these will doubtless be dealt with in the Special Group set up to consider all such requirements.
- 12. Attention is also drawn to the fact that Regulations 180 and 186 have been included, virtually, without amendment, in Annex 1. However, there may be no objection to the deletion of Regulation 186 as well as the amendment of Regulation 180 and this matter can, doubtless, be settled in Working Group 4D.
- 13. Finally, the Sub-Group wishes to express its thanks to Mr. R. Smith of the I.F.R.B. for his help and advice, and for his assistance in the preparation of documents.

E. Sharpe Chairman

# ANNEX

# SUGGESTED ALLOCATION TABLE FOR REGION 1

# 68 **-** 88 Mc/s

BAND Mc/s	Allocation
68 - 74.8	Fixed 66) 66a) 68a) 68 <b>b)</b> Land Mobile
74.8 - 75.2	Aeronautical radionavigation 70)
75.2 - 87.5	Fixed 68b) 71) 72) 72a) 72b) 73a) Mobile
87.5 - 88	Broadcasting 73b)

#### Footnotes

- 180a ADD
- 66a) In Austria, France, Greece, Morocco and the United Kingdom, the band 68 70 Mc/s is allocated additionally for the aeronautical radionavigation service.
- 180 MOD
- 66) In the U.S.S.R. the band 68 73 Mc/s is allocated for the broadcasting service. The aeronautical radionavigation service in other countries and the broadcasting service in the U.S.S.R. are subject to local arrangement in order to avoid mutual harmful interference.
- 182a ADD
- 68a) In Greece and the United Kingdom, the band 72.8 74.8 Mc/s is allocated additionally for the aeronautical radionavigation service.
- 182b ADD
- 68b) In Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania and the U.S.S.R. the bands 73 74.8 and 75.2 76 Mc/s are allocated alternatively for the aeronautical radionavigation service.

184	MOD	70) The Frequency 75 Mc/s is designated for aeronautical marker beacons. In Region 1 the guard band is $\pm$ 0.2 Mc/s. However, other services must refrain from assigning frequencies close to the limits of this guard band to stations which, because of their power or position, might cause harmful interference to marker beacons.
185	MOD	71) In the U.S.S.R. the band 76 - 100 Mc/s is allocated for the broadcasting service.
186	NOC	72) The broadcasting service in the U.S.S.R. and the radionavigation service in neighbouring countries are subject to local arrangement as regards avoiding mutual harmful interference.
186a	ADD	72a) In Morocco and the United Kingdom the band 78 - 80 Mc/s is allocated additionally for the aeronautical radionavigation service and in France for the radionavigation service.
186b	ADD	72b) In the United Kingdom the band 82 - 87 Mc/s is allocated additionally for the Radiolocation service.
187a	ADD	73a) In British West Africa the band 86 - 87.5 Mc/s is allocated alternatively for the broadcasting service.
18 <b>7b</b>	ADD	73b) In the United Kingdom the band $87.5 - 88 \text{ Mc/s}$ is allocated additionally for the land mobile service.
180(?)	ADD	66 (?) See Below.

NOTE: It is stressed that the foregoing does not take account of the full requirements of broadcasting (see paragraph 9 of the Report). To meet the outstanding broadcasting requirements the following additional Footnote was suggested (see paragraph 9):

"In Albania, Bulgaria, Czechoslovakia, Hungary, Poland and Roumania, the bands 68 - 73 Mc/s and 76 - 87.5 Mc/s are allocated alternatively to broadcasting, subject to separate agreement with neighbouring Administrations in order to avoid mutual harmful interference between the broadcasting service and the other authorised services".

However, as will be clear from the Report, agreement was not reached on the inclusion of this additional Footnote. Some such Footnote would need to be added if Working Group 4D were able to find a solution to the basic problem.

#### ANNEX 2

# DRAFT FOOTNOTE ABOUT THE BAND 68 - 87.5 Mc/s

In the People's Republic of Albania, the Hungarian People's Republic, the People's Republic of Poland, and in Czechoslovakia, the bands 68 - 73 Mc/s and 76 - 07.5 Mc/s are allocated to broadcasting as an additional service. For the bands 70 - 72.8 Mc/s, 76 - 78 Mc/s, 80 - 83 Mc/s, and 85 - 87.5 Mc/s, this allocation shall be subject to the proviso that individual agreements are reached with the Administrations directly affected as regards the frequency assignment and other technical characteristics (including power and site, or, for mobile stations, operational area) of every station which might cause harmful interference between the services of the Administrations in question. In concluding such agreements, an especial eye shall be kept on the need to avoid mutual harmful interference.

The mean field strength to be protected at the limit of the service areas and the corresponding protection ratio shall be in accordance with the relevant International Radio Consultative Committee Recommendations Nos. 263 and 312. Provisionally, in the absence of data adopted for the fixed and mobile services, 70 microvolts per metre and a protection ratio of 6 db for these services should be aimed at, assuming transmissions on the same carriers. On the average, a service shall be provided for not less than 90% of the time.

GENEVA, 1959

WORKING GROUP 5B

#### AGENDA

#### Sixth meeting of Working Group 5B

Monday, 16 November 1959, at 9 a.m. - Room F

- 1. Examination of the final report of Sub-Working Group 5B2 (Document No. DT 739). (In connection with this item, consideration will have to be given to proposal 5565 by Argentina, Brazil, Paraguay, Uruguay and Venezuela, published in Document No. 556)
- 2. Consideration of question outstanding in the report by Sub-Group 5Bl (Document No. DT 719):
  - a) Document No. D# 719 Corrigendum No. 2. Text for paragraph 1 bis (also consideration of Document No. 545 submitted by Spain).
  - Document No. DT 719 Corrigendum No. 3. New text for point 3 in Document No. DT 719, pages 3 and 4
  - c) Document No. DT 719, point 8 (page 7). Proposal by Sub-Group 5Bl that numbers 56 and 57 of the E. A.R.C. Agreement be transferred to the new Radio Regulations
  - d) Document No. DT 719, point 12 (page 8). Application of numbers 26, 27 and 28 of the E.A.R.C. Agreement to Regions 2 and 3.
  - e) Document No. DT 719, point 13 (pages 8 and 9). Questions relating to inter-ship frequencies (see new draft of point 13 in Corrigendum 4 to Document No. DT 719)
  - f) Other questions within the terms of reference of Sub-Working Group 5Bl
- 3. Examination of the Report of Sub-Working Group 5B3, if the document is available
- 4. Examination of the final report of Sub-Working Group 5B4 (Document No. DT 745)
- 5. Other business.

Juan A. Autelli Chairman GENEVE, 1959

#### GROUPE DE TRAVAIL 5B

STATISTIQUE PREPAREE PAR L'I.F.R.B. A LA DEMANDE DE LA DELEGATION DE L'ESPAGNE POUR LE GROUPE DE TRAVAIL 5B

FREQUENCES DE RADIODIFFUSION EN ONDES MOYENNES (ZONE EUROPEENNE)

STATISTIC PREPARED BY THE I.F.R.B. AT THE REQUEST OF THE DELEGATION OF SPAIN FOR WORKING GROUP 5B

MEDIUM WAVE BROADCASTING FREQUENCIES (EUROPEAN AREA)

ESTADÍSTICA SOLICITADA POR LA DELEGACIÓN DE ESPAÑA PREPARADA POR LA I.F.R.B. PARA EL GRUPE DE TRABAJO 5B FRECUENCIAS DE RADIODIFUSIÓN EN ONDAS MEDIAS (ZONA EUROPEA)

Pays	Nombre de fréquences attribuées dans le plan	Nombre de · oanaux exclusifs	Notifications à la C.A.E.R. dans le Fichie ce avec une da color 2a	et inscrites er de référen- ete dans la
Country	Number of frequencies allotted in the Plan	Number of exclusive channels	Notifications to the E.A.R.C appearing in t with dates in 2a	and he MRFR
País	Número de frecuencias atribuidas en el plan	canales	Notificaciones a la C.A.E.R. en el Registro una fecha en l 2a	e inscritas básico con
(1)	(2)	(3)	(4)	(5)
R.P. d'Albanie	4	ı	_	-
Belgique	6	1	~	
R.S.S. de Biélorussie	3	ĭ	. <del>-</del>	**
R.P. de Bulgarie	5	1	· <del>-</del>	-
Etat de la Cité du Vatican	2	-	-	· ~
<u>Danemark</u>	5			
<u>Finlande</u>	7	1	1	2
France et Algérie	23	5	_	

⁽Les noms des pays soulignés sont ceux des pays parties à la Convention de Copenhague) (The underlined countries are those party to the Copenhagen Convention) (El nombre de los países subrayados es el de los países parte en el Convenio de Copenhague)

			rage 2	
(1)	(2)	(3)	(4)	(5)
<u>Grèce</u>	9	1	-	de Cappe
R.P. de Hongrie	5	2	_	
Irlande	4	_	~	News
Italie	13	3	1	11
Maroc	6	•••		9
Monaco	1	-	-	•••
Norvège	11,	2	1	-
Pays-Bas	3	. 1	witer	
R.P. de Pologne	10	3	-	
R.P. de Roumanie	6	1	-	
Royaume-Uni	17	2	825	1
Suisse	5	2		<b></b>
Tchécoslovaquie	9	4	-	2
Tunisie	5	. 🟎	-	·
R.S.S. de l'Ukraine	10	3	***	<b>-</b>
U.R.S.S.	22	6		
Yougoslavie	10	5_		
Total	201	45	====	25
République de St. Marin *	1	-	<b>~</b> '	· <b>_</b>
Andorre *	. 1	-	***	
Autriche	6	2	11	7
Espagne	11	4	9	31
Islande	2		2	-
Israël	3	-	4	4
Jordanie		May	• <del>••</del>	1
Liban	2	<b>.</b>	<u>.</u> .	. <b>-</b>
Libye	3		1	-
Luxembourg	1	1	_	<b></b>
Portugal	13	-	7	3
R.A.U, Région Egyptienne)	4	-	-	-
R.A.U. (Région Syrienne)	4		<del>-</del>	
Allemagne	12	-	***	20
Suède	9	2	3	5
Turquie	3	1	-	
Total	75 ·	6	37	71
s nome doe nave coulienée cont	and degree	=====		====== madaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

(Les noms des pays soulignés sont ceux des pays parties à la Convention de Copenhague) (The underlined countries are those party to the Copenhagen Convention) (El nombre de los países subrayados es el de los países parte en el Convenio de

Copenhague)
*Non-Membres de l'U.I.T. * Non-Members of the I.T.U. * No-Miembros de la U.I.T.

# WORKING GROUP 5A

# DRAFT

# ARTICLE 11

# NOTIFICATION AND RECORDING OF FREQUENCIES 1N THE MASTER INTERNATIONAL FREQUENCY REGISTER

#### Summary

		rage
Section II	Notification of frequency assignments	2
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	ments	4

#### ARTICLE 11

Title	MOD	Notification and recording of frequencies in
		the Master International Frequency Register
Sect. I	SUP	
309	SUP	
310	SUP)	
311	SUP )	
312	SUP )	See Section IVa
313	SUP )	
Title	MOD	Section II. Notification of frequency
		<u>assignments*</u>
314	MOD	§ 2. (1) Any frequency assignment to a fixed, land,
		broadcasting, earth, radiodetermination land, or standard
		frequency station, or to a ground based station in the
		meteorological aids service, shall be notified to the
		International Frequency Registration Board,
		a) if the use of the frequency concerned is
		capable of causing harmful interference to any
		service of another Administration; or

radiocommunication; or

b) if the frequency is to be used for international

^{*} The expression <u>frequency assignment</u>, whenever is appears in this Article shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called <u>Master Register</u>).

c) if it is desired to obtain international recognition of the use of the frequency.

315 MOD

(2) Similar notice shall be given for any frequency to be used for the reception of mobile or space stations by a particular land or earth station in each case where one or more of the conditions specified in No. 314 are applicable.

315a **

316 MOD

(3) Specific frequencies prescribed by the Radio Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2 182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board (See No. 448).

318 MOD

§ 4. (1) For any notification under Nos. 314 or 315, an individual notice for each frequency assignment shall be drawn up as prescribed in Appendix 1, which specifies the basic characteristics to be furnished. It is recommended that the notifying Administration should also supply the additional data called for in that Appendix, together with any such further data as it may consider appropriate.

318b *

^{**} Pending the result of the examination by Group 5B of the question of intership frequencies, in respect of which a proposal has been submitted by Spain and the United Kingdom.

^{*} See No. 315a

317	MOD	g 3. (1) Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than ninety days before the date it is brought into use, but in any case not later than thirty days after that date.
317a	ADD	(2) Any frequency assignment, the notice of which reaches the Board more than thirty days after the notified date of putting into use shall, where it is to be recorded bear a remark in the Master Register to indicate that it is not in conformity with No. 317.
319	SUP	
319a	ADD	(2a) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.
320	MOD	(3) Complete notices shall be considered by the Board in the order of their receipt.
320a	ADD	§ 4a When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.
Title	MOD	Section III. Procedure for the Examination of Notices and the Recording of Frequency Assignments
320b	ADD	§ 4b Any notice which is incomplete shall be returned by the Board immediately, by airmail, to the notifying Administration with the reasons therefor.

321*	MOD	§ 5. Upon receipt of a complete notice, the Board
•		shall include the particulars thereof, with the date of
		receipt, in a weekly circular sent by airmail to Adminis-
		trations Members and Associate Members of the Union;
		this circular shall contain the particulars of all such
		notices received since the publication of the previous
		circular.
<b>3</b> 22	MOD	§ 6. The circular shall constitute the acknowledge-
		ment to the notifying Administration of the receipt of a complete notice.
<b>3</b> 22a	ADD	§ 6a Complete notices shall be considered by the
		Board in the order specified in No. 320. The Board cannot
		postpone the examination unless it lacks sufficient data
		to render a decision in connection therewith. However,
		the Board shall not act upon any notice which has a
		technical bearing of an earlier notice still under con-
		sideration by the Board, until such time as it has reached
		a finding with respect to such earlier notice,
323	SUP	
324	SUP	
325	SUP	
326	NOC	§ 7. (1) The Board shall examine each notice with respect to:
327	SUP	
328	SUP	

^{*} To be reviewed in the light of the conclusions of Sub-Group 586

328a	ADD	a)	its conformity with the Convention, and with the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the probability of harmful interference);
<b>3</b> 29	MOD	b)	the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register:
<b>32</b> 9a	ADD		(1) bears a date in Column 2a (see No. 339zc); or
329b	ADD		(2) is in conformity with the provisions of No. 328a and bears a date in Column 2b (see No. 339zd), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 328a with an earlier date in Column 2b; or
329c	ADD		(3) is in conformity with the provisions of No. 328a and either bears a symbol* in Column 2d (see No. 339zf), or was recorded in the Master Register with a date in this Column as a result of a favourable finding with respect to Nos.329 to 329d inclusive; or

^{*} This symbol indicates an assignment notified pursuant to No. 272 of the E.A.R.C. Agreement (Geneva, 1951).

329d ADD

(4) is in conformity with the provisions of No. 328a and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to Nos. 329 to 329d inclusive, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 328a.

329e ADD

329f ADD

330 MOD

§ 7. (2) Where appropriate, the Board shall also examine the notice as regards its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in Nos. 328a and 329 to 329d inclusive, except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement. Similarly, the Board shall not consider the probability of harmful interference to the assignments of any Administration with whom coordination has been effected.

331	SUP	
332	SUP	
333	MOD	§ 10. Depending upon the findings of the Board subsequent to the examination prescribed in Ncg. 328a and 329 to 329d inclusive, further action shall be as follows:
334	MOD	§ 10a.(1) Finding favourable with respect to Nos. 328a and 329 to 329d inclusive.
334a	ADD	(2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt of the notice by the Board.
3346	ADD	(3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods of solar activity is slightly greater than is considered desirable, a remark shall be included in the Master Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.
335	SUP	
<b>3</b> 36	MOD	§ 10b.(1) Finding favourable with respect to No. 328a.  but unfavourable with respect to Nos. 329 to 329d inclusive.
336a	ADD	(2) The notice shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as

the Board may be able to offer with a view to the satis-

factory solution of the problem.

337 MOD

(3) Should the notifying Administration resubmit the notice with modifications which result, after reexamination, in a favourable finding by the Board with respect to Nos.329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2, according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

338 MOD

(4) Should the notifying Administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 337 to be applied, and should this Administration insist upon reconsideration of this notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

338a ADD

(5) In the case of a frequency assignment recorded in accordance with the provisions of No. 338, the Board shall investigate the assignments that contributed to the unfavourable finding, using such means at its disposal as are appropriate in the circumstances, and, with the agreement of the notifying Administration concerned, shall effect any cancellations or amendments found to be necessary in order that the recordings in the Master Register shall reflect the actual frequency usage. If, as a result, the Board is able to reach a favourable finding with respect to Nos: 329 to 329d inclusive, with regard to any assignment recorded under the provisions of No.338, the appropriate changes shall be made in respect of the entry of that assignment in the Master Register. finding remains unfavourable, the Board shall enter suitable remarks in the Master Register for the entry or entries concerned which describe the situation as it has been found by the Board to exist.

338b ADD

(6) Moreover, if, as a result of investigations under No. 338a, it is confirmed that an assignment recorded is being used in accordance with the notified basic characteristics, a symbol shall be entered in the Master Register to indicate this fact.

338c ADD

(7) Should the notifying Administration resubmit the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the resubmitted notice shall be treated under 336a. Should the notice be resubmitted again, the date to be taken into consideration for entry in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the notice submitted for the second time.

339 SUP

339a ADD \$ 10c.(1) Finding unfavourable with respect to 328a.

339b ADD

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of number 88 of these Regulations, it shall be examined immediately with respect to Nos. 329 to 329d inclusive, and the provisions of Nos. 339c or 339d applied, as appropriate.

339c ADD

(3) If the finding is favourable with respect to Nos. 329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the notice.

339d ADD

Nos. 329 to 329d inclusive, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

339e ADD

(5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339f ADD

(6) If the notifying Administration resubmits the notice with modifications which result after re-examination in a favourable finding by the Board with respect to No. 328a, the notice shall be examined with respect to Nos. 329 to 329d inclusive and treated subsequently according to the provisions of No. 334a or 334b or to those of No. 336a as appropriate. The date to be taken into consideration for entry in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of this modified notice.

339g ADD

(7) If, however, the notifying Administration insists upon reconsideration of the notice and the Board's finding remains unchanged, the notice shall be examined with respect to Nos. 329 to 329d inclusive, and the provisions of Nos. 339h or 339i applied, as appropriate.

339h ADD

(8) If the finding is favourable with respect to Nos. 329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the resubmitted notice.

339i ADD

(9) If the finding is unfavourable with respect to Nos. 329 to 329d inclusive, the notice shall be returned immediately by airmail to the notifying Administration, Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having The date to be entered in the appropriate been received. part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the first resubmitted notice. The date of receipt by the Board of the second resubmitted notice shall be entered in the Remarks Column.

339j ADD (ex. 346)

§ 10d (1) Change to basic characteristics of assignments already recorded in the Master Register.

339k ADD

(2) A notice of a change to basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Column 3, 4a and 11 of the Master Register), shall be examined by the Board according to Nos. 328a and 329 to 329d inclusive, and the provisions of Nos. 334a to 339i inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.

391 ADD

(3) However, in case of a change to basic characteristics of an assignment (except a change of the assigned frequency which exceeds half of the frequency band orininally assigned, as defined in No. 57a) which is in conformity with No. 328a, should the Board reach a favourable finding as a consequence of the examination with respect to Nos. 329 to 329d inclusive, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original dates in the appropriate Column 2. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

339 la ADD

§ 10e. In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than 180 days after the date of its return by the Board shall be considered as a new notice.

339 lb ADD

§ 10ea (1) Recording of frequency assignments notified before being brought into use.

339 m ADD

(2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 328a and 329 to 329d inclusive, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.

339n ADD

(3) If the Board receives confirmation from the notifying Administration of the effective date of bringing into use within the period of thirty days (See No.317) after the projected date of bringing into use, the special symbol shall be deleted from the Remarks Column. In the case where the Board, in the light of a request from the notifying Administration, finds that exceptional circumstances warrant extension of this period, the extension shall in no case exceed ninety days.

3390 ADD

(4) If the Board does not receive this confirmation within the period referred to in No. 339n, the entry concerned shall be cancelled.

339p ADD

(5) The provisions of Nos. 339m to 3390 do not apply to frequency assignments which are completely in conformity with the Allotment Plan appearing in Appendices...... to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

# &DMINISTRATIVE RADIO CONFERENCE

Document No. DT 776-E (Rev.) 26 November, 1959.

GENEVA, 1959

### WORKING GROUP 5A

### DRAFT

# ARTICLE 11

# NOTIFICATION AND RECORDING OF FREQUENCIES IN THE MASTER INTERNATIONAL FREQUENCY REGISTER

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#### ARTICLE 11

Title	MOD	Notification and recording of frequencies in
		the Master International Frequency Register
Sect.I	SUP	
309	SUP ,	
310	SUP {	
311	SUP )	(See Section IVa)
312	SUP )	(See Section 1va)
313	SUP (	
$\mathtt{Title}$	) MOD	Section II. Notification of frequency
		assignments*
314	MOD	§ 2. (1) Any frequency assignment ** to a fixed, land,
		broadcasting, *** earth, radiodetermination land, or
		standard frequency station, or to a ground based station
		in the meteorological aids service, shall be notified to
	,	the International Frequency Registration Board,
		a) if the use of the frequency concerned is

a) if the use of the frequency concerned is capable of causing harmful interference to any service of another Administration; or

^{*} The expression <u>frequency assignment</u>, whenever it appears in this Article shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called <u>Master Register</u>).

^{**} In the case where a frequency is used by numerous stations under the jurisdiction of the same Administration, see Appendix 1 (Column 5a, paras. 2c and 2d).

^{***} With respect to assignments to broadcasting stations in the bands allocated exclusively to the broadcasting services between 5 950 kc/s and 26 100 kc/s, see Article 11a.

- b) if the frequency is to be used for international radiocommunication; or
- c) if it is desired to obtain international recognition of the use of the frequency.

315 MOD

(2) Similar notice shall be given for any frequency to be used for the reception of mobile or space stations by a particular land or earth station in each case where one or more of the conditions specified in No. 314 are applicable.

315a *

316 MOD

(3) Specific frequencies prescribed by these Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2 182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board (See No. 448).

318 MOD

§ 4. (1) For any notification under Nos. 314 or 315, an individual notice for each frequency assignment shall be drawn up as prescribed in Sections A or B of Appendix 1, which specifies the basic characteristics to be furnished. It is recommended that the notifying Administration should also supply the additional data called for in that Appendix, together with such further data as it may consider appropriate.

^{*} Pending the result of the examination by Committee 5 of the question of intership frequencies, in respect of which a proposal has been submitted by Spain and the United Kingdom.

318a	ADD	(2) When stations of the same service, such as the land mobile service, use a band of frequencies above 28 000 kc/s in a specific area or areas, an individual notice should be drawn up, as prescribed in Section Ba of Appendix 1, for each frequency assigned within the band, but the particulars should relate only to a typical station. This does not apply to broadcasting stations.
318b	*	
317	MOD	§ 3. (1) Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than ninety days before the date on which it is to be brought into use, but in any case not later than thirty days after the date it is actually brought into use.
317a	ADD	(2) Any frequency assignment, the notice of which reaches the Board more than thirty days after the notified date of putting into use shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. 317.
319	SUP	
319a	ADD	(2a) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.
320	MOD	(3) Complete notices shall be considered by the Board in the order of their receipt.
320a	ADD	§ 4a. When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.

^{*}Pending the result of the examination of Committee 5 of the question of intership frequencies, in respect of which a proposal has been submitted by Spain and the United Kingdom.

Title	MOD	Section III. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register
320b	ADD	§ 4b. Any notice which is incomplete shall be returned by the Board immediately, by airmail, to the notifying Administration with the reasons therefor.
321	MOD	§ 5. Upon receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in a weekly circular sent by airmail to Administrations, Members and Associate Members of the Union; this circular shall contain the particulars of all such notices received since the publication of the previous circular.
322	MOD	§ 6. The circular shall constitute the acknowledgement to the notifying Administration of the receipt of a complete notice.
322a	ADD	§ 6a. Complete notices shall be considered by the Board in the order specified in No. 320. The Board cannot postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith; moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board until it has reached a finding with respect to such earlier notice.
323 324 325 326	SUP SUP SUP MOD	§ 7. (1) Except for notices referred to in Nos. 339pl, 339p7, 339pa, 339pj and 339pq, the Board shall examine each notice with respect to:
327 328	SUP SUP	

328a ADD

a) its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the probability of harmful interference);

329 MOD

- b) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register:
  - (1) bears a date in Column 2a (see No. 339zc); or
  - (2) is in conformity with the provisions of No. 328a and bears a date in Column 2b (see No. 339zd), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 328a with an earlier date in Column 2b; or

329a ADD

- c) the probability of harmful interference to the service rendered by a station for which a frequency assignment already recorded in the Master Register:
  - (1) is in conformity with the provisions of No. 328a and either bears a symbol* in Column 2d (see No. 339zf), or was recorded in the Master Register with a date in this Column as a result of a favourable finding with respect to No. 329; or

^{*} This symbol indicates an assignment notified pursuant to No. 272 of the E.A.R.C. Agreement (Geneva, 1951), or, in the frequency bands above 27,5 Mc/s, an assignment for which the notice was received by the Board before 1 April 1952.

(2) is in conformity with the provisions of No. 328a and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to No. 329a, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 328a.

329b ADD

(2) The Board does not make the examination specified in No. 329 where the notice refers to a broadcasting station in Region 2 in the frequency band 535 - 1605 kc/s. When the notice relates to a frequency above 28 000 kc/s, the Board shall make the examination specified in No. 329a only at the request of an Administration directly concerned or affected when co-ordination has not been possible between the Administrations involved.

330 MOD

(3) Where appropriate, the Board shall also examine the notice with respect to its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in Nos. 328a and 329 or 329a, except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement. Similarly, the Board shall not consider the probability of harmful interference to the assignments of any Administration with which co-ordination has been effected.

331 SUP

332 SUP

333	MOD	§ 10a. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 328a and 329 or 329a, further action shall be as follows:
333a	ADD	§ 10aa.(1) Finding favourable with respect to No. 328a in cases where the provisions of Nos. 329 and 329a are not applicable (See No. 329b)
333ъ	ADD	(2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt of the notice by the Board.
334	MOD	§ 10ab.(1) Finding favourable with respect to Nos. 328a and 329 or 329a.
334a	ADD	(2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt of the notice by the Board.
334b	ADD	(3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods of solar activity is slightly greater than is considered desirable, a remark shall be included in the Master Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.

335

SUP

336 MOD

§ 10b. (1) Finding favourable with respect to No. 328a but unfavourable with respect to Nos. 329 or 329a.

336a ADD

(2) The notice shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

337 MOD

(3) Should the notifying Administration resubmit the notice with modifications which result, after reexamination, in a favourable finding by the Board with respect to Nos. 329 or 329a, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

338 MOD

(4) Should the notifying Administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 337 to be applied, and should that Administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

338a ADD

(5) In the case of a frequency assignment recorded in accordance with the provisions of No. 338, the Board shall investigate the assignments that contributed to the unfavourable finding, using such means at its disposal as are appropriate in the circumstances, and, with the agreement of the notifying Administration concerned, shall effect any cancellations or amendments found to be necessary in order that the recordings in the Master Register shall reflect the actual frequency usage. If, as a result, . the Board is able to reach a favourable finding with respect to Nos. 329 or 329a with regard to any assignment recorded under the provisions of No.338, the appropriate changes shall be made in respect of the entry of that assignment in the Master Register. If the finding remains unfavourable, the Board shall enter suitable remarks in the Master Register for the entry or entries concerned which describe the situation as it has been found by the Board to exist.

338b ADD

(6) Moreover, if, as a result of investigations under No. 338a, it is confirmed that an assignment recorded is being used in accordance with the notified basic characteristics, a symbol shall be entered in Column 13a of the Master Register to indicate this fact.

338c ADD

(7) Should the notifying Administration resubmit the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the resubmitted notice shall be treated under 336a. If the notice is resubmitted again and subsequently recorded, the date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the notice submitted for the second time.

339 SUP

339aa ADD

§ 10ba.(1) Finding unfavourable with respect to No. 328a in cases where the provisions of Nos. 329 and 329a are not applicable (See No. 329b).

339ab ADD

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the notice.

339ac ADD

(3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339ad ADD

(4) If the notifying Administration resubmits the notice, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the resubmitted notice.

339ae ADD

§ 10c. (1) Finding unfavourable with respect to No. 328a in cases where the provisions of Nos. 329 or 329a are applicable (See No. 329b).

339b ADD

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be examined immediately with respect to Nos. 329 or 329a, and the provisions of Nos. 339c or 339d applied, as appropriate.

339c ADD

(3) If the finding is favourable with respect to Nos. 329 or 329a, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the notice.

339d ADD

(4) If the finding is unfavourable with respect to Nos. 329 or 329a, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

339e ADD

(5) Where the notices does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339f ADD

(6) If the notifying Administration resubmits the notice with modifications which result after re-examination in a favourable finding by the Board with respect to No. 328a, the notice shall be examined with respect to Nos. 329 or 329a and treated subsequently according to the provisions of Nos. 334a or 334b, or No. 336a as appropriate. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the modified notice.

339g ADD

(7) If, however, the notifying Administration insists upon reconsideration of the notice and the Board's finding remains unchanged, the notice shall be examined with respect to Nos. 329 or 329a and the provisions of Nos. 339h or 339i applied, as appropriate.

339h ADD

(8) If the finding is favourable with respect to Nos. 329 or 329a, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the resubmitted notice.

339i ADD

(9) If the finding is unfavourable with respect to Nos. 329 or 329a, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the first resubmitted The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

339 ADD (ex 346)

§ 10d. (1) Change to basic characteristics of assignments already recorded in the Master Register.

339k ADD

(2) A notice of a change to the basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Column 3, 4a and 11 of the Master Register), shall be examined by the Board according to Nos. 328a and 329, 329a or 329b, as appropriate, and the provisions of Nos. 333a to 339i inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.

339L ADD

characteristics of an assignment (except a change of the assigned frequency which exceeds half of the frequency band originally assigned, as defined in No. 57a) which is in conformity with No. 328a, should the Board reach a favourable finding as a consequence of the examination with respect to Nos. 329 or 329a, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in the appropriate part of Column 2. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

339La ADD

§ 10e. In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than one hundred and eighty days after the date of its return by the Board shall be considered as a new notice.

339Lb ADD § 10ea.(1) Recording of frequency assignments notified before being brought into use.

ADD

339m

- (2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 328a and 329 or 329a, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.
- 339n ADD (3) If, within the period of thirty days (see
  No. 317) after the projected date of bringing into use,
  the Board receives confirmation from the notifying
  Administration of the date of putting into use, the
  special symbol shall be deleted from the Remarks Column.
  In the case where the Board, in the light of a request
  from the notifying Administration received before the
  end of the thirty day period, finds that exceptional
  circumstances warrant an extension of this period, the
  extension shall in no case exceed ninety days.
- 3390 ADD (4) If the Board does not receive this confirmation within the period referred to in No. 339n, the entry concerned shall be cancelled.
- 339p ADD (5) The provisions of Nos. 339m to 339o do not apply to frequency assignments which are in full conformity with the Allotment Plans appearing in Appendices 12a and 16a to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

- 339pl ADD § 10eb. (1) Examination of notices concerning frequency
  assignments to radiotelephone coast stations in the bands
  allocated exclusively to the maritime mobile service between
  4 000 kc/s and 23 000 kc/s for radiotelephone coast stations
  (See No. 326)
- 339p2 ADD (2) The Board shall examine each notice covered by
  No. 339pl to determine whether the notified assignment is in
  full conformity with an allotment in Section I or Section II
  of the Allotment Plan contained in Appendix 12a to these
  Regulations, i.e. whether the frequency, the area of allotment, the power and any limitations are those specified in
  that Appendix.
- 339p3 ADD (3) Any frequency assignment for which the finding is favourable with respect to 339p2 shall be recorded in the Master Register (See also No. 339p). The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.
- 339p4 ADD (4) If a notice relates to an amendment to an assignment in full conformity with an allotment in Section I or Section II of the Allotment Plan, which is only a change in the characteristics (including the frequency) of the emission of a radiotelephone coast station, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the Table in Appendix 12, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339p5 ADD

- (5) In the case of a notice which is not in conformity with the provisions of Nos. 339p2 or 339p4, the Board shall examine this notice with respect to the probability of harmful interference to the service rendered by a radiotelephone coast station for which a frequency assignment:
  - a) is in full conformity with one of the allotments in Section I or II of the Plan and is already recorded in the Master Register or may be so recorded in the future; or
  - b) was recorded in the Master Register on a frequency specified in Appendix 12 as a result of a favourable finding with respect to Nos. 339p4 or 339p5; or
  - c) was recorded in the Master Register on a frequency specified in Appendix 12 after an unfavourable finding with respect to Nos. 339p4 or 339p5, but has not, in fact, caused harmful interference to any frequency assignment to a radiotelephone coast station previously recorded in the Master Register.

339p6 ADD

(6) According to the finding of the Board with respect to No. 339p5, further action shall be in accordance with the provisions of Nos. 334 to 338c inclusive, or Nos. 339j to 339 L inclusive, as appropriate, it being understood that, in these provisions, No. 339p5 shall be read for Nos. 328a and 329.

- 339p7 ADD § 10ec.(1) Examination of notices concerning frequencies used for reception by radiotelephone coast stations in the bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone ship stations (See Nos. 315 and 326).
- 339p8 ADD (2) The Board shall examine each notice covered by
  No. 339p7 to determine whether the notified assignment
  corresponds to a frequency associated, according to Appendix 12, with a frequency allotted to the notifying Administration under Section I or Section II of the Allotment Plan
  contained in Appendix 12a to these Regulations.
- 339p9 ADD (3) Any frequency assignment for which the finding is favourable with respect to No. 339p8 shall be recorded in the Master Register. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.
- 339pl0 ADD (4) Where a notice relates to an amendment to an assignment of a frequency which is associated, according to Appendix 12, with a frequency allotted to the notifying Administration under Section I or Section II of the Plan, and this amendment is only a change in the characteristics (including the frequency) of the emission of radiotelephone ship stations, without extending the necessary bandwidth beyond the upper or lower limits of the band provided for double sideband emissions in accordance with the Table in Appendix 12, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339pll	ADD	(5) Any assignment of a frequency for reception by a radiotelephone coast station which is not in conformity with No. 339p8 shall be recorded in the Master Register. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section IV of this Article.						
339pa	ADD	§ 10ed (1) Examination of notices concerning frequency assignments to aeronautical stations in the aeronautical mobile (R) service in the bands allocated exclusively to that service between 2850 kc/s and 17 970 kc/s (See No.326)						
339pb	ADD	(2) The Board shall examine each notice covered by No. 339pa to determine whether:						
339pc	ADD	a) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 16a (Part II, Section IIB), or the assignment is the result of a permissive change from one class of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Appendix 16a (Part I, Section IIA, para. 1);						
339pd	ADD	b) the limitations of use set forth in Column 3 of the Plan have been appropriately observed;						
<b>33</b> 9pe	ADD	c) the class of station, class of emission, power, and hours of use are in accordance with the General Notes which constitute the heading for the Plan;						
339pf	ADD	d) the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of the Plan.						

339pg ADD (3) In the case of a notice in conformity with the provisions of Nos. 339pc to 339pe, but not with those of No. 339pf, the Board shall examine whether the protection specified in Appendix 16a (Part I, Section IIA, para. 5) is afforded to the allotments in the Plan. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 16a (Part I, Section IIB, para. 4).

339ph ADD (4) The technical criteria to be employed by the
Board in its examination of these notices shall be those in
Appendix 16a (Part I).

339pi ADD (5) All frequency assignments referred to in

No. 339pa shall be recorded in the Master Register according
to the findings reached by the Board. The date to be entered
in Column 2a or 2b shall be that determined according to the
relevant provisions of Section IV of this Article.

339pj ADD § 10ee. (1) Examination of notices concerning frequency assignments to aeronautical stations in the aeronautical mobile (OR) service in the bands allocated exclusively to that service, between 3 050 kc/s and 18 030 kc/s (See No. 326).

339pk ADD (2) The Board shall examine each notice covered by No. 339pj to determine whether:

a) the assignment is in conformity with the primary allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 16a (Parts III and IV);

339pm ADD

b) the assignment is in conformity with or satisfies the requirements for secondary allotments
in the Allotment Plan for the aeronautical
mobile (OR) service and the conditions specified
in Appendix 16a (Part III, Section II, para. 4,
sub-para. 4 and Part IV). In applying these
provisions, the Board shall assume that the
frequency will be used on a day-time basis;

339pn ADD

c) the assignment is the result of a permissive change from one class of emission to another, its occupied bandwidth is within the channelling arrangement provided for in Appendix 16a (Part III, Section II, paras. 1 and 2), and it meets all the conditions for a primary or secondary allotment in the Plan, except that the assigned frequency does not correspond numerically with one of the frequencies specified therein.

339po ADD

(3) The technical criteria to be employed by the Board in its examination of these notices shall be those in Appendix 16a (Part III).

339pp ADD

(4) All frequency assignments referred to in No. 339pj shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

- 339pq ADD § 10ef (1) Frequency assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s.
- 339pr ADD (2) When the Board has prepared according to the provisions of No. ...........(Article lla) the High Frequency Broadcasting Schedule for a particular season, this Schedule shall be compared with the listings in the Master Register, to determine whether all the frequency assignments included in that Schedule correspond to frequency assignments recorded in the Master Register on behalf of the Administrations concerned.
- 339ps ADD (3) In the case where a frequency assignment included in a Schedule for a particular season is not covered by any listing in the Master Register, that frequency assignment shall be considered as being notified, and the Board, without further examination, shall make an appropriate entry in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the projected seasonal schedule.

Title MOD Section IV. Recording of dates and findings in the Master Register

339q ADD § 10f. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column, where appropriate.

339qa ADD § 10g. The procedure for recording dates in the appropriate part of Column 2 of the Master Register which shall be applied according to the frequency bands and services concerned, is described in the following Nos. 339ra to 339wb.

339ra ADD § 10h.(1) Frequency bands:

2 850 kc/s 14 3 400 kc/s 3 155 3 900 kc/s in Region 1 5 500 3 500 4 000 kc/s in Region 2 3 500 3 950 kc/s in Region 3 4 368 kc/s 4 238 6 357 6 525 kc/s 8 745 kc/s 8 476 12 714 13 130 kc/s 17 290 kc/s 16 952 22 650 kc/s 22 400

339rb ADD (2) For any assignment to which the provisions of Nos. 334a, 334b or 337 apply, the relevant date shall be entered in Column 2a of the Master Register.

339rc ADD (3) For any assignment to which the provisions of Nos. 338, 339c, 339d, 339h or 339i apply, the relevant date shall be entered in Column 2b of the Master Register.

(4) However, no date shall be entered in Column 2a 339rd ADD or Column 2b in respect of broadcasting stations in Region 2 in the frequency band 535 - 1 605 kc/s. The date entered in Column 2c is given for information only. § 10i (1) Frequency bands allocated exclusively to the 339tl ADD maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone coast stations. (2) If the finding is favourable with respect to 339t2 ADD No. 339p2, the date of 3 December 1951 shall be entered in Column 2a in the case of an allotment in Section I of the Plan; in case of an allotment in Section II, the date of 4 December 1951 shall be entered in Column 2b. (3) If the provisions of No. 339p4 are found to be 339t3 ADD applicable, the date originally entered in Column 2a or 2b, as appropriate, shall be retained. (4) For all other cases referred to in No. 339pL 339t4 ADD the relevant date shall be entered in Column 2b (see Nos. 334a, 337, 338, 338c, 339k and 339 L). (5) For assignments to stations other than radio-339t5 ADD telephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 339c, 339d, 339f, 339h and 339i). 8 10j. (1) Frequency bands allocated exclusively to the 339t6 ADD maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone ship stations. (2) If the finding is favourable with respect to 339t7 ADD No. 339p8, the date of 3 December 1951 shall be entered in

Column 2a if the associated allotment appears in Section I

of the Plan; if it appears in Section II, the date of

4 December 1951 shall be entered in Column 2b.

(3) If the provisions of 339pl0 are found to be ADD 339t8 applicable, the date originally entered in Column 2a or 2b, as appropriate, shall be retained. (4) In all other cases covered by No. 339p7 the date ADD 339t9 of receipt of the notice by the Board shall be entered in Column 2b. (5) For assignments other than assignments of 339t10 ADD frequencies for reception by radiotelephone coast stations. the relevant date shall be entered in Column 2b (See Nos. 339c. 339d. 339f, 339h and 339i). § 10k. (1) Frequency bands allocated exclusively to the 339t11 ' ADD maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelegraph ship stations (See No. 316). (2) For assignments to stations other than radio-ADD 339t12 telegraph ship stations, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i). § 10ka.(1) Frequency bands allocated exclusively to the 339ta ADD aeronautical mobile (R) service between 2 850 kc/s and 17 970 kc/s. 339tb ADD (2) If the finding is favourable with respect to Nos. 339pc to 339pf, the date of 3 December 1951 shall be entered in Column 2a. (3) If the finding is favourable with respect to 339tc ADD No. 339pg, the date of 3 December 1951 shall be entered in Column 2b. (4) In all other cases covered by No. 339pa the date 339td ADD of receipt of the notice by the Board shall be entered in

Column 2b.

339te	ADD	(5) For assignments to stations other than aeronautical stations in the aeronautical mobile (R) service, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).
339ua	ADD	§ 10kb.(1) Frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3050 kc/s and 18 030 kc/s.
339ub	ADD	(2) If the finding is favourable with respect to No. 339pL, the date of 3 December 1951 shall be entered in Column 2a.
339uc	ADD	(3) If the finding is favourable with respect to No. 339pm, the date of 3 December 1951 shall be entered in Column 2b.
339ud	ADD	(4) If the provisions of No. 339pn are found to be applicable, the date of 3 December 1951 shall be entered in Column 2a for a primary allotment, or in Column 2b for a secondary allotment.
339ue	ADD .	(5) In all other cases covered by No. 339pj, the date of receipt of the notice by the Board shall be entered in Column 2b.
339u <b>f</b>	ADD	(6) For assignments to stations other than aeronautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).
339va	ADD	§ 10 L (1) Frequency bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s.
339 <b>v</b> b	ADD	(2) For any frequency assignment which is to be re-

corded under the provisions of No. 339ps, the relevant date

shall be entered in Column 2d.

339vc ADD (3) For assignments to stations other than broad-casting stations, the relevant date shall be entered in Column 2d.

339wa ADD § 10m. (1) Frequency bands between 3 95C kc/s (4000 kc/s in Region 2) and 28 000 kc/s other than those allocated exclusively to the Aeronautical Mobile Service. Maritime Mobile Service. Broadcasting Service or Amateur Service and frequency bands above 28 000 kc/s.

339wb ADD (2) For any frequency assignment in a band referred to in No. 339wa, which is to be recorded under the provisions of Section III of this Article, the relevant date shall be entered in Column 2d of the Master Register.

339xa (Deleted)

339ya (Deleted)

339za ADD § 10n. Date to be entered in Column 2c

The date to be entered in Column 2c shall be the date of putting into use notified by the Administration concerned (See Nos. 317 and 317a). However, in cases covered by No. 339pq, the date to be entered in this Column shall be either the date of implementation of the schedule from which the assignment was extracted, or the notified date of putting into use, whichever is the later.

#### Section IVa. Categories of Frequency Assignments

- 339zc ADD (ex 311)
- § 10g. (1) Any frequency assignment which bears a date in Column 2a of the Master Register shall have the right to international protection from harmful interference.
- 339zd ADD (ex 313)
- (2) Any frequency assignment which bears a date in Column 2b is recorded in the Master Register in order that Administrations may take into account the fact that the frequency assignment concerned is in use; this recording shall not give the right to international protection to the frequency assignment concerned, except as provided for in paragraph 2 of No. 329.
- 339ze ADD
- (3) For frequency assignments having dates in two parts of Column 2, the date in Column 2c is given for information only.
- 339zf ADD
- (4) The existence of a symbol in Column 2d for a particular frequency assignment and of a date in that Column for another assignment is not in itself to be considered as having any significance.
- 339zg ADD (ex 339)
- (5) If harmful interference to the reception of any station whose assignment is in accordance with No. 328a is actually caused by the use of a frequency assignment which is not in conformity with No. 328a, the station using the latter frequency assignment must immediately cease operations upon receipt of advice of this harmful interference.

Title	(MOD)*	Section V. Review of Findings
<b>3</b> 40	MOD	§ 11. (1) The review of a finding by the Board may be undertaken:
		at the request of the notifying Administration,
		- at the request of any other Administration interested in the question, but only on the grounds of actual harmful interference,
		- on the initiative of the Board itself when it considers this is justified.
341	SUP	
342	MOD	(3) The Board, in the light of all the data at its disposal, shall review the matter, taking into account Nos. 328a and 329 or 329a, and shall render an appropriate finding, informing the notifying Administration prior either to the promulgation of its finding or to any recording action.
342a	ADD	§ lla. If a review of an unfavourable finding has been requested by the notifying Administration on the grounds of special assistance to meet an urgent and essential need in a case where harmful interference has been experienced, the Board shall consult immediately the Administrations concerned and shall make such suggestions as will facilitate the operation of the assignment of the Administration which asked for special assistance; such amendments as result from this consultation shall be made to the Master Register.

^{*} This drafting amendment applies to the French and Spanish texts only.

MOD § 12. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying Administration, following an unfavourable finding with respect to Nos. 329 or 329a, this Administration may request the Board to review the finding. Thereupon the Board shall review the matter, first having consulted the Administrations concerned.

344 MOD (2) If the finding of the Board is then favourable, it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

345 MOD (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.

In the case where a frequency assignment has ADD 345a § 12a. been entered in the Master Register on the insistence of the notifying Administration, following an unfavourable finding with respect to Nos. 329 or 329a, and where the Board finds, after having consulted the Administrations concerned, that harmful interference has not, in fact, occurred, although the assignment has been in actual use, according to the notified characteristics, during a period covering all the phases of a solar cycle in which the assignment could be normally used, the Board shall amend the entry in the Master Register in such a way that it shall appear in the future as if the original finding has been favourable with respect to Nos. 329 or 329a.

346 SUP (See Nos. 339j to 339 L).

Title MOD

# Section VI. Modification, cancellation and review of entries in the Master Register.

346a ADD (ex 350) § 13a. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying Administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master Register.

347 MOD

§ 14. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying Administration and subject to its agreement, either cancel the entry or suitably modify it.

347a ADD

§ 14a. If, in connection with an enquiry by the Board under Nos. 338a or 347, the notifying Administration has failed to supply the Board within ninety days with the necessary or pertinent information, the Board shall discregard the assignment concerned when acting upon any later notice, until such time as it has been informed that the assignment is being used as notified, or until it has received the information required. The Board shall make suitable entries in the Remarks Column of the Master Register, to indicate the situation, and in particular the period when the assignment was not taken into account by the Board.

347b ADD § 14b. As far as possible, the Board shall maintain the entries in the Master Register under continuous review for those frequency bands for which technical examination by the Board is prescribed in this Article, with a view to determining whether or not the assignments are being used in accordance with the notified basic characteristics, and shall take action under 347.

348 SUP
349 SUP
350 SUP (See No. 346a)

SUP

351

Title	NOC	Section VII. Studies and Recommendations
352	MOD	§ 17. If it is requested by any Administration, particularly by an Administration in need of special assistance, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of the following problems of frequency utilization:
353	(MOD)	<ul> <li>a) in cases arising under No. 336 as to a possible alternative frequency assignment to avoid probable harmful interference;</li> </ul>
354	MOD	b) in cases where a need arises for additional frequency assignments within a specified portion of the radio spectrum;
354a	ADD	c) in cases where, due to harmful interference, two or more frequencies of the same megacycle order are being used alternately to maintain communication on a circuit requiring only one frequency of that order; and
355	MOD	<ul> <li>d) in cases of alleged contravention or non- observance of these Regulations, or of harmful interference,</li> </ul>
355a	ADD	and shall prepare and forward to the Administrations con- cerned a report containing its findings and recommendations for the solution of the problem.
356	MOD	§ 19. If the Board finds, in particular following a request from an Administration in need of special assistance, that a change in the basic characteristics, including a change of frequency within a specific frequency range, of one or more assignments in full conformity with the provisions of No. 328a will:

357	(MOD)	a) accommodate a new assignment, or
<b>3</b> 58	(MOD)	b) facilitate the solution of a problem of harmful interference; or
359	MOD	c) otherwise facilitate the more effective use of a particular portion of the radio spectrum,
359a	ADD	and if such change is acceptable to the Administration or Administrations concerned, the change in basic characteristics shall be recorded in the Master Register without change in the original date or dates.
<b>3</b> 59b	ADD	§ 19a. In a case where, as a result of a study, the Board submits to one or more Administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these Administrations within a period of thirty days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the Administrations which did not answer. If it was the requesting Administration which failed to answer within this period, the Board shall close

the study.

Title	MOD	Section VIII. Miscellaneous Provisions
359c	ADD	§ 19b. The provisions of Sections V, VI (excepting No. 346a) and VII of this Article shall not be applied to frequency assignments in conformity with the Allotment Plans contained in Appendices 12a and 16a to these Regulations.
359d	ADD	§ 19c. The technical standards of the Board shall be based upon the relevant provisions of these Regulations and the Appendices thereto, the decisions of Administrative Conferences of the Union as appropriate, the Recommendations of the C.C.I.R., the state of the radio art, and the applicability of new transmission techniques.
360	MOD	§ 20. The Board shall promulgate to Administrations its findings and reasons therefor, together with all changes made to the Master Register, through the weekly circular referred to in No. 321, which shall be published in the working languages of the Union as defined in the Convention. In carrying out the various procedures stipulated in this Article, the Board shall use this circular as a means of communicating with Administrations to the maximum extent practicable.
360a	ADD	§ 20a. The Board shall inform Administrations, at appropriate intervals, of the cases of special assistance which were studied under Nos. 342a and 352 to 359b inclusive of these Regulations.
361	(MOD)	§ 21. In case a Member or Associate Member of the Union avails itself of the provisions of Article 25 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

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GEHEVA, 1959

### WORKING GROUP 5A

#### DRAFT

#### ARTICLE 11

# NOTIFICATION AND RECORDING OF FREQUENCIES IN THE MASTER INTERNATIONAL FREQUENCY REGISTER

#### Summary

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#### ARTICLE 11

Title	MOD	Notification and recording of frequencies in				
		the Master International Frequency Register				
Sect. I	SUP					
3 <b>0</b> 9	SUP					
310	SUP )					
311	SUP )	(G G				
312	SUP )	(See Section IVa)				
313	SUP )					
Title	MOD	Section II. Notification of frequency				
		assignments*				
314	MOD	8 2. (1) Any frequency assignment to a fixed, land,				
		broadcasting, earth, radiodetermination land, or standard				
		frequency station, or to a ground based station in the				
		meteorological aids service, shall be notified to the				
		International Frequency Registration Board,				
		a) if the use of the frequency concerned is				

- capable of causing harmful interference to any service of another Administration; or
- b) if the frequency is to be used for international radiocommunication; or

^{*} The expression <u>frequency assignment</u>, whenever it appears in this Article shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called <u>Master Register</u>).

c) if it is desired to obtain international recognition of the use of the frequency.

315 MOD

(2) Similar notice shall be given for any frequency to be used for the reception of mobile or space stations by a particular land or earth station in each case where one or more of the conditions specified in No. 314 are applicable.

315a **

316 MOD

(3) Specific frequencies prescribed by the Radio Regulations for common use by stations of a given service (for example, international distress frequencies 500 kc/s and 2 182 kc/s, frequencies of ship radiotelegraph stations operating in their exclusive high frequency bands, etc.), shall not be notified to the Board (See No. 448).

318 *** MOD

§ 4. (1) For any notification under Nos. 314 or 315, an individual notice for each frequency assignment shall be drawn up as prescribed in Appendix 1, which specifies the basic characteristics to be furnished. It is recommended that the notifying Administration should also supply the additional data called for in that Appendix, together with such further data as it may consider appropriate.

318b *

^{**} Pending the result of the examination by Group 5B of the question of intership frequencies, in respect of which a proposal has been submitted by Spain and the United Kingdom.

^{*} See No. 315a

^{***} To be reviewed in the light of the conclusions of Sub-Group 5B6

317	MOD	g 3. (1) Whenever practicable, each notice should reach the Board before the date on which the assignment is brought into use. It must reach the Board not earlier than ninety days before the date it is to be brought into use, but in any case not later than thirty days after that date.
317a	ADD	(2) Any frequency assignment, the notice of which reaches the Board more than thirty days after the notified date of putting into use shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. 317.
319	SU P	
319a	ADD	(2a) Whatever the means of communication, including telegraph, by which a notice is transmitted to the Board, it shall be considered complete if it contains at least those appropriate basic characteristics specified in Appendix 1.
320	MOD	(3) Complete notices shall be considered by the Board in the order of their receipt.
320a	ADD	§ 4a When a service or regional agreement has been concluded, the Board shall be informed of the details of this agreement.
Title	MOD	Section III. Procedure for the Examination of
320ъ	ADD	Notices and the Recording of Frequency Assignments in the Master Register  § 4b Any notice which is incomplete shall be returned by the Board immediately, by airmail, to the notifying Administration with the reasons therefor.

321*	MOD	5. Upon receipt of a complete notice, the Board
		shall include the particulars thereof, with the date of
		receipt, in a weekly circular sent by airmail to Adminis-
		trations, Members and Associate Members of the Union;
		this circular shall contain the particulars of all such
		notices received since the publication of the previous
•		circular.

322 MOD g 6. The circular shall constitute the acknowledgement to the notifying Administration of the receipt of a complete notice.

322a ADD § 6a Complete notices shall be considered by the Board in the order specified in No. 320. The Board cannot postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith; moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board until it has reached a finding with respect to such earlier notice.

323	SUP	
324	SUP	
325	SUP	
326	NOC	$\S$ 7. (1) The Board shall examine each notice with respect to:
327	SUP	·
328	SUP	

^{*} To be reviewed in the light of the conclusions of Sub-Group 5B6

328a	ADD	a)	Tabl prov exce	conformity with the Convention, the e of Frequency Allocations and the other isions of the Radio Regulations (with the ption of those relating to the probability armful interference);
329	MOD	b)	serv quen	probability of harmful interference to the ice rendered by a station for which a frecy assignment already recorded in the Master ster:
329a	ADD		(1)	bears a date in Column 2a (see No. 339zc); or
329b	ADD		(2)	is in conformity with the provisions of No. 328a and bears a date in Column 2b (see No. 339zd), but has not, in fact, caused harmful interference to any frequency assignment with a date in Column 2a or to any assignment in conformity with No. 328a with an earlier date in Column 2b; or
329c	ADD		(3)	is in conformity with the provisions of No. 328a and either bears a symbol* in Column 2d (see No. 339zf), or was recorded in the Master Register with a date in this Column as a result of a favourable finding with respect to Nos.329 to 329d inclusive; or

^{*} This symbol indicates an assignment notified pursuant to No. 272 of the E.A.R.C. Agreement (Geneva, 1951).

329d ADD

(4) is in conformity with the provisions of No. 328a and was recorded in the Master Register with a date in Column 2d after an unfavourable finding with respect to Nos. 329 to 329d inclusive, but has not, in fact, caused harmful interference to any frequency assignment previously recorded in the Master Register and which is in conformity with No. 328a.

329e ADD

329f ADD

(Exceptions to Nos. 329 to 329d - Broadcasting in the band 535 kc/s - 1605 kc/s in Region 2, frequency bands above...... Mc/s etc.).

330 MOD

§ 7. (2) Where appropriate, the Board shall also examine the notice with respect to its conformity with a regional or service agreement. The procedure to be followed in connection with frequency assignments made pursuant to such an agreement shall be as specified in Nos. 328a and 329 to 329d inclusive, except that the Board shall not consider the question of the probability of harmful interference among the parties to such agreement. Similarly, the Board shall not consider the probability of harmful interference to the assignments of any Administration with whom coordination has been effected.

331	SUP	
332	SUP	
333	MOD	§ 10. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 328a and 329 to 329d inclusive, further action shall be as follows:
334	MOD	§ 10a.(1) Finding favourable with respect to Nos. 328a and 329 to 329d inclusive.
334a	ADD	(2) The assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt of the notice by the Board.
334b	ADD	(3) However, should the examination show that the probability of harmful interference for certain hours, seasons, or periods of solar activity is slightly greater than is considered desirable, a remark shall be included in the Master Register to show that there exists a slight probability of harmful interference and hence precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.
335	SUP	
336	MOD	§ 10b.(1) Finding favourable with respect to No. 328a, but unfavourable with respect to Nos. 329 to 329d inclusive.
336a	ADD	(2) The notice shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

337 MOD

(3) Should the notifying Administration resubmit the notice with modifications which result, after reexamination, in a favourable finding by the Board with respect to Nos.329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

338 MOD

(4) Should the notifying Administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 337 to be applied, and should that Administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.

338a ADD

(5) In the case of a frequency assignment recorded in accordance with the provisions of No. 338, the Board shall investigate the assignments that contributed to the unfavourable finding, using such means at its disposal as are appropriate in the circumstances, and, with the agreement of the notifying Administration concerned, shall effect any cancellations or amendments found to be necessary in order that the recordings in the Master Register shall reflect the actual frequency usage. as a result, the Board is able to reach a favourable finding with respect to Nos. 329 to 329d inclusive with regard to any assignment recorded under the provisions of No.338, the appropriate changes shall be made in respect of the entry of that assignment in the Master Register. If the finding remains unfavourable, the Board shall enter suitable remarks in the Master Register for the entry or entries concerned which describe the situation as it has been found by the Board to exist.

338b ADD

(6) Moreover, if, as a result of investigations under No. 338a, it is confirmed that an assignment recorded is being used in accordance with the notified basic characteristics, a symbol shall be entered in Column 13a of the Master Register to indicate this fact.

338c ADD

(7) Should the notifying Administration resubmit the notice with modifications which increase the probability of harmful interference, and should the Board's finding remain unchanged, the resubmitted notice shall be treated under 336a. If the notice is resubmitted and subsequently recorded, the date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the notice submitted for the second time.

339 SUP

339a ADD \$ 10c.(1) Finding unfavourable with respect to 328a.

339b ADD

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be examined immediately with respect to Nos. 329 to 329d inclusive, and the provisions of Nos. 339c or 339d applied, as appropriate.

339c ADD

(3) If the finding is favourable with respect to Nos. 329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the notice.

339d ADD

Nos. 329 to 329d inclusive, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having been received. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article shall be the date of receipt by the Board of the original notice. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

339e ADD

(5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 88 of these Regulations, it shall be returned immediately by airmail to the notifying Administration, with the reasons of the Board for this finding and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

339f ADD

(6) If the notifying Administration resubmits the notice with modifications which result after re-examination in a favourable finding by the Board with respect to No. 328a, the notice shall be examined with respect to Nos. 329 to 329d inclusive and treated subsequently according to the provisions of Nos. 334a or 334b, or No. 336a as appropriate. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the modified notice.

339g ADD

(7) If, however, the notifying Administration insists upon reconsideration of the notice and the Board's finding remains unchanged, the notice shall be examined with respect to Nos. 329 to 329d inclusive, and the provisions of Nos. 339h or 339i applied, as appropriate.

339h ADD

(8) If the finding is favourable with respect to Nos. 329 to 329d inclusive, the assignment shall be recorded in the Master Register. The date to be entered in the appropriate part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the resubmitted notice.

339i ADD

(9) If the finding is unfavourable with respect to Nos. 329 to 329d inclusive, the notice shall be returned immediately by airmail to the notifying Administration. Should the Administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register; however, this entry shall be made only if the notifying Administration informs the Board that the assignment has been in use for at least sixty days without any complaint of harmful interference having The date to be entered in the appropriate been received. part of Column 2 according to the relevant provisions of Section IV of this Article, shall be the date of receipt by the Board of the first resubmitted notice. of receipt by the Board of the second resubmitted notice shall be entered in the Remarks Column.

339j ADD (ex 346) § 10d (1) Change to basic characteristics of assignments already recorded in the Master Register.

339k ADD

(2) A notice of a change to basic characteristics of an assignment already recorded, as specified in Appendix 1 (except those entered in Column 3, 4a and 11 of the Master Register), shall be examined by the Board according to Nos. 328a and 329 to 329d inclusive, and the provisions of Nos. 334a to 339i inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.

3391 ADD

(3) However, in case of a change to basic characteristics of an assignment (except a change of the assigned frequency which exceeds half of the frequency band orininally assigned, as defined in No. 57a) which is in conformity with No. 328a, should the Board reach a favourable finding as a consequence of the examination with respect to Nos. 329 to 329d inclusive, or find that the change does not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original dates in the appropriate part of Col 2. In addition, the date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

339 la ADD

§ 10e. In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than 180 days after the date of its return by the Board shall be considered as a new notice.

339 lb ADD

§ 10ea (1) Recording of frequency assignments notified before being brought into use.

339 m ADD

(2) If a frequency assignment notified in advance of bringing into use has received favourable findings by the Board with respect to Nos. 328a and 329 to 329d inclusive, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.

339n ADD

(3) If, within the period of thirty days (see No.317) after the projected date of bringing into use, the Board receives confirmation from the notifying Administration of the date of putting into use, the special symbol shall be deleted from the Remarks Column. In the case where the Board, in the light of a request from the notifying Administration, finds that exceptional circumstances warrant an extention of this period, the extension shall in no case exceed ninety days.

3390 ADD

(4) If the Board does not receive this confirmation within the period referred to in No. 339n, the entry concerned shall be cancelled.

339p ADD

(5) The provisions of Nos. 339m to 339o do not apply to frequency assignments which are in full conformity with the Allotment Plans appearing in Appendices ......to these Regulations; such frequency assignments shall be entered in the Master Register on receipt of the notice by the Board.

Title MOD Section IV. Recording: of dates and findings in the Master Register.

339q ADD § 10f In any case where a frequency assignment in recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column, where appropriate.

339qa ADD § 10g. The procedure for recording dates in the appropriate part of Column 2 of the Master Register which shall be applied according to the frequency bands and services concerned, is described in the following Nos. 339ra to 339y...............

339ra ADD § 10h.(1) Frequency bands:

```
2 850 kc/s
    14
 3 155
            3 400 kc/s
            3 900 kc/s
 3 500
                         in Region 1
 3 500
            4 000 kc/s
                         in Region 2
 3 500
            3 950 kc/s
                         in Region 3
 4 238
            4 368 kc/s
 6 357
            6 525 kc/s
 8 476
            8 745 kc/s
12 714
           13 130 kc/s
16 952
           17 290 kc/s
           22 650 kc/s_7 *
22 400
```

- 339rb ADD (2) For any assignment to which the provisions of Nos. 334a, 334b or 337 apply, the relevant date shall be entered in Column 2a of the Master Register.
- 339rc ADD (3) For any assignment to which the provisions of Nos. 338, 339c, 339d, 339h or 339i apply, the relevant date shall be entered in Column 2b of the Master Register.

^{*} Special provisions will be taken for the band 535 - 1 605 kc/s in Region 2.

339sa ADD § 10i.(1) Frequency bands allocated exclusively to the

Maritime Mobile Service between 4 000 kc/s and 23 000 kc/s

for radiotelephone coast stations.

(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B3 are known)

339ta ADD g 10j.(1) Frequency bands allocated exclusively to the

Aeronautical Mobile R Service between 2 850 kc/s and

17 970 kc/s.

(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B2 are known)

339ua ADD § 10k.(1) Frequency bands allocated exclusively to the

Aeronautical Mobile OR Service between 3 050 kc/s and

18 030 kc/s.

(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B2 are known)

399va ADD § 101.(1) Frequency bands allocated exclusively to the Broadcasting Service between 5 950 kc/s and 26 100 kc/s.

(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B4 are known)

- 339wa ADD § 10m.(1) Frequency bands between 3 950 kc/s (4 000 kc/s in Region 2) and 27 500 kc/s other than those allocated exclusively to the Aeronautical Mobile Service. Maritime Mobile Service, Broadcasting Service or Amateur Service.
- 339wb ADD (2) For any frequency assignment in a band referred to in No. 339wa, which is to be recorded under the provisions of Section III of this Article, the relevant date shall be entered in Column 2d of the Master Register.

- 339xa ADD § 10n.(1) Frequency bands between 27.5 Mc/s and ......Mc/s allocated
  - to the fixed service, in frequency bands .....
  - to the broadcasting service. in frequency bands.......

    (The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B6 are known)
- 339ya ADD § 100.(1) Frequency bands above 27.5 Mc/s other than those listed in 339xa*

(The corresponding provisions will be decided upon when the results of the work of Sub-Working Group 5B6 are known)

- 339za ADD § 10p. Date to be entered in Column 2c
- 339zb ADD In all cases, the date to be entered in Column 2c shall be the date of putting into use notified by the Administration concerned (see Nos. 317 and 317a).

- * Sub-Working Group 5Al considers that:
  - 1. in a case where an Administration finds it necessary to notify a frequency assignment in these bands, the notice must be complete;
  - 2. technical examination by the I.F.R.B. is not necessary;
  - 3. the provisions to be laid down for recording in the Master International Frequency Register will be specified taking into account the provisions adopted for other bands.

### Section IVa. Categories of Frequency Assignments

- 339zc (ex 311) 8 10g.(1) Any frequency assignment which bears a date in Column 2a of the Master Register shall have the right to international protection from harmful interference.
- (ex 313)

  (ex 313)

  (2) Any frequency assignment which bears a date in Column 2b is recorded in the Master Register in order that Administrations may take into account the fact that the frequency assignment concerned is in use; this recording shall not give the right to international protection to the frequency assignment concerned, except as provided for in No. 329b.
- 339ze ADD (3) Except for frequency assignments which bear a symbol in Column 2d, the date in Column 2c is given for information only.
- 339zf ADD (4) The existence of a symbol in Column 2d for a particular frequency assignment and of a date in that Column for another assignment is not in itself to be considered as having any significance.
- (ex 339)

  (ex 339)

  (5) If harmful interference to the reception of any station whose assignment is in accordance with No.328a is actually caused by the use of a frequency assignment which is not in conformity with No. 328a, the station using the latter frequency assignment must immediately cease operations upon receipt of advice of this harmful interference.

Title	(MOD)*	Section V. Review of Findings
340	MOD	§ 11.(1) The review of a finding by the Board may be undertaken:
		- at the request of the notifying Administration,
		<ul> <li>at the request of any other Administration interested in the question, but only on the grounds of actual harmful interference,</li> </ul>
		- on the initiative of the Board itself when it considers this is justified.
341	SUP	
342	MOD	(3) The Board, in the light of all the data at its disposal, shall review the matter, taking into account Nos. 328a and 329 to 329d inclusive, and shall render an appropriate finding, informing the notifying Administration prior either to the promulgation of its finding or to any recording action.
342a	ADD	S lla If a review of an unfavourable finding has been requested by the notifying Administration on the grounds of special assistance to meet an urgent and essential need in a case where harmful interference has been experienced, the Board shall consult immediately the Administrations concerned and shall make such suggestions as will facilitate the operation of the assignment of the Administration which asked for special assistance; such amendments as result from this consultation shall be made to the Master Register.
343	MOD	§ 12. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying Administration, following an unfavourable finding with respect to Nos. 329 to 329d inclusive, this Administration may request the Board to review the finding. Thereupon the Board shall review the matter, first having consulted the Administrations concerned.
344	MOD	(2) If the finding of the Board is then favourable, it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

^{*} This drafting amendment applies to the French and Spanish texts only.

345 MOD If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry. § 12a. In the case where a frequency assignment nambeen entered in the Master Register on the insistence 345a ADD In the case where a frequency assignment has of the notifying Administration, following an unfavourable finding with respect to Nos.329 to 329d inclusive, and where the Board finds, after having consulted the Administrations concerned, that harmful interference has not, in fact, occurred, although the assignment has been in actual use, according to the notified characteristics, during a period covering all the phases of a solar cycle in which the assignment could be normally used, the Board shall amend the entry in the Master Register in such a way that it shall appear in the future as if the original finding had been favourable with respect to Nos. 329 to 329d inclusive.

(See Nos. 339j to 3391)

346

SUP

Title	MOD	Section VI. Modification, cancellation and review of entries in the Master Register.
346a (ex 350)	ADD	§ 13a. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying Administration shall inform the Board within three months of such discontinuance, whereupon the entry shall be removed from the Master Register.
347	MOD	§ 14. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, or is not being used in accordance with those basic characteristics, the Board shall consult the notifying Administration and subject to its agreement, either cancel the entry or suitably modify it.
347a	ADD	§ 14a. If, in connection with an enquiry by the Board under Nos. 338a or 347, the notifying Administration has failed to supply the Board within ninety days with the necessary or pertinent information, the Board shall disregard the assignment concerned when acting upon any later notice until such time as it has been informed that the assignment is being used as notified or until it has received the information required. The Board shall enter suitable entries in the Remarks Column of the Master Register, to indicate the situation.
347b	ADD	§ 14b. As far as possible, the Board shall maintain the entries in the Master Register under continuous review for those frequency bands for which technical examination by the Board is prescribed in this Article, excepting those in conformity with the Allotment Plans contained in Appendices with a view to determining whether or not the assignments are being used in accordance with the notified basic characteristics, and shall take action under 347.
348	SUP	
349	SUP	
350	SUP	(See No. 346a)
351	SUP	

Title	NOC	Section VII. Studies and Recommendations
352	MOD	§ 17. If it is requested by any Administration, particularly by an Administration in need of special assistance, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of the following problems of frequency utilization:
353	(MOD)	<ul> <li>a) in cases arising under No. 336 as to a possible alternative frequency assignment to avoid probable harmful interference;</li> </ul>
3 <b>5</b> 4	MOD	b) in cases where a need arises for additional frequency assignments within a specified portion of the radio spectrum;
354a	ADD	c) in cases where, due to harmful interference, two or more frequencies of the same megacycle order are being used alternately to maintain communication on a circuit requiring only one frequency of that order; and
355	MOD	d) in cases of alleged contravention or non-observance of these Regulations, or of harmful interference,
355a	ADD	and shall prepare and forward to the Administrations concerned a report containing its findings and recommendations for the solution of the problem.
356	MOD	§ 19. If the Board finds, in particular following a request from an Administration in need of special assistance, that a change in the basic characteristics, including a change of frequency within a specific frequency range, of one or more assignments in full conformity with the provisions of No. 328a will:
357	(MOD)	a) accommodate a new assignment, or
358	(MOD)	b) facilitate the solution of a problem of harmful interference; or
359	MOD	c) otherwise facilitate the more effective use of a particular portion of the radio spectrum,

- 359a ADD and if such change is acceptable to the Administration or Administrations concerned, the change in basic characteristics shall be recorded in the Master Register without change in the original date or dates.
- 359b ADD § 19a. In a case where, as a result of a study, the Board submits to one or more Administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these Administrations within a period of thirty days, the Board shall consider that the suggestions or recommendations concerned are unacceptable to the Administrations which did not answer. If it was the requesting Administration which failed to answer within this period, the Board shall close the study.

Title	MOD	Section VIII. Availability of Records and Preparation of Special Reports
360	MOD	§ 20. The Board shall promulgate to Administrations its findings and reasons therefor, together with all changes made to the Master Register, through the weekly circular referred to in No. 321, which shall be published in the working languages of the Union as defined in the Convention. In carrying out the various procedures stipulated in this Article, the Board shall use this circular as a means of communicating with Administrations to the maximum extent practicable.
360a	ADD	§ 20a. The Board shall inform Administrations, at appropriate intervals, of the cases of special assistance which were studied under Nos. 342a and 352 to 359b inclusive of these Regulations.
361	(MOD)	§ 21. In case a Member or Associate Member of the Union avails itself of the provisions of Article 25 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

Annex: 1

## ANNEX

## DRAFT

## ARTICLE 14

Addition recommended by Sub-Working Group 5Al to paragraph 1 of draft Article 14 published in Document No. 319:

ADD the following sentence at the end of the paragraph:

" All relevant factors shall be taken into account."

SOUS-COMMISSION 7B SUB-COMMITTEE 7B SUBCOMISION 7B

#### ORDRE DU JOUR

## Vingt-quatrième séance de la Sous-Commission 7B (Procédures radiotélégraphique et radiotéléphonique dans le service mobile)

Lundi, 16 novembre 1959, 15 heures - Salle E

1. Approbation des textes du Document Nº 495.

Rapport du Sous-Groupe 7B7 (Document N° DT 713).
 Rapport du Sous-Groupe 7B6 (Document N° DT 717).

4. Rapport du Groupe spécial: Table d'épellation phonétique des Chiffres (Document Nº DT 675).

5. Divers.

### AGENDA

## Twenty-Fourth Meeting of Sub-Committee 7B (Radiotelegraphy and Radiotelephone Procedures in the Mobile Service)

Monday, 16 November 1959 at 3 p.m. - Room E

1. Approval of texts in Document No. 495.

Report of Working Group 7B7 (Document No. DT 713).
 Report of Working Group 7B6 (Document No. DT 717).

4. Report of Ad Hoc Working Group on Phonetic Figure Table (Document No. DT 675).

5. Any other business.

## ORDEN DEL DIA

24^a sesión de la Subcomisión 7B (Procedimientos radiotelegráfico y radiotelefónico en el servicio movil)

Lunes, 16 de noviembre, a las 3 de la tarde - Sala E

1. Textos del documento N.º 495.

Informe del Grupo de trabajo 7B7 (Documento N.º DT 713).
 Informe del Grupo de trabajo 7B6 (Documento N.º DT 717).

4. Informe del Grupo de trabajo especial sobre el Cuadro para deletrear cifras (Documento N. DT 675).

5. Otros asuntos.

Le Président The Chairman El Presidente,

R. M. Billington

GENEVA, 1959

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Document No. 15 November,

Document No.

DT 776

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}	13a	13b	13c

1) See Article 11, Nos. 339zc and 339zd

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- 2) A symbol instead of a date indicates an assignment notified pursuant to No. 272 of the E.A.R.C. Agreement (Gene va, 1951)
- 3) See Article 11, Section III
- 4) See Article 11 (Nos. 338a, 338b, 347a and 347b)

GENEVA, 1959

Document No. DT 779-E 16 November, 1959

WORKING GROUP 4E

#### DRAFT

## Second Report of Working Group 4E to Committee 4

- 1. In continuation of the First Report contained in Document No. DT 654 (Rev.) the following comments, observations and reservations with regard to the frequency bands 8 500 10 500 Mc/s were made:
  - 1.1 Frequency band 8 500 8 750 Mc/s: No comments.
  - 1.2 Frequency band 8 750 8 850 Mc/s: The Delegates of Sweden, Switzerland and the Soviet Union consider that the aeronautical radionavigation service should have priority, and reserve the right to raise the matter again in Committee 4.
  - 1.3 Frequency band 8 850 9 000 Mc/s: No comments.
  - 1.4 Frequency band 9.000 9.200 Mc/s: No comments.
  - 1.5 Frequency band 9 200 9 300 Mc/s: No comments.
  - 1.6 Frequency band 9 300 9 500 Mc/s: No comments.
  - 1.7 Frequency band 9 500 9 800 Mc/s: No comments.
  - 1.8 Frequency band 9 800 10 000 Mc/s: The Delegate of the Soviet Union, opposing any priority for radiolocation since the rights of the services developed on the basis of the Atlantic City Table should be respected, reserves the right to raise the matter again in Committee 4.
  - 1.9 Frequency band 10 000 10 500 Mc/s: No comments.
- 2. Appended at the Annex to the present Report is the draft new Table of Frequency Allocations for the frequency bands 8 500 10 500 Mc/s which are proposed to Committee 4 for adoption.

3. Completion of terms of reference and votes of thanks.

G. C. Braga Chairman

Annex: 1

## ANNEX 1

Frequency	Allocation to services			
band Mc/s	World-wide	Region 1	Regional Region 2	Region 3
8 500-8 750	Radiolocation 115c)		Tagyay giranimintika, yaku tabihililika ay awalan na tabi	Anadas and the Common of the STAN STAN STAN STAN STAN
8 750-8 850	a) Radioloca- tion b) Aeronau- tical radionavi- gation 115d) 115e)			
8 850-9 000	Radiolocation 115d) 115f)			,

229c ADD 115c) In Albania, Bulgaria, Roumania, Czechoslovakia and (ex-1 & 2 the U.S.S.R., the frequency band 8 500-8 700 Mc/s is alloca-DT 637 Rev.) ted additionally to the fixed and mobile services and in the same countries and in Sweden the frequency band 8 500-8 750 Mc/s is allocated additionally to the radionavigation service.

229d ADD 115d) In Belgium, France, the Netherlands and the Federal (ex-3 Republic of Germany, the frequency band 8 825-9 225 Mc/s is DT 637 Rev.) allocated additionally to the maritime radionavigation service for use by shore-based radars.

229e ADD 115e) The use of the frequency band 8 750-8 850 Mc/s by (ex-4 the aeronautical radionavigation service is limited to air-DT 637 Rev.) borne Doppler navigation aids on a centre frequency of 8 800 Mc/s.

229f ADD 115f) In Albania, Bulgaria, Roumania, Sweden, Switzerland, (ex-5 Czechoslovakia and the U.S.S.R., the frequency bands 850-DT 637 Rev.) 9 000 Mc/s, 9 200-9 300 Mc/s and 9 500-9 800 Mc/s are allocated additionally to the radionavigation service.

Mc/s	World-wide	Rogion 1	Region 2	Region 3
9 000-9 200	a) Aeronautical radionaviga— tion * b) Radioloca— tion 115d) 115g)			
9 200-9 300	Radiolocation 115d) 115f)			
9 300-9 500	a) Radionaviga- tion ** b) Radioloca- tion 116a)			

229g ADD (ex-6)

***

In the frequency band 9 000-9 200 Mc/s, the only uses permitted by the aeronautical radionavigation service DT 637 Rev.) are for ground-based radars and, in the future, for associated airborne transponders which transmit only on frequencies in this band, and only when actuated by radars operating in this band.

116) 230 SUP

230a ADD (ex 7 & 3

116a) In the frequency band 9 300-9 500 Mc/s the aeronautical radionavigation service is limited to airborne DT 637 Rev.) weather radars and ground-based radars and in the same frequency band ground-based radars, used in conjunction with the meteorological aids service, have priority over other radiolocation services.

In the frequency band 9 000-9 200 Mc/s, the aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service (7A).

In the frequency band 9 300-9 500 Mc/s, the radionavigation service is the primary service. The radiolocation service is a secondary service (7A).

^{***} Note: Agreement to the allocation shown for 9 300-9 500 Mc/s was reached only after considerable discussion, and on the condition that the recommendation appearing at Annex 2 to the present Report is included in the report.

Mc/s	World-wide	Region 1	Region 2	Region 3
9 500-9 800	Radiolocation 115f)			
9 800-10 000	a) Radioloca- tion * b) Fixed 116b) 116c)			
10 000-10 500	a) Radioloca- tion ** b) Amateur 116d)			

230b ADD 116b) In Albania, Bulgaria, Roumania, Czechoslovakia and (ex-9 the U.S.S.R., the frequency band 9 800-10 000 Mc/s is alloca-DT 637 Rev.) ted additionally to the fixed and radionavigation services.

230c ADD 116c) In Indonesia, Japan and Sweden, the frequency band 9 800-10 000 Mc/s is allocated to the fixed service on a basis equal to that of the radiolocation service.

230d ADD 116d) In Japan and Sweden, the frequency band 10 000-10 500 Mc/s is allocated additionally to the amateur fixed and mobile services on a basis equal to that of the radiolocation service.

231 SUP 117)

^{*} In the frequency band 9 800-10 000 Mc/s, the radiolocation service is the primary service. The fixed service is a secondary service (7A).

In the frequency band 10 000-10 500 Mc/s, the radiolocation service is the primary service. The amateur service is a secondary service (7A).

## ANNEX 2

## DRAFT RECOMMENDATION CONCERNING THE USE OF THE FREQUENCY BAND 9 300-9 500 Mc/s

The Administrative Radio Conference, Geneva, 1959

#### noting

- a) that there are in existence two main classes of airborne weather radar using the frequency bands 5 350-5 460 Mc/s and 9 300-9 500 Mc/s respectively;
- b) that there is in existence a very considerable number of shipborne radars the majority in the frequency band 9 300-9 500 Mc/s;
- c) that there are also ground-based radars of the maritime and aeronautical radionavigation services and of the meteorological service in the frequency band 9 300-9 500 Mc/s;
- d) that a priority allocation has been made for airborne weather radars in the frequency band 5 350-5 460 Mc/s;
- e) that priority allocations have been made for shipborne radars in the frequency bands 2 900-3 100 Mc/s and 5 470-5 650 Mc/s;
- f) that it has proved necessary to allocate the frequency band 9 300-9 500 Mc/s on an equality basis to both the aeronautical and the maritime radionavigation services;

#### considering

- a) that it is of the utmost importance to ensure that harmful interference is not caused to radionavigation services providing a Safety of Life function;
- b) that the operating conditions of a Safety of Life service should be uniform throughout the world;
- c) that an unco-ordinated increase in the use of the frequency band 9 300-9 500 Mc/s can only lead to an increase in the probability of harmful interference between the aeronautical and maritime radionavigation services;

#### recommends

that Administrations and the International Civil Aviation Organization and the Intergovernmental Maritime Consultative Organization study this matter at the earliest opportunity taking into account the following:

- the need to establish whether and to what extent interference which is recognized to be technically possible between the two services becomes harmful in operational circumstances;
- 2. in the event that it is established that there may be harmful interference between the two services, the possibility that this can be reduced by technical, operational and procedural means, including the principle that new equipments should always be to the highest technical standards;

#### invites

Administrations, the International Civil Aviation Organization and the Intergovernmental Maritime Consultative Organization to communicate to the Union the results of their studies together with their views and proposals resulting therefrom.

## CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 780-FES
16 novembre 1959

COMMISSION 7 COMMITTEE 7 COMISION 7

### ORDRE DU JOUR

# Quatorzième séance (spéciale) de la Commission 7 (Exploitation)

Mardi 17 novembre 1959, à 15 heures avant la séance de la Sous-Commission 7B

1. Rapport de la Sous-Commission 7B - Approbation des textes pour l'Article 28 (Document N° 571)

#### AGENDA

# Fourteenth (Special) Meeting of Committee 7 (Operations Committee)

To precede meeting of Sub-Committee 7B at 3 p.m. Tuesday, 17 November 1959.

1. Report of Sub-Committee 7B - Approval of Texts for Article 28 (Document No. 571)

## ORDEN DEL DÍA

# 14.ª sesión (especial) de la Conisión 7 (Comisión de explotación)

Martes, 17 de noviembre, 1959, a las 3 de la tarde (inmediatamente antes de la sesión de la Subcomisión 7B)

1. Informe de la Subcomisión 7B - Aprobación de los textos para el **Artículo** 28 (Documento N.º 571).

Le Président :

The Chairman: A.J. Ehnle

El Presidente:

Document No. DT 781-E 16 November 1959

## WORKING GROUP 7A8

## A G E N D A

## Meeting of Working Group 7A8

Friday, 20 November 1959, 3 p.m. - Room H

### APPENDIX 7

- 1. Consideration of proposals Nos. 2789 through 2829 of the Yellow Book and 5125 Document No. 71. (See Annex)
- 2. Any other business.

W. F. Bradley Chairman

Annex: 1

## ${\tt A} \ {\tt N} \ {\tt N} \ {\tt E} \ {\tt X}$

## APPENDIX 7

## PROPOSALS TO BE CONSIDERED

	Document No. Yellow Book Page No.	Proposal No.
Australia	727	2789
Denmark, Finland, Iceland, Norway, Sweden	727	2790
United States of America	727/728/729/730 and DT 685, pages 23-2	279 <b>1</b> 6 through 2810
France, French O.P.T.A.	730/731	2811 through 2817
France, French O.P.T.A., Morocco	731/732	2818 through 2828
India	732	2829
Federal Republic of Germany	71	5125

## CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document No DT 782-FES 16 novembre 1959

GROUPE DE TRAVAIL 4E
WORKING GROUP 4E
GRUPO DE TRABAJO 4E

## ORDRE DU JOUR

## 17ème séance - Groupe de travail 4E (960 - 10 500 kHz)

Mardi 17 novembre 1959, 9 heures - Salle E

- 1. Suite de l'examen du projet de rapport à la Commission 4 (Document N° 654 Rev. et ses Addenda).
- 2. Divers.

## AGENDA

## Seventeenth Meeting of Working Group 4E (960 to 10,500 kc/s)

Tuesday, 17 November 1959, at 9 a.m. - Room E

- 1. Further consideration of the draft report to Committee 4 (Document No. 654 Rev. and its addenda).
- 2. Any other business.

## ORDEN DEL DÍA

## 17. a sesión del Grupo de trabajo 4E (960 - 10 500 kc/s)

Martes, 17 de noviembre de 1959, a las 9 de la mañana - Sala E

- 1. Continuación del examen del proyecto de informe a la Comisión 4. (Documento N.º 654 Rev. y sus Addenda).
- 2. Otros asuntos.

Le Président The Chairman El Presidente,

G.C. Braga

GENEVA, 1959

COMMITTEE 4

#### AGENDA

## Twenty-fifth Meeting of Committee 4 (Frequency Allocation)

Tuesday, 17 November, 1959, at 5 p.m. - Room A

- 1. Consideration of outstanding points from Documents No. 457 and No. 521 (Third and Fourth Report by Working Group 4B)
  - a) Frequency band 510-525 kc/s (sharing between Mobile and Aeronautical Services in Region 2).
  - b) Footnote 29c) RR143c 1 605 1 800 kc/s (Italy)
  - c) Footnote 32) RR146 Loran 1 950 kc/s (ADDENDUM No. 1 to Document No. 521).
  - d) 2 182 kc/s (Committee 7 Document No. 566 refers).
  - e) Footnote 36a) RR150a ex-42a) RR156a radioastronomy service (Document No. DT 724-FES-Rev.)
- 2. Consideration of the Second Report by Working Group 41 concerning Articles 6, 7 and 9 of the Radio Regulations (Document No. 506 dated 31 October, 1959).
- 3. Consideration of the Third and Final Report by Working Group 4A. (Document No. 568).
- 4. Continuation of consideration of the Report by Working Group 4 Ad Hoc on future frequency allocation policy (Document No. 525-Rev. and of the proposal by the Federal Republic of Germany (Document No. 528).
- 5. Any other business.

Gunnar Pedersen Chairman

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA 1959

Document No. DT 784-E 16 November, 1959

WORKING GROUP 4G

## A G E N D A

## Tenth Meeting of Working Group 4G

Wedenesday, 18 November 1959, at 9 a.m. - Room E

- 1. Consideration of the Draft Report from Working Group 4G to Committee 4, excluding the table of frequency allocations and its appended footnote contained in the Appendix to Document No. DT 771, (i.e., Document No. 449 (Rev.))
- 2. Other business.

S.M. Myers Chairman, Working Group 40

Document Nº DT 785-FES 16 novembre 1959

GENEVE, 1959

COMMISSION 7 COMMITTEE 7 COMISION 7

## $\hbox{O R D R E } \quad \hbox{D U } \quad \hbox{J O U R }$

## Quinzième séance de la Commission 7 (Exploitation)

Mercredi 18 novembre 1959, à 9 heures

- 1. Compte rendu de la 12ème séance (Document Nº 557)
- 2. Approbation des textes de l'article 30a (Document Nº 544)
- 3. Approbation des textes de l'article 28 (Document Nº 571)
- 4. Divers (y compris l'approbation de tous textes distribués jusqu'à mardi, 17 novembre, après-midi).

## AGENDA

## Fifteenth Meeting of Committee 7 (Operations Committee)

Wednesday, 18 November, 1959, at 9 a.m.

- 1. Summary Record of the Twelfth Meeting (Document No. 557)
- 2. Approval of texts for Article 30a contained in Document No. 544
- 3. Approval of texts for Article 28 (Document No. 571)
- 4. Any other business (including the approval of any texts distributed up to the afternoon of Tuesday, 17 November).

## ORDEN DEL DÍA

## 15.ª sesión de la Comisión 7 (Comisión de Explotación)

Miércoles, 18 de noviembre de 1959, a las 9 de la maĥana

- 1. Informe de la 12.ª sesión (Documento N.º 557)
- 2. Textos para el Artículo 30a (Documento N.º 544)
- 3. Textos para el Artículo 28 (Documento N.º 571)
- 4. Otros asuntos (comprendida la aprobación de cuantos textos se distribuyan hasta el martes 17 de noviembre por la tarde).

Le Président :

The Chairman: A. Ehnle

El Presidente:

GENEVA, 1959

Document No. DT 786-E 17 November, 1959

#### SUB-WORKING GROUP 4D SPECIAL

#### DRAFT REPORT

## of Sub-Working Group 4D Special to Working Group 4D

- 1. The special Working Group was appointed on 14 October, 1959 at the 8th meeting of Working Group 4D. The terms of reference were: "To deal with the proposals for radio astronomy service in the frequency bands between 27.5 Mc/s and 960 Mc/s."
- The Special Working Group met on 6 occasions, and the following countries took part in the work of the Group: Australia, Belgium, Canada, Denmark, United States, France, Greece, India, Italy, Norway, New Zealand, Pakistan, the Netherlands, Federal Republic of Germany, the United Kingdom, Sweden, Switzerland and the U.S.S.R.; and observers from the W.M.O. and the I.A.U. Mr. M.S. Kari and Mr. R.L. Smith of the Secretariat of the I.F.R.B. were invited to assist the Working Group.
- 3. The following requirements for the radio astronomy service had to be considered:
  - a) A frequency band around 40 Mc/s (see proposals 5448 of the United Kingdom, 4616 of the Netherlands and 5553 of the U.S.A.)
  - b) A frequency band around 80 Mc/s (see same proposals)
  - c) A frequency band around 160 Mc/s (see same proposals)
  - d) The frequency band 322 329 Mc/s for research of Deuterium line emissions (see proposal 5311 of the U.S.S.R.)
  - e) A frequency band around 400 Mc/s (see proposals 5534 of Belgium and 5553 of the U.S.A.)
  - f) A frequency band around 620 Mc/s (see proposals 5448 of the United Kingdom, and 4616 of the Netherlands).
- 4. Before reporting the results of the discussions in Working Group 4D Special, the following points should be specially mentioned to give a better understanding of the results achieved:

- a) It was the general view that frequencies to be used for radio astronomy should be shown in the Table of Frequency Allocations, either as footnotes or in the Table itself wherever possible. This view was of course not quite in accordance with the suggestions made in the U.S.A. proposal 5553 (Document No. 452).
- Towards the end of the meetings however, a number of countries (including the U.S.S.R.) stated that as far as radio astronomy was concerned they would prefer the term "may be used by" or similar words to the standardized term "allocated". On the other hand, several countries (including Belgium, Pakistan the Netherlands and the United Kingdom, strongly favoured the term "allocated" because it had been decided that radio astronomy was to be one of the recognized services in the Radio Regulations and for that reason normal allocation procedure should if possible be used. Furthermore, the status of radio astronomy would be enchanced if there were allocations or footnotes covering its requirements in the Table of Frequency Allocations, but there are, of course, difficulties in some cases in treating the matter in that way. It was decided that a final decision could not be taken in the Working Group and it should therefore be understood that wherever the word "allocated" is used, this matter has yet to be considered by Working Group 4D or perhaps even by Committee 4 itself.
- c) Efforts were made to reach world-wide agreement on all frequency requirements, but because of the regional allocations in the Table of Frequency Allocations, this was in some cases very difficult and some requirements had to be considered on a regional basis.
- d) The discussion also made it clear that, in general, countries could not make these bands available at short notice; indeed in some cases periods of 5 to 10 years were mentioned. The whole approach, therefore, must be a gradual one; Administrations will need time to find an acceptable sharing-pattern between other users and the radio astronomy service.
- e) For the reasons stated above it was generally felt that in addition to allocations in the Table or in footnotes, a resolution or recommendation in the Radio Regulations was necessary in order to cover a number of points more appropriately dealt with in that way (see paragraph 7 below).
- f) The following paragraphs give the outcome of the discussions in the Group; the progress that will be made by Administrations in affording to the radio astronomy service the facilities it desires will depend very much upon the position of individual countries in the bands in question.

### 5. Frequency bands considered

- a) Frequency allocation around 40 Mc/s still under discussion
- b) Frequency allocation around 80 Mc/s (± 1 Mc/s)
- 1) It will be difficult to make available a frequency band around 80 Mc/s in Region 2 because in that Region, the band is allocated to broadcasting. On the other hand in Region 1, the U.S.A. proposal 5553 for a frequency around 74 Mc/s was not favoured because of the aeronautical radionavigation usages in this band. In Region 3 a majority could agree to the 80 Mc/s proposal, whilst the U.S.S.R. could agree to either frequency.
- 2) It was generally felt that the requirement for a 2 Mc/s band-width could not be fulfilled at the present time. It was however considered that a frequency with a bandwidth of 500 kc/s might be selected in the hope that this bandwidth might be extended by some future conference. It is understood that even this limited bandwidth would be of use for some radio astronomical work.
- The Working Group agreed on the following footnote: "The frequency band 80 Mc/s ± 0.25 Mc/s is also allocated in Regions 1 and 3 (except in India) to the radio astronomy service. Administrations assigning frequencies to stations of the authorized services in this band should take all practicable measures to avoid harmful interference to radio astronomy"

A similar footnote for Region 2 for the frequency band 73 - 74.6 Mc/s was proposed and was held under consideration by the U.S.A.

c) Frequency allocation around 160 Mc/s

A number of Region 1 countries expressed their difficulties in making available a band for radio astronomy in this frequency range. All Region 1 countries favoured an allocation below 156 Mc/s instead of the frequency around 174 Mc/s proposed by the U.S.A. Furthermore it was thought that the 600 kc/s bandwidth proposed by the U.S.A. would not satisfy the needs of radio astronomy. Because only a very limited number of countries of Regions 2 and 3 were present, the discussion centred largely on the position in Region 1. After it had been clearly indicated that it might well be some little time that any frequency in this range could be made available for radio astronomy (the interests of existing services using the frequency band 146 - 156 Mc/s have to be safeguarded).

Region 1 countries agreed on the following footnote: "The frequency band 150 - 153 Mc/s is also allocated in Region 1 to the radio astronomy service. Administrations assigning frequencies to new stations of the authorized services in this band should take the necessary measures to avoid harmful interference to radio astronomy".

It was hoped that other Regions would also consider the possibility of allocating this band additionally to the radio astronomy service.

d) The frequency band 322 - 329 Mc/s for the Deuterium line emissions.

The possiblility of allocating this specific frequency band to radio astronomy found very little support. One reason for this was that up till now the emissions of Deuterium were never observed, whilst the chance of observing it were at the moment not very great. Moreover the band was already used by other important services. The U.S.S.R. stated that they would support and could protect this requirement the importance of which had been furthermore stressed in a letter of the I.A.U. to Administrations seeking their support at this Radio Conference. The I.A.U. observer explained that the Deuterium emissions were important because of the measurement of the Dt-abundance as compared to the Hydrogen abundance which could give science a clue to a number of cosmological problems. However, in the same frequency order (that is to say somewhere between 300 Mc/s and 500 Mc/s) it was more important at the moment to have a frequency band available for continuum research. Furthermore the I.A.U. observer explained that compared to Hydrogen which is so abundant and relatively easy to observe the Deuterium would, probably, after its detection, have a rather limited importance. As only two countries (the United Kingdom and the U.S.S.R.) were at the moment carrying out these observations and for the reasons given above, the Working Group felt that the allocation of this particular frequency band to radio astronomy was not justified at the present time. A majority of the Working Group, however, felt that some mention should be made for this requirement. A footnote (or inclusion in a recommendation on radio astronomy) of the following text was suggested: "Radio astronomical observations on the Deuterium line (322 - 329 Mc/s) are carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of radio astronomy in their future planning of this band."

#### e). Frequency allocation around 400 Mc/s.

The main difficulty here was that in many countries the frequency band 400 - 420 Mc/s is used for the meteorological service. The frequency band 400 - 406 Mc/s in particular is a most important meteological aid band. For this reason the Working Group felt that an allocation to radio astronomy should be above 406 Mc/s. After the I.A.U. observer explained the great importance of research in this frequency range the Working Group agreed to a footnote allocating the band 406 - 410 Mc/s to radio astronomy on an additional basis to the other authorized services in the band. The U.S.A. could not agree whilst the U.S.S.R. stated that they could not give protection to the radio astronomy in the frequency band 406 - 410 Mc/s. It must be clearly understood that in some countries it will be extremely difficult to give full protection to this band for radio astronomical observations, though subject to the reservations stated above, the Working Group could agree on the following text: "The frequency band 406 - 410 Mc/s is also allocated to the radio astronomy service.

Administrations assigning frequencies to stations of other authorized services in this band will take all practicable measures to avoid as far as possible harmful interference to radio astronomy observations."

#### f) Frequency allocation around 600 Mc/s

As this requirement will fall either in a band allocated to broadcasting or in a band shared between broadcasting and radionavigation difficulties were seen in these proposals.

The only approach which was acceptable to the members of the Working Group was to give the radio astronomy service the opportunity to use the frequency band 606 - 614 Mc/s until the band was required for broadcasting. However, at the same time, in any recommendation dealing with radio astronomy, Administrations should be asked to consider the possiblility of not assigning this particular frequency band at the next European VHF/UHF Broadcasting Conference - or if that was not feasible to restrict the assignments of this channel as much as possible. A number of countries (France and the Federal Republic of Germany) foresaw considerable difficulty in accepting this approach. However, they would do what they could. The U.S.A. could not accept this solution because in Region 2 these frequencies fall well within a broadcasting band already in use. The text for inclusion in a footnote would read: "The frequency band 606 - 614 Mc/s will be used by the radio astronomy service until such time as it is required for use by broadcasting; and during this period Administrations should take all practicable measures to avoid harmful interference to radio astronomy observations."

- 6. The <u>Belgian Delegate</u> raised the question of the distribution of data regarding the location of radio astronomy observatories to Administrations. Though this matter was clearly outside the terms of reference of the special Working Group, it was felt that the point made was an important one and should be dealt with via Working Group 4D and Committee 4 to the appropriate Committee. Mention was made of the possibility of including such information in the I.T.U. publications.
- 7. Though not discussed in the Working Group it is felt that amongst others the following points should be covered by the Ad Hoc Group to be set up under Committee 4 (Document No. 507 Minutes of the 20th meeting, paragraph 5 refers).
  - a) To deal with the frequency bands which are a radio astronomy requirement and which could not be solved in the Working Groups (Deuterium, OH-line emissions).
  - b) To deal with the requirements which were not fully covered (e.g. 0.5 Mc/s instead of 2 Mc/s bandwidth at 38 and 80 Mc/s).
  - c) The recommendation on the use of the frequency band 606-614 Mc/s to the next Broadcasting Conference.

- d) The difficulty of freeing bands on a short notice for radio astronomy and the gradual approach to the ultimate goal of radio astronomy.
- e) The possibilities of sharing bands between radio astronomy and some other services, especially in the higher ranges of the spectrum.
- f) To deal with the representation of data concerning the use of radio astronomy to Administrations.
- g) The position of the radio astronomy service as regards the extraband radiations and the need to take all practicable steps to avoid harmful interference in bands shared between radio astronomy and other services.

J.H.R. van der Willigen Chairman

## CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document N° DT 787-FES 17 novembre 1959

COMMISSION 5 COMMITTEE 5 COMISION 5

#### ORDRE DU JOUR

# Quinzième séance - Commission 5 (Procédure d'enregistrement des fréquences et

Liste Internationale des fréquences)

Mercredi 18 novembre 1959, à 15 heures - Salle B

- 1. Examen du Rapport du Groupe de Travail 5 ad hoc (Besoins concrets des pays nouveaux et en voie de développement) (Document N° 552).
- 2. Questions diverses.

#### AGENDA

# Fifteenth meeting - Committee 5 (Frequency registration procedure and the

International Frequency List)

Wednesday 18 November, 1959, at 3 p.m. - Room B

- 1. Examination of the Report by Working Group 5 ad hoc (Practical requirements of "new and developing" countries) (Document No. 552).
- 2. Any other business.

### ORDEN DEL DÍA

### 15. a sesión - Comisión 5

(Procedimiento de notificación y registro y

Lista internacional de frecuencias)

Miércoles, 18 de noviembre de 1959, a las 3 de la tarde - Sala B

- 1. Examen del Informe del Grupo de trabajo 5 especial (Necesidades concretas de los países nuevos y en vías de desarrollo) (Documento N.º 552).
- 2. Otros asuntos.

Le Président:

The Chairman: Dr. Joachim

El Presidente:

GENEVE, 1959

SOUS-COMMITTEE 7C SUB-COMMITTEE 7C SUBCOMISION 7C

#### ORDRE DU JOUR

## <u>Dix-huitième</u> séance de la Sous-Commission 7C (Détresse et sécurité)

Vendredi 20 novembre 1959, à 15 heures - Salle D

- 1. Compte rendu de la 17ème séance (Document Nº 583)
- 2. Rapport final de la Sous-Commission 70 (s'il est publié)
- 3. Divers.

#### AGENDA

### 18th Meeting of Sub-Committee 70

(Distress and Safety)

Friday, 20 November 1959, at 3.p.m. - Room D

- 1. Summary Record of the 17th Meeting (Document No. 583)
- 2. Final Report of Sub-Committee 7C (if available)
- 3. Other business

## ORDEN DEL DIA

### 18. a sesion de la Subconision 70 (Socorro y seguridad)

Viernes, 20 de noviembre de 1959, a las 3 de la tarde - Sala D

- 1. Informe de la 17. a sesion (Documento N.º 583)
- 2. Informe final de la Subcomision 70 (Si se ha publicado)
- 3. Otros asuntos.

Le Président :

The Chairman:

El Presidente:

G. van A. Graves

WORKING GROUP 4D

#### A G E N D A

## Fifteenth and Sixteenth Meetings of Working Group 4D (Table of Frequency Allocations 275 - 960 Mc/s)

Thursday, 19 November 1959, at 09.00 hours - Room E and Friday, 20 November 1959, at 09.00 hours - Room F

- 1. Consideration of the report of Sub-Working Group 4D5/Region 1 Allocation of the frequency band 100 108 Mc/s Document No. DT 769 refers.
- 2. Consideration of the report of Sub-Working Group 4D4/Region 1 Allocation of the frequency band 68 88 Mc/s Document No. DT 772 refers.
- 3. Consideration of the report of Sub-Working Group 4D Special Frequency allocations for radio astronomy Document No. DT 786 refers.
- 4. Further consideration of outstanding points relating to two Sub-Working Group reports considered at the fourteenth meeting.
  - 1) Report of Sub-Working Group 4D2 Frequencies for Ionospheric Scatter Document No. DT 750 refers.
  - 2) Report of Sub-Working Group 4D8/Region 1 Allocation of the frequency band 216 235 Mc/s Document No. DT 752 refers.
- 5. Consideration of the draft second report of Working Group 4D to Committee 4 Frequency allocations in the band 27.5 235 Mc/s Document No. DT ..... refers.

(Note - This draft second report may be incomplete in a few respects but we shall endeavour to complete and approve it at the sixteenth, and I hope final, meeting of Working Group 4D)

6. Other business.

C. W. Sowton
 Chairman
Working Group 4D

Document No. DT 790-E 1.7 November, 1959

GENEVA, 1959

SUB-COMMITTEE 7A

#### REPORT

by Ad Hoc Working Group 7A to Sub-Committee 7A

#### FORMATION OF CALL-SIGNS

The Working Group had to study the problem of the formation of call-signs raised in a plenary meeting of Committee 7 by the Delegation of the Republic of the Philippines and recalled in Document No. 456.

It met on 4 and 10 November. Delegations of the following countries were present:

Canada
Denmark
United States of America
France
Israel
New Zealand
Portugal
Republic of the Philippines
United Kingdom of Great Britain and Northern Ireland
U.S.S.R.

Mr. Kunz, of the General Secretariat, was also present.

Explanations were given by Mr. Sannier (France), Chairman of Working Group 7A4 (Article 19) and Mr. Kunz. There was a long exchange of views on the possible solutions. The Working Group is now submitting to Sub-Committee 7A for approval the annexed draft resolution which it has unanimously (?) approved.

P.C.M. Bouchier Chairman

Annex: 1

#### A N N E X

#### Draft Resolution on the formation of call-signs

The (Administrative Radio Conference)

#### considering

- a) the Recommendation relating to a new method of generating callsigns (Atlantic City, 1947);
- b) the fact that no new proposal has been placed before the Administrative Radio Conference, Geneva, 1959;
- c) Document No. 456 submitted by the Republic of the Philippines;
- d) the increasing demand for call-signs justified by the increased number of countries which are Members of the International Telecommunication Union or by the increased requirements of Administrations of countries which are already Members;
- e) the information supplied by the General Secretariat as regards allocations of call-signs since 1947 and the possibilities of the current system of forming call-signs;

#### believing

- a) that call-signs already in use should, as far as possible, not be changed;
- b) that, however, the current system of forming call-signs may not be adequate to meet all the requirements submitted between the present time and the next Administrative Radio Conference;

#### resolves

- that, should the existing call-sign series formed of three letters or a figure and two letters be exhausted, recourse may be had to series formed of a letter, a figure and a letter. In no case may the figure be 0 or 1;
- 2. that the method advocated in 1. above shall not be applicable to series beginning with one of the following letters: B F G I K M N R U W.

#### Annex to Document No. DT 790-E Page 3

- 3. that the General Secretariat shall issue a circular letter urging the Administrations of Members of the Union:
  - 3.1. to make the maximum use of the possibilities of the series at present allocated to avoid further requests as far as possible;
  - 3.2. to review the call-sign allocations they have so far made so as to free any series that can be freed and place them at the disposal of the Union;
- 4. that any Administration of a Member of the Union may, if it so desires, obtain help and advice from the General Secretariat in order to meet the requirements of economy which should be the rule in the matter in question;
- 5. that if, nevertheless, before the next Administrative Radio Conference, all the possibilities of the present system of forming callsigns as amended by 1. and 2. above are exhausted, the General Secretariat shall issue a circular-letter:
  - 5.1. explaining the position;
  - 5.2. urging the Administrations of Members to send in their proposals for possible solutions;
- 6. that, from the information thus assembled, the General Secretariat shall prepare a report, together with its own comments and suggestions, if any, for submission to the next Administrative Radio Conference.

GENEVA, 1959

#### COMMITTEE 6

#### Draft Recommendation No. 4 to the C.C.I.R.

RELATING TO THE TECHNICAL PROVISIONS CONCERNING EQUUIPMENT (Article 16)

The International Radio Conference of Geneva, 1959, invites the C.C.I.R. to continue the study of the following questions:

#### 1. Determination of:

- the recommended figures for the bandwidth, selectivity, sensitivity and stability of various types of apparatus used for the reception of different classes of emission in the different services:
- the practical methods of obtaining the necessary characteristics.
- 2. Consideration of the minimum practicable spacing between the frequencies of stations operating in adjacent channels for different classes of emission in the different services.
  - The C.C.I.R. is further invited to study the above questions simultaneously and with the same urgency and to publish its recommendations and possible revisions as soon as practicable.
- 3. Consideration of field intensity necessary for the reception of different classes of emission in the different services.
- 4. Consideration of the desirable conditions to be fulfilled by the complete systems employed by the different services in order to determine the required technical performance of the equipment (including the station terminal apparatus and the antennae) and of the measuring apparatus used, to ascertain whether the equipment satisfies the recommendations of the C.C.I.R.

#### COMMITTEE 6

#### $\Lambda$ G E N D $\Lambda$

#### Fourteenth Meeting - Committee 6 (Technical)

Thursday, 19 November 1959 at 0900 hours - Room C

- 1. Summary Record of Twelfth Meeting (if available).
- 2. Report of Chairman of Working Group 6A
  - (a) Oral report(b) Definitions (Documents Nos. 561, DT 749 and DT 768)
- 3. Oral Report of Chairman of Ad Hoc Group No. 1.
- 4. Report of Chairman of 'd Hoc Group No. 4. (Documents Nos. 48, 567 and DT 643)
- 5. Appendix C (Proposal No. 3050 p. 820.1 Yellow Book)
- 6. Recommendation No. 4 (Document No. DT 791)
- 7. Recommendation No. 8.
- 8. Summary Records of Working Group 6B (Documents Nos. 546, 547 and 548).
- 9. Summary Records of Working Group 60 (Documents Nos. 503 and 540).
- 10. Other matters.

M. N. Mirza Chairman GENEVA, 1959

WORKING GROUP 4B

#### DRAFT FIFTH REPORT

## by Working Group 4B to Committee 4 (Erequency bands 70-150)kc/s)

- 1. This is the final report by Working Group 4B to Committee 4 and deals with the draft new Table of Frequency Allocations for the frequency bands 70-150 kc/s.
- 2. The recommended draft new Table contained in the Annex to this report was agreed except for the following:
  - 2.1 Concerning the frequency band 70-130 kc/s The Delegations of Argentina, Brazil, Switzerland and the United States reserved the right to make further reference to this band, if they so desire, in Committee 4. The Delegations of Argentina, Brazil and India were in favour of not showing the term "c.w. systems" in the Table itself.
  - 2.2 Concerning footnotes 2) and 4) (frequency bands 70-90 kc/s and 110-130 kc/s) The Delegation of the United States reserved its position with regard to footnotes 2) and 4) insofar as they may affect U.S.A. operations in Region 3.
  - 2.3 Concerning the portion of the frequency band 115-117.6 kc/s The Working Group was unable to agree that the extension of the band from 112-115 kc/s to 112-117.6 kc/s should be shown in the Table for Region 1; five Delegations among those present were in favour while five were against. In these circumstances Committee 4 is invited to give consideration to this matter.
  - 2.4 (Concerning narrow-shift radio-teletype ground to air)
  - 2.5 Concerning the allocation to the fixed service frequency band  $(130-150~{\rm kc/s})$  The Delegation of Portugal reserved its position with regard to the allocation to the fixed service in the frequency band 130-150 kc/s.

- 2.6 Concerning footnote 7) (RR 116) The Atlantic City Regulations reads "The fixed service is authorized, provided no harmful interference is caused to ship telegraphy in the North Atlantic and the Mediterranean areas." The indicator 7) appears against the allocations to the fixed service in Regions 2 and 3 in the Atlantic City Table. No allocation to the fixed service was made in that Table for Region 1 in this band. Besides a proposal to modify the text so that it applied to all the sea areas in Region 1, there were two main issues upon which the Group divided. Some Delegations felt that the indicator should be added to the proposed allocation in Region 1 to the fixed service on a permitted basis. Further, many Delegations felt that the indicator could be removed from the Region 2 and the Region 3 columns and as a result of this, footnote 7) (RR 116) is deleted. The Delegations of the United Kingdom and Switzerland have reserved the right to come back to this question in Committee 4.
- 2.7 The Working Group paid special tribute by applause to Mr. K.A. Williams (Australia), Chairman of Sub-Working Group 4B2 for the excellent manner in which he had carried out a very difficult task, it being recognized that in the frequency bands concerned many serious problems existed.
- In submitting this Report, Working Group 4B considers that its terms of reference have been completed. The Group again expressed its appreciation of the work of all Chairmen of the Sub-Working Groups viz Mr. C. V. Sowton (United Kingdom), Mr. K. A. Williams (Australia), Mr. D. L. Sigler (Mexico), Mr. C. Terzani (Italy), Mr. M. Hassan (Malaya), Col. J. da Costa Vallim (Brazil), and Mr. T. I. Rogers (U.S.A.) for the successful and expeditious way in which they completed the work in their respective Groups. The Group also expressed its appreciation to Mr. M. Chef (France), Mr. D. E. Cubero (Spain), Mr. A. Martorell (Spain) and Mr. A. O. Planas (Argentine) for their valuable assistance in the Drafting Group.

The Group is also grateful for the most valuable help and advice it received throughout its work from the I.F.R.B. member, Mr. John H. Gayer and from Mr. Arnold A. Matthey of the I.F.R.B. Secretariat.

M. L. Sastry Chairman, Working Group 4B

Annex: 1

#### ANNEX

The same of the	Allocation to services				
Frequency band	World-wide	Regional			
kc/s		Region 1	Region 2	Region 3	
70-90	2a <b>)</b>	70-72 Radionavigation (c.w. systems)  72-84 a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavig- ation (c.w. systems) 2b)	70-90 a) Fixed * b) Maritime mobile * (coast tele- graph Al and Fl) c) Maritime radio- navigation (c.w. systems) * 2c)	70-90 a) Fixed b) Maritime mobile (coast tele- graph Al and F1) c) Radionavig- ation 2) (c.w. systems)	
(cont'd)			(cont'd)	(cont'd)	

- 111 MOD 2) In the frequency bands 70-72 kc/s and 84-86 kc/s, the radionavigation service is the primary service except in Japan and Pakistan.
- 111a ADD 2a) The intermittent use of very low power (under 10 watts) hydrographic survey systems is authorized in the frequency bands 86-135 kc/s and 170-180 kc/s provided any harmful interference from other authorized services is accepted and harmful interference is not caused to other services.
- 111b ADD 2b) In Albania, Bulgaria, Poland, Roumania, Czechoslovakia and the U.S.S.R. the frequency band 80-150 kc/s is allocated on a secondary basis to the aeronautical and land mobile services while within and between these countries these services shall have equal right to operate.
- lllc ADD 2c) The establishment and operation of maritime radionavigation stations shall be subject to arrangements between Administrations having other services which may be affected. However, the fixed, maritime mobile and radiolocation services shall not cause harmful interference to maritime radionavigation stations when so established.

^{*} In Region 2, the fixed, maritime mobile and maritime radionavigation services are the primary services. The radiolocation service is a secondary service according to paragraph 7A of Document No. 242 (Rev. 2).

Annex to Document No. DT 793-E Page 4

kc/s	World-wide	Region 1	Region 2	Region 3
70-90 (cont'd)		84-86 Radionavigation (c.w. systems) 2b)	70-90 (cont'd)	70-90 (cont'd)
	2a)	86-90 a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavig- ation (c.w. systems) 2b)		

kc/s	World-wide	Region 1	Region 2	Region 3
90-110	a) Fixed b) Maritime mobile (coast tele- graph Al and Fl) c) Radionavig- ation 2a) 2b) 2d) 3)			

- 111d ADD 2d) In Region 2, the frequency band 90-110 kc/s is also allocated to the radiolocation service on a secondary basis.
- 112 MOD 3) The development and operation of long distance radionavigation systems are authorized in this band, which will become exclusively allocated, wholly or in part, for the use of any one such system as soon as it is internationally adopted. Other considerations being equal, preference should be given to the system requiring the minimum bandwidth for world-wide service and causing the least harmful interference to other services. If a pulse radionavigation system is employed the pulse emissions must nevertheless be confined within the band and must not cause harmful interference outside the band to stations operating in accordance with the Regulations. During the period prior to the international adoption of any long distance radionavigation system;
  - a) in Regions 1 and 3 the operation of specific radionavigation stations shall be subject to arrangements between Administrations having authorized services which may be affected. Once established under such arrangements radionavigation stations shall be protected from harmful interference;
  - b) in Region 2 the radionavigation service is the primary service.

kc/s	World-wide	Region l	Region 2	Region 3
110-130		110-112 a) Fixed b) Maritime mobile (calling frequency see Art. 33) c) Radionavig- ation (c.w. systems) 2b)	c) Maritime radionavig- ation (c.w. sys- tems) * 2c)	110-130 a) Fixed b) Maritime mobile (calling frequency see Art. 33) c) Radionavig- ation (c.w. systems) 4)
2a) 3a) (cont'd) RR 233(Rev.)		1.12-115 Radionavigation (c.w. systems) 2b)	d) Radioloca- tion (cont'd)	(cont'd)

- 112a ADD 3a) Aeronautical stations may use frequencies in the frequency band 110-130 kc/s on a permitted basis for high-speed communications to aircraft.
- 113 MOD 4) In the frequency bands 112-117.6 kc/s and 126-129 kc/s, the radionavigation service is the primary service except in Japan and Pakistan.

^{*} In Region 2, the fixed, maritime mobile and maritime radionavigation services are the primary services. The radiolocation service is a secondary service according to paragraph 7A of Document No. 242 (Rev. 2).

Concerning new footnote 3a) see Document No. DT 794.

kc/s	World-wide	Region 1	Region 2	Region 3
110-130 (cont'd)		115-126 a) Fixed b) Maritime mobile   (calling frequency see   Art. 33) c) Radionavigation   (c.w. systems) 2b) 4a) 4b) 4c)  I26-129 Radionavigation	110-130 (cont'd)	110-130 (cont'd)
	2a)	(c.w. systems) 2b)  129-130 a) Fixed b) Maritime mobile (calling frequency see Art. 33) c) Radionavigation (c.w. systems) 2b)		

- 113a ADD 4a) In the frequency band 115-117.6 kc/s the radio-navigation service is the primary service.
- 113b ADD 4b) In the Federal Republic of Germany, the radionavigation service is a permitted service in the frequency band 115-117.6 kc/s.
- 113c ADD 4c) In France, the radionavigation service is a secondary service in the frequency band 115-117.6 kc/s.

See paragraph 2.3 of the present Report.

kc/s	World-wide	Region 1	Region 2	Region 3
130-150	2a) RR 233(Rev.)	a) Maritime mobile (ship tele- graph) (calling frequency see Art.33)* b) Fixed 2b) 7a)	a) Fixed b) Maritime mobile (calling frequency see Art.33)	a) Fixed b) Maritime mobile (calling frequency see Art.33)

114 SUP 5)

115 SUP 6)

116 SUP 7)

116a ADD 7a) In Albania, Bulgaria, Poland, Roumania, Czechoslovakia and the U.S.S.R. the frequency band 130-150 kc/s is allocated on a secondary basis to the radionavigation service while within and between these countries this service shall have equal right to operate.

^{*} In Region 1, the maritime mobile service is the main service. The fixed service is a permitted service according to paragraph 7B of Document No. 242 (Rev.2).

See paragraph 2.6 of the present Report.

GENEVA, 1959

Document No. DT 794-E 17 November, 1959

WORKING GROUP 4B

## DRAFT NEW FOOTNOTE 3a) TO THE DRAFT NEW TABLE OF FREQUENCY ALLOCATIONS

(Proposed by the Delegations of France and the United Kingdom for inclusion in Document No. DT 793)

Add new footnote 3a) under World-wide in the frequency band  $110-130~\mathrm{kc/s}$ .

112a ADD 3a) Aeronautical stations may use frequencies in the band
110 - 130 kc/s on a permitted basis for high-speed communications
to aircraft.

#### Reason

Frequencies are required for ground-to-air RTT or other narrow-shift automatic transmissions from ground stations only. This restriction is contained in the definition of "aeronautical station" (RR42).

Frequencies and characteristics of use are selected in such a way as to be compatible with existing plans and other assignments in the band which requirement is satisfied by "on a permitted basis" in the terms of Document No. 242, 7(B).

# ADMINISTRATIVE RADIO CONFERENCE

GENEVA, 1959

Document No. DT 795-E 18 November, 1959

SUB-WORKING GROUP 5B6

#### AGENDA

Thursday, 19 November, 1959, 15.00 hrs. - Room F

- 1. Continued study of the situation with regard to frequency assignments in the bands above 27.5 Mc/s, taking into account the general questions given in Document No. DT 728 (Annex 2) as well as the additional questions below:
  - 1) Whether the details of notification above 27.5 Mc/s should be included in the I.F.R.B. weekly circulars. (Document No. DT 776, paragraph 3.2.1).
  - 2) Whether any regional agreements such as that concluded at the Hague for the International Maritime V.H.F. Radiotelephone Service could be extended to a world-wide basis.

P. N. Parker Chairman

# CONFERENCE ADMINISTRATIVE DES RADIOCOMMUNICATIONS GENEVE, 1959

Document Nº DT 796-FES

ADDENDUM Nº 1

19 novembre 1959

COMMISSION 7 COMMITTEE 7 COMISION 7

#### ADDENDUM A L'ORDRE DU JOUR

#### Quinzième séance - Commission 7 (Exploitation)

Vendredi 20 novembre 1959

- 3. Document No 335, Page 24, paragraphe 6 (2).
- 4. Propositions du Groupe de travail 7E concernant les définitions.

#### ADDENDUM TO AGENDA

#### Fifteenth Meeting - Committee 7 (Operations)

Friday, 20 November, 1959

- 3. Document No. 335, Page 24, paragraph 6 (2).
- 4. Proposals of Working Group 7E in regard to definitions.

## ADDENDUM AL ORDEN DEL DÍA

### 15. a sesión - Comisión 7 (Explotación)

Viernes, 20 de noviembre de 1959

- 3. Documento N.º 335, página 24, parrafo 6 (2).
- 4. Proposiciones del Grupo de trabajo 7E relativas a las definiciones.

Le Président par intérim:
The Acting Chairman:
El Presidente interino:
Y. Nomura

## CONFERENCE INTERNATIONALE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document Nº DT 796-FES 18 novembre 1959

COMMISSION 7
COMMITTEE 7
COMISION 7

#### ORDRE DU JOUR

#### Quinzième séance de la Commission 7 (Exploitation)

avant la séance de la Sous-Commission 7A, à 9 heures, Vendredi 20 novembre 1959

- 1. Approbation des textes pour l'Article 45 (Document Nº 574)
- 2. Approbation des textes pour l'Article 35 (Document Nº 575).

#### AGENDA

#### Fifteenth Meeting of Committee 7 (Operations Committee)

To precede Sub-Committee 7A at 0900 a.m. Friday, 20 November, 1959

- 1. Approval of texts for Article 45 (Document No. 574)
- 2. Approval of texts for Article 35 (Document No. 575)

### ORDEN DEL DIA

#### 15.ª sesión de la Comisión 7 (Comisión de Explotación)

Viernes, 20 de noviembre de 1959, a las 9 de la maĥana, antes de la sesión de la Subcomisión 7A

- 1. Aprobación de textos para el Artículo 45 (Documento N.º 574)
- 2. Aprobación de textos para el Artículo 35 (Documento N.º 575).

Le Président par intérim :

The Acting Chairman:

Y. Nomura

El Presidente interino

WORKING GROUP 5A1

#### DRAFT

326 MOD § 7. (1) Except for notices referred to in Nos. 339pl, 339pl0, 339pa, 339pj and 339pq, the Board shall examine each notice with respect to:

329e Delete

# (Section III) (See Document No. 731, pages 7 & 8)

- 339pl ADD § 10eb. (1) Examination of notices concerning frequency assignments to radiotelephone coast stations in the bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone coast stations (See No. 326)
- 339p2 ADD (2) In the case of a frequency assignment to a radiotelephone coast station in a band exclusively allocated to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone coast stations, the Board shall examine the notice to determine whether the notified assignment is in full conformity with an allotment in Section I or Section II of the Allotment Plan contained in Appendix 16b to these Regulations, i.e. whether the frequency, the area of allotment, the power and any limitations are those which are specified in that Appendix.
- 339p3 ADD (3) Any frequency assignment for which the finding is favourable with respect to 339p2 shall be recorded in the Master Register (See also No. 339p). The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.
- (4) If a notice relates to an amendment to an assignment in full conformity with an allotment in Section I or Section II of the Allotment Plan, which is only a change in the characteristics (including the frequency) of the emission of a radiotelephone coast station, without increasing the width of the frequency band originally assigned beyond the limits of the channel in the Plan, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339p5 ADD

- (5) In the case of a notice which is not in conformity with the provisions of No. 339p2, the Board shall examine this notice with respect to the probability of harmful interference to the service rendered by a radiotelephone coast station for which a frequency assignment:
  - a) which is in full conformity with one of the allotments in Section I or II of the Plan is already recorded in the Master Register or may be so recorded in the future; or
  - b) was recorded in the Master Register on a frequency specified in Appendix 12 as a result of a favourable finding with respect to Nos. 339p4 or 339p5; or
  - c) was recorded in the Master Register on a frequency specified in Appendix 12 after an unfavourable finding with respect to Nos. 339p4 or 339p5, but has not, in fact, caused harmful interference to any frequency assignment to a radiotelephone coast station previously recorded in the Master Register.

339p6 ADD

(6) According to the finding of the Board with respect to No. 339p5, further action shall be in accordance with the provisions of Nos. 334 to 338c inclusive, or Nos. 339j to 339 L inclusive, as appropriate, on the provisions of No. 329 being applied instead of those of No. 339p5.

339p7 ADD

8 10ec. (1) Examination of notices concerning frequencies used for reception by radiotelephone coast stations in the bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone ship stations (See Nos. 315 and 326).

339p8 ADD

(2) In the case of the assignment of a receiving frequency to a radiotelephone coast station in a band exclusively allocated to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone ship stations, the Board shall examine the notice to determine whether the notified assignment corresponds to a frequency associated, according to Appendix 12, with a frequency allotted to the notifying Administration under Section I or Section II of the Allotment Plan contained in Appendix 16bis to these Regulations.

339p9 ADD

(3) Any frequency assignment for which the finding is favourable with respect to No. 339p8 shall be recorded in the Master Register. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339pl0 ADD

assignment of a receiving frequency which is associated, according to Appendix 12, with a frequency allotted to the notifying Administration under Section I or Section II of the Plan, if this amendment is only a change in the characteristics (including the frequency) of the emission of radiotelephone ship stations, without increasing the width of the frequency band originally assigned, the original assignment shall be amended according to the notice. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339pll ADD

(5) Any assignment of a receiving frequency to a radiotelephone coast station which is not in conformity with No. 339p8 shall be recorded in the Master Register. The date to be entered in Column 2b shall be that determined according to the relevant provisions of Section IV of this Article.

(See Document No. DT 739, Annex 6)

339pa ADD

§ 10ed (1) Examination of notices concerning frequency assignments to aeronautical stations in the aeronautical mobile (R) service in the bands allocated exclusively to that service between 2850 kc/s and 17 970 kc/s (See No.326)

339pb ADD

(2) In the case of a frequency assignment to an aeronautical station in the aeronautical mobile (R) service in a band exclusively allocated to that service between 2 850 kc/s and 17 970 kc/s, the Board shall examine the notice to determine whether:

339pc ADD

a) the frequency corresponds to one of the frequencies specified in Column 1 of the Allotment Plan for the aeronautical mobile (R) service contained in Appendix 16bis (Part II, Section IIB), or the assignment is the result of a permissive change from one class of emission to another and the occupied bandwidth is within the channelling arrangement provided for in Appendix 16bis (Part I, Section IIA para. 1);

339pd ADD

b) the limitations of use set forth in Column 3 of the Plan have been appropriately observed;

339pe ADD

c) the class of station, class of emission, power, and hours of use are in accordance with the General Notes which constitute the heading for the Plan;

339pf ADD

d) the area of use is within the boundaries of the Air Route Areas as set forth in Column 2 of the Plan.

339pg ADD

(3) In the case of a notice in conformity with the provisions of Nos. 339pc to 339pe, but not with those of No. 339pf, the Board shall examine whether the protection specified in Appendix 16bis (Part I, Section IIA, para.5) is afford to the allotments in the Plan. In doing so, the Board shall assume that the frequency will be used in accordance with the "Sharing conditions between areas" specified in Appendix 16bis (Part I, Section IIB, para.4).

339ph ADD

(4) The technical criteria to be employed by the Board in its examination of these notices shall be those in Appendix 16bis (Part I).

339pi ADD

(5) All frequency assignments referred to in No. 339pa shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

339pj ADD

§ 10ee. (1) Examination of notices concerning frequency assignments to aeronautical stations in the aeronautical mobile (OR) service in the bands allocated exclusively to that service, between 3050 kc/s and 18 030 kc/s (See No.326).

339pk ADD

(2) In the case of a frequency assignment to an aeronautical station in the aeronautical mobile (OR) service in a frequency band exclusively allocated to that service between 3050 kc/s and 18 030 kc/s, the Board shall examine each notice to determine whether:

339pL ADD

a) the assignment is in conformity with the primary allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 16bis (Parts III and IV);

339pm ADD

b) the assignment is in conformity with or satisfies the requirements for secondary allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 16bis (Part III, Section II, para. 4, sub-para. 4 and Part IV). In applying these provisions, the Board shall assume that the frequency will be used on a day-time basis;

339pn ADD

c) the assignment is the result of a permissive change from one class of emission to another, its occupied bandwidth is within the channel-ling arrangement provided for in Appendix 16bis (Part III, Section II, paras. 1 and 2), and it meets all the conditions for a primary or secondary allotment in the Plan, except that the assigned frequency does not correspond numerically with one of the frequencies specified therein.

339po ADD

(3) The technical criteria to be employed by the Board in its examination of these notices shall be those in Appendix 16bis (Part III).

339pp ADD

(4) All frequency assignments referred to in No. 339pj shall be recorded in the Master Register according to the findings reached by the Board. The date to be entered in Column 2a or 2b shall be that determined according to the relevant provisions of Section IV of this Article.

(See Document No. DT 745, page 6)

339pq ADD

§ 10ef. (1) Examination of notices concerning frequency assignments to broadcasting stations in the bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s.

339pr ADD

(2) When the Board has prepared according to the provisions of No..... (Article 11a) the High Frequency Broadcasting Schedule for a particular season, this Schedule shall be compared with the entries in the Master Register, to determine whether all the frequency assignments included in that Schedule correspond to frequency assignments recorded in the Master Register on behalf of the Administration concerned.

339ps ADD

(3) In the case where a frequency assignment included in a Schedule for a particular season does not correspond to any listing in the Master Register, that assignment shall be considered as being notified, and the Board, without further examination, shall make an appropriate entry in the Master Register. The date to be entered in Column 2c shall be that determined according to the relevant provisions of Section IV of this Article.

# (Section IV) (See Document No. DT 731, pages 7 & 8)

- 339tl ADD § 10i (1) Frequency bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone coast stations.
- 339t2 ADD (2) If the finding is favourable with respect to No. 339p2, the date of 3 December, 1951, shall be entered in Column 2a in case of an allotment in Section I of the Plan; in case of an allotment in Section II, the date of 4 December, 1951, shall be entered in Column 2b.
- 339t3 ADD (3) If the provisions of No. 339p4 are found to be applicable, the date originally entered in Column 2a or 2b, as appropriate, shall be retained.
- 339t4 ADD (4) For all other cases referred to in No. 339pL the relevant date shall be entered in Column 2b (see Nos. 334a, 337, 338, 338c, 339k and 339 L).
- 339t5 ADD (5) For assignments to stations other than radiotelephone coast stations, the relevant date shall be entered in Column 2b (see Nos. 339c, 339d, 339f, 339h and 339i).
- 339t6 ADD § 10j. (1) Frequency bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelephone ship stations.
- 339t7 ADD (2) If the finding is favourable with respect to No. 339p8, the date of 3 December, 1951, shall be entered in Column 2a if the allotment concerned appears in Section I of the Plan; if it appears in Section II, the date of 4 December, 1951, shall be entered in Column 2b.
- 339t8 ADD (3) If the provisions of 339pl0 are found to be applicable, the date originally entered in Column 2a or 2b, as appropriate, shall be retained.

339t9 ADD (4) In all other cases referred to in No. 339p7 the date of receipt of the notice shall be entered in Column 2b.

339tl0 ADD (5) For assignments other than assignments of receiving frequencies to radiotelephone coast stations, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).

339tll ADD § 10k. (1) Frequency bands allocated exclusively to the maritime mobile service between 4 000 kc/s and 23 000 kc/s for radiotelegraph ship stations (See No. 316).

339tl2 ADD (2) For assignments to stations other than radiotelegraph ship stations, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).

(See Document No. DT 739, Annex 6)

- 339ta ADD § 10j. (1) Frequency bands allocated exclusively to the aeronautical mobile (R) service between 2 850 kc/s and 17 970 kc/s.
- 339tb ADD (2) If the finding is favourable with respect to Nos. 339pc to 339pf, the date of 3 December, 1951, shall be entered in Column 2a.
- 339tc ADD (3) If the finding is favourable with respect to Nos. 339pc to 339pe, unfavourable with respect to No.339pf, but favourable with respect to No. 339pg, the date of 3 December, 1951, shall be entered in Column 2b.
- 339td ADD (4) In all other cases referred to in No. 339pa the date of receipt of the notice shall be entered in Column 2b.
- 339te ADD (5) For assignments to stations other than aeronautical mobile (R) service, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).

- 339ua ADD § 10k. (1) Frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3050 kc/s and 18 030 kc/s
- 339ub ADD (2) If the finding is favourable with respect to No. 339pL, the date of 3 December, 1951, shall be entered in Column 2a.
- 339uc ADD (3) If the finding is favourable with respect to No. 339pm, the date of 3 December, 1951, shall be entered in Column 2b.
- 339ud ADD (4) If the provisions of No. 339pn are found to be applicable, the date of 3 December, 1951, shall be entered in Column 2a for a primary allotment, or in Column 2b for a secondary allotment.
- 339ue ADD (5) In all other cases referred to in No. 339pj, the date of receipt of the notice shall be entered in Column 2b.
- 339uf ADD (6) For assignments to stations other than aero-nautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (See Nos. 339c, 339d, 339f, 339h and 339i).

(See Document No. DT 645, page 6)

- 339va ADD § 10 L (1) Frequency bands allocated exclusively to the broadcasting service between 5 950 kc/s and 26 100 kc/s.
- 339vb ADD (2) Any frequency assignment to a broadcasting station recorded in the Master Register under No. 339ps shall receive in Column 2c the date which corresponds to the date of implementation of the Schedule from which the assignment was extracted.

339vc ADD

(3) For assignments to stations other than broadcasting stations, the relevant date shall be entered in Column 2c (See No. 339za).

339wa-339wb

(See Document No. DT 776)

339xa-339y.... (Frequency bands above 27.5 Mc/s)

339za ADD

§ 10p.

Date to be entered in Column 2c

339zb ADD

With the exception of cases referred to in No. 339vb, the date to be entered in Column 2c shall be the date of putting into use notified by the Administration concerned. (See Nos. 317 and 317a).

GENEVA, 1959

Document No. DT 798-E 18 November, 1959

WORKING GROUP 4D

## DRAFT SECOND REPORT

#### of Working Group 4D to Committee 4

- 1. The first report of Working Group 4D (Document No. 549) was primarily concerned with the allocations in the frequency range 235 960 Mc/s. This second report covers the frequency range 27.5 235 Mc/s and thus completes the task assigned to Working Group 4D.
- 2. The allocations which have been agreed in the bands from 27.5 235 Mc/s are shown in the Annex to this report, in the accepted form of a Table of Frequency Allocations together with the necessary footnotes, which, as far as possible, have been drafted to conform to the standards of Document No. 242 (Rev.2).
- 3. The following draft recommendations or resolutions have been agreed in the Working Group and are submitted for the consideration of Committee 4 for possible inclusion in the Radio Regulations.
- 4. The following comments or reservations have been made in regard to the allocations proposed in the frequency bands 27.5 235 Mc/s.
- 5. With the submission of this Report, Working Group 4D considers that it has completed its work in accordance with the terms of reference given it at the eleventh meeting of Committee 4.

C. W. Sowton Chairman

Annex 1

### ANNEX

Frequency	Allocation to services					
band		control (ETISA MINING) and Might Applicate the second control of t	Regional			
Mc/s	World-wide	Region 1	Region 2	Region 3		
27.5-28		Meteorological aids 53a)	a) Meteorological aids b) Fixed c) Mobile	a) Meteorological aids b) Fixed c) Mobile		
28-29.7	Amateur 58b) 58c)					

- 172a ADD 58a) In Albania, Bielorussia, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania, Okraine and the U.S.S.R., the frequency band 27.5-28 is allocated alternatively to the fixed and mobile services.
- 172b ADD 50b) In Belgium, France, French Overseas Territories, Indonesia, Italy, Portugal and Switzerland, the frequency band 29-29.7 Mc/s is allocated on a permitted basis to the fixed and mobile services.
- 172c ADD 58c) In Japan, the frequency band 29.2-29.7 Mc/s is allocated on a permitted basis to the fixed and mobile services.

Mc/s	World-wide	Region 1	Region 2	Region 3
29.7-41 62)	a) Fixed b) Mobile 6la) 6lb) 6lc) 6ld) 6lf)			

173 SUP 59)

174 SUP 60)

175 SUP 61)

175a ADD 61a) Systems designed to use ionospheric scatter or other fixed service systems designed to operate over distances exceeding 800 km. shall confine their emissions to the following bands:

32.6-33 Mc/s 34.6-35 Mc/s - Regions 2 and 3 36.2-36.6 Mc/s - Region 1 36.4-36.8 Mc/s - Regions 2 and 3 39 -39.4 Mc/s - Region 1

and shall have priority in Region 2 in the bands available for use in that Region.

- 175b ADD 61b) The operation of stations designed to use ionospheric scatter is permitted only under arrangements to be agreed between Administrations concerned or affected.
- 175c ADD 61c) Ionospheric scatter stations existing on 1 January, 1960, may continue to operate on their present assignments.
- 175d ADD 6ld) In the case of frequency bands limited to a particular region, the provisions of paragraph 90 shall apply and Administrations shall avoid beaming such transmissions towards another region unless specifically co-ordinated otherwise.
- 175e ADD 6le) Systems designed to use ionospheric scatter which may cause harmful interference to the broadcasting service are not permitted.
- 175f ADD 61f) (Radioastronomy service)
- 176 NOC 62) The frequency 40.68 Mc/s is designated for industrial, scientific and medical purposes. Emissions must be confined within the limits of ± 0,05% of that frequency. Radiocommunication services operating within those limits must accept any harmful interference that may be experienced from the operation of industrial, scientific and medical equipment.

Hc/s	World-wide	Region 1	Region 2	Region 3
41-100		41-47 a)Broad- casting * b)Fixed c)Mobile	41-50 a) Fixed b) Mubile	41-44 a) Fixed b) Mobile 44-50 a) Fixed b) Mobile c) Broad- casting
	61b) 61e)	64) 64a) 64z)	61c)	óle)
(cont'd)			(cont'd)	(cont'd)

177 SUP 63)

178 MOD 6

In Northern and Southern Rhodesia, the frequency band 41-44 Mc/s is allocated alternatively to the aeronautical radionavigation, fixed and mobile services, and the frequency bands 44-50 and 54-68 Mc/s are allocated additionally to the fixed and mobile services, and the frequency band 50-54 Mc/s is allocated exclusively to the broadcasting service. In the Union of South Africa and the Territory of South West Africa, the frequency band 41-50 Mc/s is allocated alternatively to the aeronautical radionavigation, fixed and mobile services, and the frequency band 50-54 Mc/s is allocated alternatively to the amateur service, and the frequency band 54-60 mc/s is allocated alternatively to the fixed and land mobile services. Model control may operate in the frequency band 53-54 Mc/s.

178a ADD 64a) In Spain, France, Portugal and the United Kingdom, the frequency band 41-47 Me/s is allocated exclusively to the broadcasting service.

178z ADD 64z) In the Portuguese Oversea Provinces, in Region 1, south of the Equator, the frequency band 41-68 Mc/s is also allocated on a permitted basis to the fixed and mobile services.

^{*} In Region 1, the broadcasting service is the primary service. Fixed and mobile services are secondary services as defined in Document No. 242 (Rev.2) paragraph 7A.

Mc/s	World-wide	Region l	Region 2	Region 3
41-100 (cont'd)		47 <b>-</b> 65 Broadcasting	41-50 (cont'd)	41-50 (cont'd)
		64) ·64z) 64b)	50-54 Amateur	50-54 Amateur 64c) 64d) 64e) 64f)
			54-74.6 a) Fixed b) Mobile c) Broad- casting 64g)	54-68  a) Fixed b) Mobile c) Broad- casting 61c) 54e)
(cont'd)	e chapechalata (Ili Salat van van van side enhalata vad state		(cont'd)	

- 178b ADD 64b) In Austria and Federal Republic of Germany, the frequency band 47-63 Mc/s is also allocated on a secondary basis to the fixed and mobile except aeronautical mobile services.
- 178c ADD 64c) In Malaya and New Zealand, the frequency band 50-51 Mc/s is allocated alternatively to the fixed, mobile and broadcasting services.
- 178d ADD 64d) In India, Indonesia and Pakistan, the frequency band 50-54 Mc/s is allocated alternatively to the fixed and mobile services.
- 178e ADD 64e) In Australia, the frequency band 50-54 Mc/s is allocated alternatively to the fixed, mobile and broadcasting services, and the frequency band 56-58 Mc/s is allocated alternatively to the amateur service.
- 178f ADD 64f) In New Zealand, the frequency band 51-53 Mc/s is allocated additionally to the fixed and mobile services and the frequency band 53-54 Mc/s is allocated alternatively to the fixed and mobile services.
- 173g ADD 64g) (Radioastronomy service Region 2)

Mc/s	World-wide	Region 1	Region 2	Region 3
41-100 (cont'd)		63-74.8 a) Fixed b) Land Mobile 66) 56a) 65a)	54-74.6 (cont'd)	63-70 a) Fixed b) Mobile c) Aeronautical radicnavig- ation 67a) 67b) 67c)
(cont'd)		(cont'd)	(cont'd)	

- 179 SU2 65)
- 180 MOD 66) In the U.S.S.R., the frequency band 68-73 Mc/s is allocated for the broadcasting service. The aeronautical radionavigation service in other countries and the broadcasting service in the U.S.S.R. are subject to local arrangement in order to avoid mutual harmful interference.
- 180a ADD 65a) In Austria, France, Greece, Morocco and the United Kingdom, the frequency band 58-70 Mc/s is allocated additionally for the acronautical radionavigation service.
- 181 SUP 67)
- 18la ADD 67a) In Australia, the frequency band 68-70 Mc/s is allocated alternatively to the fixed, mobile and broadcasting services, and the frequency band 85-88 Mc/s is allocated alternatively to the broadcasting and radionavigation services.
- 181b ADD 67b) In China, the frequency bands 68-70 Mc/s and 75.4-87 Mc/s are allocated alternatively to the fixed, mobile and broadcasting services, and the frequency band 100-108 Mc/s is allocated additionally to the fixed service.
- 181c ADD 67c) In Korca, the frequency band 68-72 Mc/s is allocated additionally to the broadcasting service, and the frequency bands 76-87 Mc/s and 100-108 Mc/s are allocated alternatively to the fixed, mobile and broadcasting services.
- 182 SUP 68)
- 182a ADD 68a) In Greece and the United Kingdom, the frequency band 72.8-74.8 i.c/s is allocated additionally for the aeronautical radionavigation service.
- 182b ADD 65b) In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R. the frequency bands 73-74.8 and 75.2-76 Mc/s are allocated alternatively for the aeronautical radionavigation service.

Mc/s	World-wide	Region 1	Region 2	Region 3
41-100		68-74.8	54-74.6	70-74.6
(cont'd)		(cont'd)	(cont'd)	a) Fixed b) Mobile
1				67c) 69a) 69b)
		74.6-75.2 Acronautical radionavig- ation (Mar- ker beacons)	74.6-75.4 Aeronautical radionavig- ation (Mar- ker beacons)	74.6-75.4 Aeronautical radionavig- ation (Har- ker beacons)
(cont'd)		70)	(cont'd)	(cont'd)

- 183 SUP 69)
- 183a ADD 69a) In India, the frequency bands 70-72.8 Mc/s and 76-85 Mc/s are allocated additionally to the broadcasting service.
- 183b ADD 69b) In North Borneo, Malaya, Sarawak and Singapore, the frequency band 72.8-74.6 Mc/s is allocated additionally to the aeronautical radionavigation service, and the frequency band 100-108 Mc/s is allocated additionally to the fixed and mobile services.
- 184 MOD 70) The frequency 75 Mc/s is designated for aeronautical marker beacons. In Region 1 the guard-band is ± 0.2 Mc/s. However, Administrations must refrain from assigning frequencies close to the limits of this guard-band to stations of other services which, because of their power or position, might cause harmful interference to marker beacons.

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Mc/s	World-wide	Region l	Region 2	Region 3
41-100 (cont'd)		75.2-67.5 a) Fixed b) Mobile 68b) 71) 72) 72a) 72z) 72b) 73a)	74.6-75.4 (cont'd) 75.4-88 a) Fixed b) Hobile c) Broad- casting	74.6-75.4 (cont'd) 75.4-78 a) Fixed b) Mobile 67b) 67c) 69a) 70a)
(cont'd)		(cont'd)	(cont'd)	a) Fixed b) Mobile c) Aeronautical radionavig- ation  67b) 67c) 69a) 70a) 72z)

184a ADD 70a) In Japan, the frequency band 76-87 Mc/s is allocated (ex-69c) additionally to the broadcasting service.

185 MOD 71) In the U.S.S.R., the frequency band 76-87.5 Mc/s is allocated alternatively to the broadcasting service.

186 NOC 72) The broadcasting service in the U.S.S.R. and the authorized services in the neighbouring countries are subject to local arrangement in order to avoid mutual harmful interference.

186a ADD 72a) In Morocco and the United Kingdom, the frequency band 78-80 Mc/s is allocated additionally to the aeronautical radionavigation service and in France to the radionavigation service.

186z ADD 72z) (Radioastronomy service Regions 1 and 3)

186b ADD 72b) In the United Kingdom, the frequency band 32-87 Mc/s is allocated additionally to the Radiolocation service.

187 SUP 73)

187a ADD 73a) In British West Africa, the frequency band 86-87.5 Mc/s is allocated alternatively to the broadcasting service.

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Mc/s	World-wide	Rogion 1	. Region 2	Region 3
41-100 (cont'd)	- 1978 (May 10 10 10 10 10 10 10 10 10 10 10 10 10	75.2-67.5 (cont'd)	75.4-88 (cont'd)	80-87 a) Fixed b) Mobile 67a) 67b) 67c) 69a) 70a) 72z)
(cont'd)		07.5-100 Broad- casting 73b) 78a) (cont'd)		87-100 a) Fixed b) Mobile c) Broad- casting 67a) 74a) (cont'd)

187b ADD 73b) In the United Kingdom, the frequency band 87.5-88 Mc/s is allocated additionally to the land mobile service.

188 SUP 74)

183a ADD 74a) In New Zealand, the frequency band 84-85 Mc/s is allocated additionally to the radionavigation service, and the frequency band 100-108 Mc/s is allocated alternatively to the fixed and mobile service.

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Mc/s World-	-wide Region 1	Region 2	Region 3
41-100 (cont'd)	87.5-100 (cont'd)	88-100 Broad- casting 78b)	පි7-100 (cont'd)

189 SUP 75)

190 SUP 76)

191 SUP 77)

192 SUP 78)

192a ADD 78a) In the United Kingdom, the frequency band 94.5-95 Mc/s is allocated on a permitted basis to the meteorological aids service and the frequency band 95-100 Mc/s is allocated on a permitted basis to the fixed and mobile services.

192b ADD 78b) In the Eritish Caribbean Group, the frequency band 88-108 Mc/s is allocated on a secondary basis to low-power fixed and mobile services.

Mc/s	World-wide	Region l	Region 2	Region 3
100-108		100-108 Mobile ex- cept acro- nautical mobile (R) 79) 79a) 79b)	100-108 Broad- casting 78b)	100-108 Broad- casting 67b) 67c) 69b) 74a) 80a)

- 193 MOD
- 79) In Northern Rhodesia and Southern Rhodesia, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service and the frequency bands 132-144 Mc/s and 146-174 Mc/s are allocated alternatively to the fixed and mobile services. In the Union of South Africa and the Territory of South West Africa, the frequency band 100-108 Mc/s is allocated alternatively to the broadcasting service, the frequency bands 132-144 Mc/s, 146-156 Mc/s and 165-174 Mc/s are allocated alternatively to the fixed and mobile services, and the frequency band 156-165 Mc/s is allocated alternatively to the maritime mobile service.
- 193a ADD
  - ADD 79a) In Austria, Belgium, Spain, Israel, Italy, Switzerland and if necessary in the Netherlands and the Federal Republic of Germany, the frequency band 100-104 Mc/s is allocated on a permitted basis to the broadcasting service. The introduction of the broadcasting service in these countries is subject to special arrangements between the interested and affected Administrations, to ensure that harmful interference is not caused to the services of the other countries operating in accordance with the frequency allocation table.
- 193b ADD
- Republic of Germany and Sweden, the frequency band 100-108 Mc/s is allocated additionally to the fixed service and in the Netherlands and the United Kingdom will eventually be allocated additionally to that service. The effective radiated power of any station in the fixed service shall normally not exceed 25 watts. In case higher powers are used the introduction of the fixed service is subject to special arrangements between interested and affected Administrations.
- 194 SUP 80)
- 194a ADD 80a) In the Philippines, the frequency band 100-108 Mc/s is allocated additionally to the fixed and mobile services.

Me/s	World-wide	Ragion 1	Rogion 2	Region 3
108-117.975	Acronautical radionavig- ation 80b)			
117.975-132	Aeronautical mobile (R) 81)			

- 194b ADD 80b) In the U.S.S.R., the frequency bend 108-117.975 Mc/s is also allocated on a secondary basis to the aeronautical mobile services.
- 195 MOD 81) The frequency 121.5 Mc/s is the aeronautical emergency frequency in this band for distress communication. Ships may contact aircraft on this frequency.

Mc/s	World-wide	Region l	Region 2	Region 3
132-144		132-136 Aeronautical Mobile (R) 79) Sla)	132-135 a) Fixed b) Mobile 8lb)  135-136 a) Fixed b) Mobile except aeronautical mobile	132-136 a) Fixed b) Mobile 82) 82a)
(cunt'd)	136-137 a) Fixed b) Mobile c) Space 79) 82) 82b)			

- 195a ADD Sla) In certain countries of Region 1, the aeronautical mobile (OR) service will continue to operate for an unspecified period during which it will operate on a primary basis.
- 195b ADD 81b) (Aeronautical service)
- 196 MOD 82) In New Zealand, the frequency bands 132-136 Mc/s and 137-144 Mc/s are allocated alternatively to the aeronautical mobile service (OR).
- 196a ADD 62a) In Australia, the frequency band 132-144 Mc/s is allocated alternatively to the aeronautical mobile (OR) service until 1st July 1963, after which the frequency band 132-146 Mc/s will be allocated alternatively to the broadcasting service and the frequency band 148-150 Mc/s will be allocated alternatively to the amateur service.
- 196d ADD 82b) In the frequency band 136-137 Mc/s the aeronautical mobile (OR) service will be the primary service for as long as it continues to operate in this band and on discontinuation of this service, the space service will be the primary service except in Spain and the U.S.S.R.

Mc/s	World-wide	Rogion l	Region 2	Rogion 3
137-144		Acronautical Mobile (OR) 79) 82c) 82d)	a) Fixed b) Mobile c) Radio- location	a) Fixed b) Mobilo 52) 52a) 52c)

- 196c ADD 83c) In Austria, Denmark, France, Norway, the Notherlands, the United Kingdom and Sweden, the frequency band 137-144 Mc/s will, at some future date, be allocated alternatively to the fixed and mobile except aeronautical mobile services.
- 196d ADD 82d) In Federal Republic of Germany, the frequency band 137-144 Mc/s is allocated additionally to the fixed and mobile services.
- 196e ADD 82e) In China, the frequency band 137-144 Nc/s is allocated additionally to the radiolocation service.

Mc/s	World-wide	Region 1	Region 2	Region 3
144-146	Amatour 82a)			:
146-174		146-151 Aeronautical mobile (OR)	146-148 Amateur	146-148 Amateur
		79) 83b)  151-154 a) Aeronautical mobile (OR) * b) Meteorological aids 79)	148-174 a) Fixed b) Mobile	148-170 a) Fixed b) Mobile 82a) 83a)
		83b)   154-156     Aeronautical     mobile (OR)     79)     156-174     a) Fixed     b) Mobile except acronautical     mobile     CON		
(cont'd)	84)	79) (cont'd)	(cont'd)	

197 SUP \$3)

197a ADD 83a) In New Zealand, the frequency band 148-156 Mc/s is allocated alternatively to the aeronautical mobile (OR) service.

197b ADD 83b) (Radioastronomy Region 1)

198 MOD 84) The frequency 156.80 Mc/s is the international safety and calling frequency for the Maritime mobile VHF radio telephone service.

Administrations will ensure that a guard-band of 75 kc/s on each side of the frequency 156.80 Ms/s is provided. The conditions for the use of this frequency are contained in Article 34.

In the bands 156.025-157.425 Mc/s, 160.625-160975 Mc/s and 161.475-162.025 Mc/s each Administration shall give priority to the maritime mobile service on such frequencies in those bands as are assigned to stations of the maritime mobile service by that Administration.

Any use of frequencies by other authorized services in these respective bands should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiotelephone service.

^{*} In Region 1, the aeronautical mobile (OR) service is the main service. The meteorological service is a permitted service as defined in Document No. 242 (Rev.2) paragraph 7B.

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Mc/s	World-wide	Region l	Region 2	Region 3
146-174 (cont'd)		156-174 (cont'd)	148-174 (cont'd)	170-174 a) Fixed b) Mobile c) Broad- casting

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Mc/s	World-wide	Region 1	Region 2	Region 3
174-235 (cont'd)		174-216 Broadcasting 69a) 69b)	174-216 a) Fixed b) Mobile c) Droad- casting	174-216 a) Fixed b) Mobile c) Broad- casting 89c) 39d)

200 SUP 36)

201 Sup 37)

202 SUP 88)

203 SUP 89)

203a ADD 89a) In Tritish East Africa, British West Africa, Northern Rhodesia and Southern Rhodesia, the frequency band 174-216 Mc/s is allocated additionally to the fixed and mobile services.

203b ADD 89b) In the Union of South Africa and the territory of South West Africa, the frequency bands 174-181 Mc/s and 213-216 Mc/s are allocated additionally to the fixed and land mobile services.

203c ADD 89c) In Australia, the frequency band 202-209 Mc/s is allocated alternatively to the aeronautical radionavigation service.

203d ADD 89d) In India, New Zealand, Pakistan and Philippines, the frequency band 200-216 Mc/s is allocated additionally to the aeronautical radionavigation service.

Mc/s	World-wide	Region 1	Region 2	Region 3
174-235 (cont'd)		216-223 a) Aeronauti- cal radiona- vigation b) broadcast- ing  90a) 90b) 90c) 90d) 90e)	1 :	216-225 a) Acronautical radionavigation b) Radiolocation 92a) 92b) 92c)
(cont'd)		(cont'd)		(cont'd)

204 SUP 90)

204a ADD

90a) The aeronautical radionavigation service will be operated only in Denmark, France, Greece, the Netherlands, Portugal, the United Kingdom, Sweden and the Union of South Africa and Territory of South Africa.

The broadcasting service will be introduced in such a way so as not to reduce the service areas existing on (°) December, 1959, or such lesser areas as may exist thereafter for the aeronautical radionavigation service of the above-mentioned countries.

The agreement of these countries as applicable, will be obtained before new broadcasting stations are brought into operation which could cause harmful interference to the aeronautical radionavigation service.

The countries employing the aeronautical radionavigation service must not operate airborne equipment during flights over countries in which the frequency band 216-223 Mc/s is used exclusively for the broadcasting service.

^{*} In Region 3, the aeronautical radionavigation service is the primary service. The radiolocation service is a secondary service as defined in Document No. 242 (Rev.2) paragraph 7A.

⁽O) Date of Final Acts of the Geneva Conference.

- 204b ADD 90b) In Italy the frequency band 216-223 Mc/s is additionally allocated to the fixed service.
- 204c ADD 90c) In France and in Italy the provisions of footnote 90a) apply to the frequency band 216-225 Mc/s.
- 204d ADD 90d) In the United Ringdom the frequency band 216-225 Mc/s is allocated exclusively to the aeronautical radionavigation service, on a primary basis and to radiolocation service on a secondary basis.
- 204e ADD 90e) In British West Africa, the frequency band 216-251 Mc/s is allocated alternatively to the broadcasting service.
- 205 HOD 91) In Northern Rhodesia and Southern Rhodesia the frequency band 220-225 Me/s is allocated to the amateur service.
- 206 SUP 92)
- 206a ADD 92a) In Indonesia, the frequency band 216-222 Mg/s is allocated alternatively to the fixed, mobile and broadcasting services.
- 206b ADD 92b) In Japan, the frequency band 216-222 Ne/s is allocated alternatively to the broadcasting service.
- 206c ADD 92c) In Korca and the Philippines, the frequency band 216-225 Mc/s is allocated additionally to the fixed and broadcasting services.

Mc/s	World-wide	Region l	Region 2	Region 3
174-235 (cont'd)	The technique of the te	216-223 (cont'd)	220-225 Amatour	215-225 (cont'd)
		223-235 Aeronautical radionavig- ation  90c) 90d) 90e) 90f) 91) 92a) 92b)	225-235 a) Fixed b) Mobile	225-235 a) Fixed b) Mobile c) Aeronautical radionavigation

- 206a ADD 92d) In Austria and Switzerland the frequency band 223-230 Me/s is allocated on a permitted basis for broadcasting only and the frequency band 230-235 Me/s is used by the fixed and mobile services only.
- 206b ADD 92e) Albania, Bulgaria, Gzechoslovakia, Hungary, Poland, Roumania and the U.S.S.R. favour broadcasting in the frequency band 223-230 lie/s as a service with equal rights to the aeronautical radionwigation service.
- 206c ADD 92c) In the Union of South Africa and territory of South West Africa, the frequency band 223-235 Me/s is allocated additionally to the broadcasting service and the provisions of footnote 90a) will apply to this band.

Document No. DT 799-E
ADDENDUM No. 1
18 November 1959

WORKING GROUP 4D

#### ADDENDUM

### Report of Sub-Working Group 4D Special to Working Group 4D

With reference to paragraph 5a) on page 3 of Document No. DT 799 the following should be inserted:

The discussions on a frequency band in the range of 40 Mc/s centred on the following two possibilities

(i) The United States proposal to centre radio astronomy observations on the frequency 40.68 Mc/s per second and leave it to a regional responsibility to allocate a certain bandwidth.

Advantages of this proposal were that according to the United States statements sharing with the I.S.M. frequency was controllable. The United States mentioned that out of 14 monitoring stations in the United States, only 2 had experienced difficulties with I.S.M. emissions and that only for 4 per cent. of the time. This could even be bettered if special measures were taken.

The disadvantages brought forward were the following:

40.68 Mc/s per second is the I.S.M. frequency and probably not so easy to control in densely populated areas. Furthermore, around 40 Mc/s there were assignments for space, and Channel 1 of TV Broadcasting in Europe starts at 41.0 Mc/s. Finally the frequency band centred around 40.68 Mc/s would give no possibilities for extension without entering the broadcasting bands on the upper side and on the lower side meet space and scatter requirements.

The following countries supported the United States proposal:

United States, Italy, U.S.S.R., Sweden and the Federal Republic of Germany,

whilst the following countries had no objections:

Pakistan, New Zealand, Australia.

(ii) The United Kingdom proposal was for the frequency band 38.0 Mc/s with a minimum bandwidth of  $\pm .0.25$  Mc/s.

The advantages of this proposal were that the allocation would be free of space, scatter and broadcasting assignments, ald also allow for future extension to a bandwidth of 1.5 Mc/s as asked for by the Radio-astronomers.

The disadvantages were the extremely dense usage of low powered, fixed and mobile services.

The following countries supported the U.K. proposal:

United Kingdom, Belgium, France, Netherlands, Canada

whilst the following countries had no objections:

Pakistan, New Zealand and Australia.

As it seemed impossible in the Working Group to finalize an agreement on this specific requirement for radio astronomy, the following was recommended for inclusion in the report of 4D to Committee 4:

In the Recommendation which is going to be considered by an ad hoc group of Committee 4, the following should be inserted:

Administrations should, in assigning frequencies in the 37 to 41 Mc/s Band, try to avoid as much as practicable the frequencies 38.0 Mc/s, ± 0.25 Mc/s and 40.60 Mc/s = 0.25 Mc/s, so as to enable the next Radio Conference to be in a position to make a definite allocation for the radio astronomy service.

GENEVA, 1959

Document No. DT 799-E 18 November 1959

WORKING GROUP 4D

#### REPORT

### of Sub-Working Group 4D Special to Working Group 4D

- 1. The special Working Group was appointed on 14 October, 1959 at the 8th meeting of Working Group 4D. The terms of reference were: "To deal with the proposals for radio astronomy service in the frequency bands between 27.5 Mc/s and 960 Mc/s."
- The Special Working Group met on 6 occasions, and the following countries took part in the work of the Group: Australia, Belgium, Canada, Denmark, United States, France, Greece, India, Italy, Norway, New Zealand, Pakistan, the Netherlands, Federal Republic of Germany, the United Kingdom, Sweden, Switzerland and the U.S.S.R.; and observers from the W.M.O. and the I.A.U. Mr. M.S. Kari and Mr. R.L. Smith of the Secretariat of the I.F.R.B. were invited to assist the Working Group.
- 3. The following requirements for the radio astronomy service had to be considered:
  - a) A frequency band around 40 Mc/s (see proposals 5448 of the United Kingdom, 4616 of the Netherlands and 5553 of the U.S.A.)
  - b) A frequency band around 80 Mc/s (see same proposals)
  - c) A frequency band around 160 Mc/s (see same proposals)
  - d) The frequency band 322 329 Mc/s for research of Deuterium line emissions (see proposal 5311 of the U.S.S.R.)
  - e) A frequency band around 400 Mc/s (see proposals 5534 of Belgium and 5553 of the U.S.A.)
  - f) A frequency band around 620 Mc/s (see proposals 5448 of the United Kingdom, and 4616 of the Netherlands).
- 4. Before reporting the results of the discussions in Working Group 4D Special, the following points should be specially mentioned to give a better understanding of the results achieved:

- a) It was the general view that frequencies to be used for radio astronomy should be shown in the Table of Frequency Allocations, either as footnotes or in the Table itself wherever possible. This view was of course not quite in accordance with the suggestions made in the U.S.A. proposal 5553 (Document No. 452).
- b) Towards the end of the meetings however, a number of countries (including the U.S.S.R.) stated that as far as radio astronomy was concerned they would prefer the term "may be used by" or similar words to the standardized term "allocated". On the other hand, several countries (including Belgium, Pakistan the Netherlands and the United Kingdom, strongly favoured the term "allocated" because it had been decided that radio astronomy was to be one of the recognized services in the Radio Regulations and for that reason normal allocation procedure should if possible be used. Furthermore, the status of radio astronomy would be enchanced if there were allocations or footnotes covering its requirements in the Table of Frequency Allocations, but there are, of course, difficulties in some cases in treating the matter in that way. It was decided that a final decision could not be taken in the Working Group and it should therefore be understood that wherever the word "allocated" is used, this matter has yet to be considered by Working Group 4D or perhaps even by Committee 4 itself.
- c) Efforts were made to reach world-wide agreement on all frequency requirements, but because of the regional allocations in the Table of Frequency Allocations, this was in some cases very difficult and some requirements had to be considered on a regional basis.
- d) The discussion also made it clear that, in general, countries could not make these bands available at short notice; indeed in some cases periods of 5 to 10 years were mentioned. The whole approach, therefore, must be a gradual one; Administrations will need time to find an acceptable sharing-pattern between other users and the radio astronomy service.
- e) For the reasons stated above it was generally felt that in addition to allocations in the Table or in footnotes, a resolution or recommendation in the Radio Regulations was necessary in order to cover a number of points more appropriately dealt with in that way (see paragraph 7 below).
- f) The following paragraphs give the outcome of the discussions in the Group; the progress that will be made by Administrations in affording to the radio astronomy service the facilities it desires will depend very much upon the position of individual countries in the bands in question.

### 5. Frequency bands considered

- a) Frequency allocation around 40 Mc/s see Addendum No. 1 to the present Report, issued separately.
- b) Frequency allocation around 80 Mc/s (+ 1 Mc/s)
- 1) It will be difficult to make available a frequency band around 80 Mc/s in Region 2 because in that Region, the band is allocated to broadcasting. On the other hand in Region 1, the U.S.A. proposal 5553 for a frequency around 74 Mc/s was not favoured because of the aeronautical radionavigation usages in this band. In Region 3 a majority could agree to the 80 Mc/s proposal. The U.S.S.R., though finding considerable difficulty with both frequencies, would not object to their use by the radio astronomy service.
- 2) It was generally felt that the requirement for a 2 Mc/s band-width could not be fulfilled at the present time. It was however considered that a frequency with a bandwidth of 500 kc/s might be selected in the hope that this bandwidth might be extended by some future conference. It is understood that even this limited bandwidth would be of use for some radio astronomical work.
- The Working Group agreed on the following footnote: "The frequency band 80 Mc/s ± 0.25 Mc/s is also allocated in Regions 1 and 3 (except in India) to the radio astronomy service. Administrations assigning frequencies to stations of the authorized services in this band should take all practicable measures to avoid harmful interference to radio astronomy".

 $\Lambda$  similar footnote for Region 2 for the frequency band 73 - 74.6 Mc/s was proposed and was held under consideration by the U.S.A.

c) Frequency allocation around 160 Mc/s

A number of Region 1 countries expressed their difficulties in making available a band for radio astronomy in this frequency range. All Region 1 countries favoured an allocation below 156 Mc/s instead of the frequency around 174 Mc/s proposed by the U.S.A. Furthermore it was thought that the 600 kc/s bandwidth proposed by the U.S.A. would not satisfy the needs of radio astronomy. Because only a very limited number of countries of Regions 2 and 3 were present, the discussion centred largely on the position in Region 1. After it had been clearly indicated that it might well be some little time that any frequency in this range could be made available for radio astronomy (the interests of existing services using the frequency band 146 - 156 Mc/s have to be safeguarded).

Region 1 countries agreed on the following footnote: "The frequency band 150 - 153 Mc/s is also allocated in Region 1 to the radio astronomy service. Administrations assigning frequencies to new stations

of the authorized services in this band should take the necessary measures to avoid harmful interference to radio astronomy."

It was hoped that other Regions would also consider the possibility of accepting the same footnote.

d) The frequency band 322 - 329 Mc/s for the Deuterium line emissions.

The possibility of allocating this specific frequency band to radio astronomy found very little support. One reason for this was that up till now the emissions of Deuterium were never observed, whilst the chance of observing it were at the moment not very great. Moreover the band was already used by other important services. The U.S.S.R. stated that they would support and could protect this requirement the importance of which had been furthermore stressed in a letter of the I.A.U. to Administrations seeking their support at this Radio Conference. The I.A.U. observer explained that the Deuterium emissions were important because of the measurement of the Dt-abundance as compared to the Hydrogen abundance which could give science a clue to a number of cosmological problems. However, in the same frequency order (that is to say somewhere between 300 Mc/s and 500 Mc/s) it was more important at the moment to have a frequency band available for continuum research. Furthermore the I.A.U. observer explained that compared to Hydrogen which is so abundant and relatively easy to observe the Deuterium would, probably, after its detection, have a rather limited importance. As only two countries (the United Kingdom and the U.S.S.R.) were at the moment carrying out these observations and for the reasons given above, the Working Group felt that the allocation of this particular frequency band to radio astronomy was not justified at the present time. A majority of the Working Group, however, felt that some mention should be made for this requirement. A footnote (or inclusion in a recommendation on radio astronomy) of the following text was suggested: "Radio astronomical observations on the Deuterium line (322 - 329 Mc/s) are carried out in a number of countries under national arrangements. Administrations should bear in mind the needs of radio astronomy in their future planning of this band."

### e) Frequency allocation around 400 Mc/s.

The main difficulty here was that in many countries the frequency band 400 - 420 Mc/s is used for the meteorological service. The frequency band 400 - 406 Mc/s in particular is a most important meteorological side band. For this reason the Working Group felt that an allocation to radio astronomy should be above 406 Mc/s. After the I.A.U. observer explained the great importance of research in this frequency range the Working Group agreed to a footnote allocating the band 406 - 410 Mc/s to radio astronomy on an additional basis to the other authorized services in the band. The U.S.A. could not agree whilst the U.S.S.R. stated that they could not give protection to the radio astronomy in the frequency band 406 - 410 Mc/s. It must be clearly understood that in some countries it will be extremely difficult to give full protection to this band for

radio astronomical observations, though subject to the reservations stated above, the Working Group could agree on the following text: "The frequency band 406 - 410 Mc/s is also allocated to the radio astronomy service. Administrations assigning frequencies to stations of other authorized services in this band will take all practicable measures to avoid as far as possible harmful interference to radio astronomy observations."

f) Frequency allocation around 600 Mc/s.

As this requirement will fall either in a band allocated to broadcasting or in a band shared between broadcasting and radionavigation difficulties were seen in these proposals.

The only approach which was acceptable to the members of the Working Group was to give the radio astronomy service the opportunity to use the frequency band 606 - 614 Mc/s until the band was required for broadcasting. However, at the same time, in any recommendation dealing with radio astronomy, Administrations should be asked to consider the possibility of not assigning this particular frequency band in future broadcasting assignment plans (at the next European VHF/UHF Broadcasting Conference) or if that was not feasible to restrict the assignments of this channel as much as possible. A number of countries (especially France and the Federal Republic of Germany) foresaw considerable difficulty in accepting this approach. The text for inclusion in a footnote would read: "The frequency band 606 - 614 Mc/s will be used by the radio astronomy service until such time as it is required for use by other authorized services and during this period Administrations should take all practicable measures to avoid as far as possible harnful interference to madio astronomy observations." The U.S.A. could not accept this solution because in Region 2 these frequencies fall well within a broadcasting band already in use.

- 6. The Belgian Delegate raised the question of the distribution of data regarding the location of radio astronomy observatories to Administrations. Though this matter was clearly outside the terms of reference of the special Working Group, it was felt that the point made was an important one and should be dealt with via Working Group 4D and Committee 4 to the appropriate Committee. Mention was made of the possibility of including such information in the I.T.U. publications.
- 7. Though not discussed in the Morking Group it is felt that amongst others the following points should be covered by the Ad Hoc Group to be set up under Committee 4 (Document No. 507 Minutes of the 20th meeting, paragraph 5 refers).
  - a) To deal with the frequency bands which are a radio astronomy requirement and which could not be solved in the Working Groups (Deuterium, OH-line emissions).
  - b) To deal with the requirements which were not fully covered (e.g. 0.5 Mc/s instead of 2 Mc/s bandwidth at 38 and 80 Mc/s).

- o) The recommendation on the use of the frequency band 606-614 Mc/s to the next Broadcasting Conference.
- d) The difficulty of freeing bands on a short notice for radio astronomy and the gradual approach to the ultimate goal of radio astronomy.
- e) The possibilities of sharing bands between radio astronomy and some other services, especially in the higher ranges of the spectrum.
- f) To deal with the representation of data concerning the use of radio astronomy to Administrations.
- g) The position of the radio astronomy service as regards the extraband radiations and the need to take all practicable steps to avoid harmful interference in bands shared between radio astronomy and other services.

J.H.R. van der Willigen Chairman

## CONFERENCE ADMITTSTRATIVE DES RADIOCOMMUNICATIONS

GENEVE, 1959

Document Nº DT 800-FES 18 Novembre 1959

SOUS-GROUPE DE TRAVAIL 5B3 SUB-WORKING GROUP 5B3 SUBGRUPO DE TRABAJO 5B3

### ORDRE DU JOUR

## Quatrième séance du Sous-Groupe de travail 5B3 (Groupe maritime)

Vendredi 20 Novembre 1959 à 15 heures - Salle C

- 1. Suite de l'examen du Document Nº DT 731.
- 2. Examen du Document Nº 141 (Proposition des Etats Unis d'Amérique relative à l'Appendice 12).
- 3. Divers.

### AGENDA

### Fourth meeting of Sub-Working Group 5B3 (maritime)

Friday, 20 November, 1959, at 3 p.m. - Room C

- 1. Further discussion of Working Document No. DT 731.
- 2. Document No. 141 (United States Proposal about Appendix 12).
- 3. Any other business.

## ORDEN DEL DÍA

# 4.ª sesión del Subgrupo de trabajo 5B3 (Grupo marítimo)

Viernes, 20 de noviembre de 1959, a las 3 de la tarde - Sala C

- 1. Continuación del examen del Documento N.º DT 731.
- 2. Examen del Documento N.º 141 (Proposición de los Estados Unidos de América sobre el Apéndice 12).
- 3. Otros asuntos.

Le Président The Chairman El Presidente,