



**Documents of the Extraordinary Administrative Radio Conference
to allocate frequency bands for space radiocommunication purposes (EARC-63)
(Geneva, 1963)**

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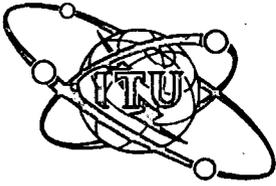
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SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 201-E
6 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Note by the Chairman of the Conference

At the request of Mr. Eid, Head of the Delegation of the United Arab Republic, I am circulating the attached copy of his letter to me. At the same time, I believe all delegates are entitled to know all the facts concerning the points raised by him.

The matter has already been discussed on his initiative at three separate meetings of the Conference Steering Committee (Committee No. 1) which took a decision on the procedure to be followed, a decision which I had hoped fully disposed of the matter.

The original Documents Nos. 22 and 23 he mentioned, produced at the headquarters of the Union and circulated to all members of the Union on 13 September 1963 (including the U.A.R.) were withdrawn by the Secretary-General by circular-telegram 49/20 of 20 September 1963 for the reasons given by the Secretary-General in his letter of 14 October 1963 addressed to me (see Annex 2) the substance of which was communicated to the Steering Committee.

There was no question of censorship involved, but merely a question of following the decision of the Administrative Council as to the scope of the Agenda. The decision of the Administrative Council with respect to the Agenda was later unanimously ratified in a referendum of the Members of the Union.

Subsequently the I.F.R.B. itself modified the documents and reintroduced in their place Documents Nos. 42, 43 and 44 not as proposals but as I.F.R.B. reports on studies carried out.

The Steering Committee considered the matter and recommended the circulation of new Documents Nos. 42 and 43 (the latter somewhat amended) and decided on the non-circulation of Document No. 44. The contents of the latter had of course been made known by the previous general circulation to all Members of the Union of Document No. 23.



I feel that it is my duty as Chairman of the Conference to direct its proceedings as expeditiously and efficiently as possible and it is with this in mind that these facts are set forth so that the Conference time may not be spent in useless discussions of matters not on its agenda.

Gunnar PEDERSEN
Chairman

Annexes:

- 1) Letter to Chairman of Conference from Mr. Eid
- 2) Letter to Chairman of Conference from the Secretary-General

A N N E X 1

Geneva, 2 November, 1963

To Mr. G. Pedersen
Chairman of the Conference

Mr. Chairman,

The Delegation of the United Arab Republic would like to bring to your attention the following:

1. Towards the end of September, my Administration received Circular-telegram No. 49/20 circulated by the Secretary-General of the I.T.U. The telegram carried information to the effect that upon reconsideration, certain documents were withdrawn on the ground that:

- a) they fall outside the Agenda of the Conference;
- b) the duration of the Conference is short.

These documents, namely, Nos. 22 and 23, were not received by my Administration.

2. Upon investigation of the matter, and acquiring the said documents through Delegations who had received them prior to their withdrawal, I was greatly surprised when I found that Document No. 22 was issued by the I.F.R.B., and Document No. 23 was the joint work of both the General Secretariat and the I.F.R.B.

It is to be noted that the documents contain material that can be described as highly technical and of great value to the work being undertaken by the Conference.

3. This led the Delegation of the U.A.R. to consider serious questions of principle i.e. the competence of the Secretary-General to stand in the way of circulation of conference documents forwarded by any of the permanent organs, Members, or Associate Members of the I.T.U. irrespective of the material they contained.

4. Concerning the subject of the documents, it is stressed here that the question being raised is that of the principle and not of the subject.

It is the firm belief of the Delegation of the U.A.R., that the only competent authority to decide upon the subject is the Plenary Meeting, where delegations can freely exchange their views on the matter prior to final decision.

5. As a result of the action taken by the Secretary-General, circulation of Documents Nos. 42 and 43 (containing the material of the original Document No. 22) took place about two weeks after the convening of the Conference.

6. For the above mentioned reasons, I feel that this matter must be put on record and, henceforth transmitted to the competent authority i.e. the Administrative Council, for consideration.

To conclude, the Delegation of the U.A.R. requests you, Sir, to circulate this letter as a formal conference document, and include it in the Agenda of the Plenary Meeting of the Conference.

Yours sincerely,

(signed) A.B. EID
Head of the U.A.R. Delegation

A N N E X 2

International Telecommunication Union

The Secretary-General

Geneva, 14 October 1963.

Mr. Gunnar Pedersen,
Chairman of the Space
Radiocommunication Conference

Dear Mr. Pedersen,

In view of the fact that you have brought the question of I.F.R.B. reports, tentatively submitted as Documents Nos. 42, 43 and 44 for the Conference, to the attention of the Steering Committee, I feel that it is only fair that all members of the Steering Committee should be informed as to the circumstances surrounding the withdrawal of Documents Nos. 22 and 23, and the controversy connected with these two documents. First of all, I think it should be made clear that the matter has been brought to you by the I.F.R.B. because that permanent body of the I.T.U. was not in agreement with the action of the Secretary-General in withdrawing the two documents in question, and consequently, they have appealed to you to overrule him, which, of course, you, guided by the Steering Committee, have every right to do. Parenthetically, may I say that whatever your decision is, I shall not be unhappy, because I think it is high time to shed a little light on the matter.

Under normal procedures, the Secretary-General is responsible for the issuance of all documents to conferences, since such purely administrative matters as their preparation, their translation, their mimeographing and their distribution involve the administrative and financial services of the Union.

This logically flows from Article 10 of the Convention, paragraph 120, which places the responsibility on the Secretary-General "for all the administrative and financial services of the Union". As indicated in

circular telegram 49/20 of 20 September, 1963, the two documents in question originally numbered 22 and 23 were withdrawn by me because they included matters which are not on the agenda of this Conference.

It will be recalled that a long discussion took place at the 18th Session of the Administrative Council as to the precise terms of the agenda, and while suggestions had been made that this agenda be widened to include certain points covered in the documents originally submitted as Documents Nos. 22 and 23, the Administrative Council ruled otherwise and limited the agenda of this Conference to the specific terms with which we are all familiar shown in Document No. 46.

Not only that, but this action in thus limiting the agenda was unanimously ratified by the Members of the Union in a referendum.

In all of this discussion, I wish to make it clear that I am not debating the merits of the proposals contained in the documents withdrawn. Sooner or later it is clear that some of these points must be dealt with. What I am saying and what I continue to feel is that at a Conference as important as this one, and with a limited duration of only five weeks, there is no time to take up items not on the agenda if the main work of the Conference, i.e. frequency allocation, and their notification, recording and use, is to be accomplished.

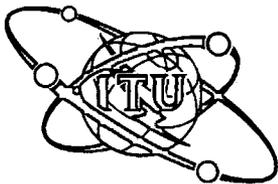
I trust that the work of the Conference can be carried out in an effective and efficient way on the particular problems which are on the agenda, so that the Conference may finish on time.

The matters covered by original Documents Nos. 22 and 23 obviously involve important questions of policy which must, of course, be dealt with sooner or later.

Sincerely yours,

(signed) Gerald C. GROSS
Secretary-General

P.S. I intend to cover the substance of the above statement in the meeting of the Steering Committee which is called for 0930 hours on Tuesday, 15 October.



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 202-E
6 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AGENDA

FOR THE 6th PLENARY MEETING

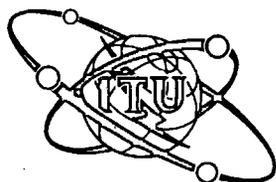
Wednesday 6 November, 1963, at 21.00 hours

1. Any items outstanding from the 5th Plenary Meeting
2. Seventh series of "blue" texts²⁾ submitted by the Editorial Committee (Document No. 187)
3. Final Report by Committee 2 - Credentials (Document No. 179)
4. Draft Recommendation submitted by the Delegation of the State of Israel (Document No. 166)
5. International Technical Cooperation and Assistance in the field of Space Radiocommunication (Document No. 192)
6. Miscellaneous

Gunnar PEDERSEN
Chairman of the Conference

²⁾ Texts submitted by Committee 5 to Committee 7





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 203-E
6 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 5

AGENDA

TENTH MEETING OF COMMITTEE 5

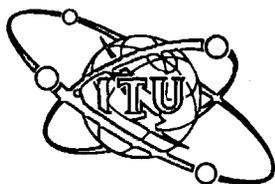
(ALLOCATIONS)

Thursday, 7 November, 1963 (at a time to be announced) Room A

1. Summary Record, Second meeting (Document No. 153 (Rev. 2))
Summary Record, Third meeting (Document No. 142)
Summary Record, Fourth meeting (Document No. 140)
Summary Record, Fifth meeting (Document No. 158 (Rev.))
Summary Record, Sixth meeting (Document No. 162 (Rev. 2))
Summary Record, Seventh meeting (Document No. 182)
Summary Record, Eight meeting (Document No. 199)
2. Any other business

W. KLEIN
Chairman





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 204-E
6 November, 1963
Original : French

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 3

REPORT

BY THE WORKING GROUP OF COMMITTEE 3

1. The Working Group of Committee 3 (Budgetary Control) set up at the first meeting of that Committee (Document No. 89), met on 31 October and 6 November, 1963 to examine the budget of the Conference.

The following delegations took part in the work of the Group: Belgium, United States, the Roumanian P.R., and the United Kingdom. The Secretariat was represented by Mr. Prélaz, Head of Administrative Services of the Conference and by Mr. Monti, Head of the Bureau of the I.F.R.B. Mr. A. Caruso (Italy) acted as Chairman.

2. The Group examined the expenditure of the Conference as at 24 October, 1963 and 4 November, 1963, and the estimated expenditure up to the closing of the Conference.

The expenses were examined section by section and item by item, in the light of information and explanations provided by the representatives of the Secretariat.

3. The Group felt that it might be useful to indicate the reasons put forward to justify the amounts shown under various items in the budget as overtime for conference staff. The reasons were :

- a) The assimilation of I.T.U. salaries into the United Nations common system was automatically reflected in the overtime rates.
- b) The need to keep a certain number of staff in the various sections (pool - roneo - translation, etc.) throughout the time when delegates were present at the Conference Building, so as to be certain of being able to cope at all times with urgent requests from the Chairmen of Committees, Working Groups and Sub-Groups, in connection with the preparation of documents.
- c) The decision of the Conference to work on Saturdays.



- d) The decision of the Conference to organize its work by radio services rather than by frequency band, which entailed the rearrangement and publication of all proposals concerning the table of frequency allocation by services (see Document No. 17).
4. The Working Group considered that the presentation of the statement of expenditure should be slightly amended by the addition of a new column showing, for each item, the expenditure already incurred but not payable until the end of the Conference.
5. The Working Group, considering that certain miscellaneous expenses - such as the decoration of the front of the Conference building - and others could not be correctly debited under budgetary sub-head 7.509, Unforeseen, requested that the expenses concerned be transferred to the appropriate sub-head (7.505. Premises, furniture, machines).
6. At the 1st Meeting of Committee 3, credit transfers from article to article amounting to 58,000 Swiss francs had been approved. The Working Group draws the attention of the Committee to the fact that, on the basis of the estimate of expenditure at 4 November, 1963, credit transfers from article to article amounting to only 31,000, Swiss francs will be necessary.
7. The Working Group requests Committee 3 to approve the budget of the Extraordinary Administrative Conference on Space Radiocommunication as set out in Annex 1 to the present report, showing a total expenditure of 1,070,000.- Swiss francs, which falls within the figure of 1,075,000.- Swiss francs approved by the Administrative Council of the I.T.U.
8. A list of the recognized private operating agencies, scientific or industrial organizations, and international organizations taking part in the Conference, together with the number of contributory units chosen, is contained in Annex 2 hereto.

A. CARUSO
Chairman of the Working Group

A N N E X 1

STATEMENT OF EXPENDITURE FOR THE SPACE RADIOCOMMUNICATION CONFERENCE AT 4 NOVEMBER 1963

Articles and subheads	Budget approved by the C.A.	Credit transfers from sub-head to subhead	Credit transfers from article to article	Total credits available	Actual expenditure at 4. 11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
<u>Article I. Staff</u>								
<u>7.501 Administration</u>								
- Salaries					45,769.25	18,846.05	8,520.--	73,135.30
- Travel					1,059.05	475.10	100.--	1,634.15
- Overtime					34,316.90	12,000.--	17,000.--	63,316.90
- Other expenses						2,000.--	913.65	2,913.65
	115,000.--	+ 26,000.--	--	141,000.--	81,145.20	33,321.15	26,533.65	141,000.--
<u>7.502 Language service</u>								
- Salaries					302,895.30	118,958.--	4,707.--	426,560.30
- Travel					22,275.15	2,649.85	143.--	25,068.--
- Overtime					11,980.55	5,000.--	10,000.--	26,980.55
- Other expenses					438.75	1,700.--	7,252.40	9,391.15
	600,000.--	- 76,000.--	-31,000.--	493,000.--	337,589.75	128,307.85	22,102.40	488,000.--
<u>7.503 Document Reproduction</u>								
- Salaries					35,401.--	12,666.--	9,396.--	57,463.--
- Travel					--	--	--	--
- Overtime					21,824.55	5,000.--	10,000.--	36,824.55
- Other expenses					--	300.--	412.45	712.45
	50,000.--	+ 45,000.--	--	95,000.--	57,225.55	17,966.--	19,808.45	95,000.--
<u>7.504 Insurance</u>								
- Accident insurance					--	3,000.--	--	3,000.--
- Pension Fund/Sickness insurance					1,879.90	3,868.30	251.80	6,000.--
	4,000.--	+ 5,000.--	--	9,000.--	1,879.90	6,868.30	251.80	9,000.--
TOTAL, ARTICLE I	769,000.--	--	-31,000.--	738,000.--	477,840.40	186,463.30	68,696.30	733,000.--

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Articles and Subheads	Budget approved by the C.A.	Credit transfers from subhead to subhead	Credit transfers from article to article	Total credits available	Actual expenditure at 4.11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
<u>Article II. Premises and equipment</u>								
<u>7.505 Premises, furniture, machines</u>								
- Renting of premises					-.	50,400.--	-.	50,400.--
- Lighting					-.	10,000.--	-.	10,000.--
- Installation					507.70	15,247.30	-.	15,755.--
- Hiring of furniture and machines					824.--	7,270.--	-.	8,094.--
- Machine maintenance and repairs					-.	-.	2,000.--	2,000.--
--Transport					5,905.60	-.	100.--	6,005.60
- Miscellaneous					- 14.25	200.--	559.65	745.40
	70,000.--	+23,000.--	-.	93,000.--	7,223.05	83,117.30	2,659.65	93,000.--
<u>7.506 Document production</u>								
- Paper					19,105.75	4,200.--	8,500.--	31,805.75
- Stencils					3,278.25	400.--	1,000.--	4,678.25
- Ink					2,465.--	-.	-.	2,465.--
- Offset workshop					666.65	2,000.--	3,000.--	5,666.65
- Final documents					-.	-.	40,000.--	40,000.--
- Miscellaneous					2,330.--	260.--	2,794.35	5,384.35
	75,000.--	+ 1,000.--	+14,000.--	90,000.--	27,845.65	6,860.--	55,294.35	90,000.--
<u>7.507 Office supplies and overheads</u>								
- Office supplies					14,001.45	250.--	-4,500.--	9,751.45
- Postage					1,258.45	-.	4,000.--	5,258.45
- Telephone					- 72.70	2,500.--	500.--	2,927.30
- Telegrams					150.05	-.	1,000.--	1,150.05
- Removal costs					471.50	-.	1,000.--	1,471.50
- Guides, badges etc.					7,493.40	90.--	-.	7,583.40
- Night taxis					542.35	500.--	500.--	1,542.35
- Miscellaneous					- 163.40	875.--	1,603.90	2,315.50
	40,000.--	- 8,000.--	-.	32,000.--	23,681.10	4,215.--	4,103.90	32,000.--
<u>7.508 Simultaneous interpretation and other technical equipment</u>								
- Hiring I.T.U. equipment					-.	13,000.--	-.	13,000.--
- Tapes					-.	-.	1,000.--	1,000.--
- Installation costs					48.40	5,000.--	-.	5,048.40
- Removal costs					105.--	-.	846.60	951.60
	25,000.--	- 5,000.--	-.	20,000.--	153.40	18,000.--	1,846.60	20,000.--
<u>7.509 Unforeseen</u>	21,000.--	-11,000.--	-.	10,000.--	2,225.95	2,410.--	5,364.05	10,000.--
TOTAL, ARTICLE II	231,000.--	-.	+14,000.--	245,000.--	61,129.15	114,602.30	69,268.55	245,000.--

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Articles and sub-heads	Budget approved by the C.A.	Credit transfers from sub-head to sub-head	Credit transfers from article to article	Total credits available	Actual expenditure at 4.11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
<u>Article III. Preparatory work</u>								
<u>7.510 I.F.R.B. preparatory work</u>								
- Staff					13,929.65	2,626.60	---	16,556.25
- Mission expenses					1,000.75	---	---	1,000.75
- Equipment					247.50	---	---	247.50
- Miscellaneous					---	---	195.50	195.50
	40,000.--	-22,000.--	---	18,000.--	15,177.90	2,626.60	195.50	18,000.--
<u>7.511 Preparation and despatch of preparatory documents</u>								
- Staff expenses								
Salaries					26,320.85	---	---	26,320.85
Travel					721.50	---	---	721.50
Overtime					8,865.10	---	---	8,865.10
Offset workshop					4,197.10	3,370.10	---	7,567.20
- Service taxi					300.45	---	---	300.45
- Supplies and equipment					18,174.55	---	---	18,174.55
- Despatch					12,050.35	---	---	12,050.35
	35,000.--	+22,000.--	+17,000.--	74,000.--	70,629.90	3,370.10	---	74,000.--
TOTAL, ARTICLE III.	75,000.--	---	+17,000.--	92,000.--	85,807.80	5,996.70	195.50	92,000.--
TOTAL SECTION 7.5 SPACE CONFERENCE	1,075,000.--	---	---	1,075,000.--	624,777.35	307,062.30	138,160.35	1,070,000.--

MARGIN IN RELATION TO
THE BUDGET

5,000.--

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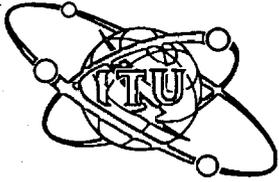
A N N E X 2

LIST OF RECOGNIZED PRIVATE OPERATING AGENCIES, SCIENTIFIC OR
INDUSTRIAL ORGANIZATIONS AND INTERNATIONAL ORGANIZATIONS
TAKING PART IN THE CONFERENCE

	<u>No. of contributory units</u>
<u>1. Recognized private operating agencies</u>	
Companhia Portuguesa Radio Marconi.....	½ unit
Italcable	*)
Cable and Wireless	1 unit
American Cable and Radio Corp.	½ unit
France Cables et Radio	*)
Compagnie générale de télégraphie sans fil	½ unit
<u>2. International organizations</u>	
United Nations	**)
International Civil Aviation Organization	**)
United Nations Educational, Scientific and Cultural Organization	**)
World Meteorological Organization	**)
International Air Transport Association	**)
International Chamber of Shipping	**)
International Radio-Maritime Committee	**)
Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science	**)
Committee on Space Research	**)
International Council of Scientific Unions	**)
Federation internationale des éditeurs de journaux et publications	**)
International Broadcasting and Television Organization ..	**)
European Broadcasting Union	**)
International Amateur Radio Union	**)
International Scientific Radio Union	**)

*) The Secretariat has not yet been informed of the choice of contributory class.

***) Exempt from any contribution under the terms of Administrative Council Resolution No. 22 (amended).



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 205-E
6 November 1963
Original : French

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 3

AGENDA

OF THE

SECOND MEETING OF COMMITTEE 3 (BUDGET CONTROL)

Thursday, 7 November 1963, at 9.30 a.m. - Salle B

1. Approval of the Summary Record of the 1st meeting (Document No. 89)
2. Report by the Working Group (Document No. 204)
3. Decision to be taken relative to the percentage of the composition costs of the Final Acts to be debited to the Conference account (Administrative Council Resolution No. 83)*)
4. Any other business.

B. IONITA

Chairman

*) With regard to the publication of the Final Acts of conferences, Administrative Council Resolution No. 83 lays down that :
"If a conference or meeting prints, for its own use, documents of which typographical composition can subsequently be used, in whole or in part, for the printing of the Final Acts, it must bear a percentage of the composition costs and the whole of the printing costs of the said document.
The percentage of the composition cost ... shall be decided by the Plenary Assembly of the Conference or meeting".



SPACE
RADIOCOMMUNICATION
CONFERENCE
GENEVA, 1963

Document No. 206-E
6 November, 1963

E

R.2

PLENARY MEETING
SECOND READING

The Editorial Committee, submits the attached texts to the Plenary Assembly for a second reading.

Art. 9A

No. 695

Nos. 711A, 711B

Art. 19

Art. 20

Y. PLACE
Chairman of the Editorial
Committee

Annex : 20 pages



ANNEX 6

Addition of a new Article (Article 9A) to the Radio Regulations

The following new Article 9A shall be added to the Radio Regulations after Article 9 :

ARTICLE 9A

Notification and Recording in the Master International Frequency Register of Frequency Assignments to Stations in the Space and Radio Astronomy Services**Section I. Notification of Frequency Assignments and Co-ordination Procedure to be Applied in appropriate Cases**

- ADD 639AA § 1 (1) *Any frequency assignment*¹ to an earth or space station 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 radio-communication; or
 - c) if it is desired to obtain international recognition of the use of the frequency.

ADD 639AA.1¹ The expression *frequency assignment*, wherever 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 *Master Register*).

ADD **639AB** (2) Similar notice shall be given for any frequency to be used for the reception of transmissions from earth or space stations by a particular space or earth station in each case where one or more of the conditions specified in No. **639AA** are applicable.

ADD **639AC** (3) Similar notice may be given for any frequency or frequency band to be used for reception by a particular radio astronomy station, if it is desired that such data should be included in the Master Register.

ADD **639AD** § 2 (1) Before an administration notifies to the Board or brings into use any frequency assignment to an earth station, whether for transmitting or receiving, in a particular band allocated with equal rights to the space service and the fixed or the mobile service in the frequency spectrum between one and ten Gc/s, it shall effect co-ordination of the assignment with any other administration whose territory lies wholly or partly within co-ordination distance¹, but only in respect of the fixed or the mobile service. For this purpose it shall send to any other such administration a copy of a diagram drawn to an appropriate scale indicating the location of the earth station and showing the co-ordination distance from the earth station, for the cases of transmission and reception by the earth station, as a function of azimuth and the data on which it is based, including all pertinent details of the proposed frequency assignment, as listed in Appendix 1A, and an indication of the approximate date on which it is planned to begin operations.

ADD **639AD.1**¹ For the purposes of this Article the expression "co-ordination distance" means the distance from an earth station calculated along the lines of the procedures shown in Recommendation No.  [Doc. 157] within which there is a possibility of the use of a given transmitting frequency at this earth station causing harmful interference to stations in the fixed or the mobile service in the frequency spectrum between one and ten Gc/s, sharing the same frequency band, or, as the case may be, of the use of a given frequency for reception at this earth station receiving harmful interference caused by such stations in the fixed or the mobile service.

ADD **639AE** (2) An administration with which co-ordination is sought under No. **639AD** shall acknowledge receipt of the co-ordination data within thirty days and shall promptly examine the matter to establish:

- a)* in the case of a frequency assignment to be used for transmitting by the earth station, whether the use would cause harmful interference to the service rendered by its stations in the fixed or the mobile service operating in accordance with the Convention and these Regulations, or to be so operated within the next two years;
- b)* in the case of a frequency assignment to be used for reception by the earth station, whether harmful interference would be caused to reception at the earth station by the service rendered by its stations in the fixed or the mobile service operating in accordance with the Convention and these Regulations, or to be so operated within the next two years;

and shall, within a further period of thirty days, notify the administration requesting co-ordination of its agreement. If the administration with which co-ordination is sought does not agree it shall, within the same period, send to the administration seeking co-ordination a copy of a diagram drawn to an appropriate scale showing the location of its stations in the fixed or the mobile service which are within the co-ordination distance of the earth transmitting or receiving station, as appropriate, together with all other relevant basic characteristics, and make such suggestions as it may be able to offer with a view to a satisfactory solution of the problem. A copy of these data shall be sent to the Board, as notification within the period specified for such a case in No. **491**.

ADD **639AF** (3) No co-ordination under No. **639AD** is required when an administration proposes:

- a)* to bring into use an earth station which is located in relation to the territory of any other country, outside the co-ordination distance defined in **639AD.1**;

- b)* to change characteristics of an existing assignment in such a way as not to increase the probability of harmful interference to the stations in the fixed or the mobile service of other administrations;
- c)* to bring into use an earth station in the band 4 400-4 700 Mc/s or the band 8 100-8 400 Mc/s; or
- d)* to operate an earth station located on board a ship or aircraft; however, in such a case the operation of this station in the band referred to in No. **639AD**, if the ship or aircraft is within the co-ordination distance with respect to the boundaries of another country, shall be subject to prior agreement between the administrations concerned, in order to avoid harmful interference to the established fixed and mobile services of that country.

ADD **639AG** (4) An administration seeking co-ordination may request the Board to endeavour to effect co-ordination in those cases where:

- a)* an administration with which co-ordination is sought under No. **639AD** fails to reply within a period of ninety days;
- b)* there is a disagreement between the administration seeking co-ordination and an administration with which co-ordination is sought as to the probability of harmful interference; or
- c)* co-ordination between administrations is not possible for any other reason.

In so doing, it shall furnish the Board with the necessary information to enable it to effect such co-ordination.

ADD **639AH** (5) Either the administration seeking co-ordination or an administration with which co-ordination is sought, or the Board, may

request additional information which they may require to assess the probability of harmful interference to the services concerned.

- ADD **639AI** (6) Where the Board receives a request under No. **639AG a**), or where the Board receives no reply within ninety days to its request for co-ordination in the case foreseen in No. **639AG c**), it shall immediately send a telegram to the administration with which co-ordination is sought. If no reply has been received from that administration within a period of sixty days from the date of despatch of the telegram, it shall be deemed that the administration with which co-ordination was sought shall have undertaken that no complaint will be made in respect of any harmful interference which may be caused by the earth station to the services rendered by its stations in the fixed or the mobile service.
- ADD **639AJ** (7) Where necessary, as part of the procedure under No. **639AG**, the Board shall assess the probability of harmful interference. In any case, the Board shall inform the administrations concerned of the results obtained.
- ADD **639AK § 3** For any notification under Nos. **639AA**, **639AB**, or **639AC**, an individual notice for each frequency assignment shall be drawn up as prescribed in Appendix 1A, which specifies in Sections B, C, D, E or F the basic characteristics to be furnished, according to the case. It is recommended that the notifying administration should also supply the additional data called for in Section A of that Appendix, together with such further data as it may consider appropriate.
- ADD **639AL § 4 (1)** For a frequency assignment to an earth or space station, each notice must reach the Board not earlier than two years before the date on which the assignment is to be brought into use. It must reach the Board in any case not later than one hundred and eighty days before this date, except in the case of assignments in the space research service in bands allocated exclusively to this service or in shared bands in which this service is the sole primary service. In the case of such an assignment in the space research service the notice should, whenever practicable, reach the Board before the date on which the assignment is brought into use, but in any case must reach

the Board not later than thirty days after the date it is actually brought into use.

- ADD **639AM** (2) Any frequency assignment to an earth or space station, the notice of which reaches the Board after the applicable period specified in No. **639AL**, shall, where it is to be recorded, bear a remark in the Master Register to indicate that it is not in conformity with No. **639AL**.

Section II. Procedure for the Examination of Notices and the Recording of Frequency Assignments in the Master Register

- ADD **639AN** § 5 Any notice which does not contain at least those characteristics specified in Appendix 1A (Sections B, C, D, E, or F, as appropriate) shall be returned by the Board immediately, by airmail, to the notifying administration with the reasons therefor.

- ADD **639AO** § 6 Upon receipt of a complete notice, the Board shall include the particulars thereof, with the date of receipt, in the weekly circular referred to in No. **497**, which shall contain the particulars of all such notices received since the publication of the previous circular.

- ADD **639AP** § 7 The circular shall constitute the acknowledgment to the notifying administration of the receipt of a complete notice.

- ADD **639AQ** § 8 Complete notices shall be considered by the Board in the order of their receipt. The Board shall not 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.

- ADD **639AR** § 9 The Board shall examine each notice:

- ADD **639AS** a) with respect to 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 co-ordination procedure and the probability of harmful interference);
- ADD 639AT b) where appropriate, with respect to its conformity with the provisions of No. 639AD relating to the co-ordination of the use of the frequency assignment with the other administrations concerned;
- ADD 639AU c) where appropriate, with respect to the probability of harmful interference to the service rendered by a station in the fixed or the mobile service for which a frequency assignment already recorded in the Master Register is in conformity with the provisions of Nos. 501 or 570AC, as appropriate, if this frequency assignment has not, in fact, caused harmful interference to any frequency assignment in conformity with No. 639AS previously recorded in the Master Register.
- ADD 639AV § 10 Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 639AS, 639AT and 639AU further action shall be as follows:
- ADD 639AW § 11 (1) *Finding favourable with respect to No. 639AS in cases where the provisions of No. 639AT are not applicable.*
- ADD 639AX (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- ADD 639AY § 12 (1) *Finding unfavourable with respect to No. 639AS.*
- ADD 639AZ (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 115, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- ADD 639BA (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. 115, 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.

- ADD **639BB** (4) If the notifying administration resubmits the notice unchanged, it shall be treated in accordance with the provisions of No. **639BA**. If it is resubmitted with a specific reference to the fact that the station will be operated in accordance with the provisions of No. **115**, or with modifications which, after re-examination, result in a favourable finding by the Board with respect to No. **639AS**, and the provisions of No. **639AT** are not applicable, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the resubmitted notice shall be entered in Column 2d.
- ADD **639BC** § 13 (1) *Finding favourable with respect to No. 639AS in cases where the provisions of No. 639AT are applicable.*
- ADD **639BD** (2) Where the Board finds that the co-ordination procedure mentioned in No. **639AT** has been successfully completed with all administrations whose fixed or mobile services may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- ADD **639BE** (3) Where the Board finds that the co-ordination procedure mentioned in No. **639AT** has not been applied, and the notifying administration requests the Board to effect the required co-ordination, the Board shall take the appropriate action necessary and shall inform the administrations concerned of the results obtained. If the Board's efforts are successful, the notice shall be treated in accordance with No. **639BD**. If the Board's efforts are unsuccessful, the notice shall be examined by the Board with respect to the provisions of No. **639AU**.
- ADD **639BF** (4) Where the Board finds that the co-ordination procedure mentioned in No. **639AT** has not been applied, and the notifying administration does not request the Board to effect the required co-ordination, the notice shall be returned immediately by airmail to the

notifying administration with the reasons of the Board for this action and with such suggestions as the Board may be able to offer with a view to the satisfactory solution of the problem.

- ADD **639BG** (5) Where the notifying administration resubmits the notice and the Board finds that the co-ordination procedure mentioned in No. **639AT** has been successfully completed with all administrations whose fixed or mobile services may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.
- ADD **639BH** (6) Where the notifying administration resubmits the notice with a request that the Board effect the required co-ordination, it shall be treated in accordance with the provisions of No. **639BE**. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.
- ADD **639BI** (7) Where the notifying administration resubmits the notice and states it has been unsuccessful in effecting the co-ordination, it shall be examined by the Board with respect to the provisions of No. **639AU**. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.
- ADD **639BJ**§ 14 (1) *Finding favourable with respect to Nos. 639AS and 639AU.*
- ADD **639BK** (2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.
- ADD **639BL**§ 15 (1) *Finding favourable with respect to No. 639AS but unfavourable with respect to No. 639AU.*
- ADD **639BM** (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.

- ADD 639BN** (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to No. **639AU**, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.
- ADD 639BO** (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. **639BN** 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 one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. 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.
- ADD 639BP** (5) The period of one hundred and twenty days mentioned in No. **639BO** shall count from:
- the date when the assignment to the earth station which received an unfavourable finding is brought into use, if the assignment to the station in the fixed or the mobile service is then in use;
 - otherwise, from the date when the assignment to the station in the fixed or the mobile service is brought into use.
- But if the assignment to the fixed or mobile station has not been brought into use by the notified date, the period of one hundred and twenty days shall be counted from this date. Allowance may be made for the additional period mentioned in No. **639BY**.

- ADD **639BQ** § 16 (1) *Notices relating to radio astronomy stations.*
- ADD **639BR** (2) A notice relating to a radio astronomy station shall not be examined by the Board with respect to Nos. **639AT** or **639AU**. Whatever the finding, the assignment shall be recorded in the Master Register with a date in Column 2c. The date of receipt by the Board of the notice shall be recorded in the Remarks Column.
- ADD **639BS** § 17 (1) *Change in the basic characteristics of assignments already recorded in the Master Register.*
- ADD **639BT** (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1A (except the call sign, the name of the station or the name of the locality in which it is situated) shall be examined by the Board according to No. **639AS**, and, where appropriate, Nos. **639AT** or **639AU**, and the provisions of Nos. **639AW** to **639BR** inclusive applied. Where the change should be recorded, the assignment shall be amended according to the notice.
- ADD **639BU** (3) However, in the case of a change in the characteristics of an assignment which is in conformity with No. **639AS**, should the Board reach a favourable finding with respect to Nos. **639AT** or **639AU**, where these provisions apply, 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 Column 2d. The date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.
- ADD **639BV** § 18 *In applying the provisions of the whole of this Section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board, shall be considered as a new notice.*

- ADD **639BW** § 19 (1) *Recording of Frequency Assignments notified before being brought into use.*
- ADD **639BX** (2) If a frequency assignment notified in advance of bringing into use has received a favourable finding by the Board with respect to No. **639AS** and, where appropriate, Nos. **639AT** or **639AU**, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.
- ADD **639BY** (3) If, within the period of thirty days 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 one hundred and fifty days.
- ADD **639BZ** (4) In the circumstances described in No. **639BO**, and as long as an assignment which received an unfavourable finding cannot be resubmitted as a consequence of the provisions of No. **639BP**, the notifying administration may ask the Board to enter the assignment provisionally in the Master Register, in which event a special symbol to denote the provisional nature of the entry shall be entered in the Remarks Column. The Board shall delete this symbol when it receives from the notifying administration, at the end of the period specified in No. **639BO**, the information relating to the absence of complaint of harmful interference.
- ADD **639CA** (5) If the Board does not receive this confirmation within the period referred to in No. **639BY** or at the end of the period referred to in No. **639BZ**, as appropriate, the entry concerned shall be cancelled.

Section III. Recording of Findings in the Master Register

- ADD **639CB** § 20 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 finding shall be inserted in the Remarks Column.

Section IV. Categories of Frequency Assignments

- ADD **639CC** § 21 (1) The date in Column 2c shall be the date of putting into use notified by the administration concerned. It is given for information only.
- ADD **639CD** (2) If harmful interference to the reception of any station whose assignment is in accordance with Nos. **501**, **570AC** or **639AS** as appropriate, is actually caused by the use of a frequency assignment which is not in conformity with No. **639AS**, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

Section V. Reviews of Findings

- ADD **639CE** § 22 (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.
- ADD **639CF** (2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account No. **639AS** and Nos. **639AT** or **639AU**, where these latter provisions apply, and shall render an appropriate finding, informing the notifying administration prior either to the promulgation of its finding or to any recording action.
- ADD **639CG** § 23 (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 No. **639AU**, this administration may request the Board to review the finding. Thereupon the Board shall review the matter, having first consulted the administrations concerned.

ADD **639CH** (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.

ADD **639CI** (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.

Section VI. Modification, Cancellation and Review of Entries in the Master Register

ADD **639CJ** § 24 In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within ninety days of such discontinuance, whereupon the entry shall be removed from the Master Register.

ADD **639CK** § 25 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, shall either cancel or suitably modify the entry.

ADD **639CL** § 26 If, in connection with an enquiry by the Board under No. **639CK**, the notifying administration has failed to supply the Board within ninety days with the necessary or pertinent information, the Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation.

Section VII. Studies and Recommendations

ADD **639CM** § 27 (1) If it is requested by any administration, 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 cases of alleged contravention or non-observance of these Regulations, or of harmful interference.

ADD **639CN** (2) The Board shall thereupon prepare and forward to the administration concerned a report containing its finding and recommendations for the solution of the problem.

ADD **639CO § 28** 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 ninety 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.

Section VIII. Miscellaneous Provisions

ADD **639CP § 29** 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, and the Recommendations of the C.C.I.R.

ADD **639CQ § 30** 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. 497.

ADD **639CR § 31** In case a Member or Associate Member of the Union avails itself of the provisions of Article 27 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 7

Revision of Article 14 of the Radio Regulations

Article 14 of the Radio Regulations shall be amended as follows :

For Regulation No. 695 there shall be substituted the following Regulation :

MOD

695 § 3.

In order to avoid interference:

- locations of transmitting stations and, where the nature of the service permits, locations of receiving stations shall be selected with particular care;
- radiation in and reception from unnecessary directions shall be minimized, where the nature of the service permits, by taking the maximum practical advantage of the properties of directional antennae;
- the choice and use of transmitters and receivers shall be in accordance with the provisions of Article 12 ;
- space stations shall be fitted with appropriate devices to quickly terminate their radio emissions whenever required to do so under the provisions of these Regulations.

ANNEX 8

Revision of Article 15 of the Radio Regulations

Article 15 of the Radio Regulations shall be amended as follows :

After Regulation No. 711, there shall be inserted the following new Regulations :

ADD 711A § 8A. When the service rendered by an earth station suffers interference, the administration having jurisdiction of the receiving station experiencing the interference may also approach directly the administration having jurisdiction over the interfering station.

ADD 711B § 8B. When cases of harmful interference occur as a result of emissions from space stations, the administrations concerned shall, upon request from the administration having jurisdiction over the station experiencing the interference, furnish current ephemeral data necessary to allow calculation of the positions of the space station.

ANNEX 9

Revision of Article 19 of the Radio Regulations

Article 19 of the Radio Regulations shall be amended as follows :

For Regulation No. 735.1 there shall be substituted the following Regulation :

MOD 735.1 1. In the present state of the technique, it is recognized nevertheless that the transmission of identifying signals for certain radio systems (e.g. radio-determination, radio relay systems and space systems) is not always possible.

After Regulation No. 737, there shall be inserted the following new Regulation :

ADD 737A § 2A. In the event that the transmission of identification signals by a space station is not possible, that station shall be identified by specifying the angle of inclination of the orbit and the period of the object in space on the orbit and the altitude in kilometres of apogee and perigee of the orbit of the space station(s). In the case of a space station on board a stationary satellite, the mean geographical longitude of the projection of the satellite's position on the surface of the Earth shall be specified. (See Appendix 1A.)

After Regulation No. 773, there shall be inserted the following new Regulation :

ADD *Stations in the Space Service*

ADD 773A § 21A. When call signs for stations in the space service are employed it is recommended that they consist of:

- two letters followed by two or three digits (other than the digits 0 and 1 in cases where they immediately follow a letter). (See also No. 737A.)

ANNEX 10

Revision of Article 20 of the Radio Regulations

Article 20 of the Radio Regulations shall be amended as follows :

For Regulation No. 808, there shall be substituted the following Regulation :

- MOD 808 (VII) *List VII. Alphabetical List of Call Signs Assigned from the International Series to Stations Included in Lists I to VI and VIIIA.*

After Regulation No. 811, there shall be inserted the following new Regulation :

- ADD 811A (VIIIA) *List VIIIA. List of Stations in the Space Service and in the Radio Astronomy Service.*

This list shall contain particulars of earth and space stations and of radio astronomy stations. In this list, each class of station shall occupy a special section.

For Regulation No. 815, there be substituted the following Regulation :

- MOD 815 § 2. (1) The Secretary-General shall publish the amendments to be made in the documents listed in Nos. 790 to 814 inclusive. Once a month administrations shall inform him, in the form shown for the lists themselves in Appendix 9, of the additions, modifications or deletions to be made in Lists IV, V and VI using for this purpose the appropriate symbols shown in Appendix 10. Furthermore, in order to make the necessary additions, modifications and deletions to Lists I, II, III and VIIIA, he shall use the data provided by the International Frequency Registration Board, obtained from the information received in application of the provisions of Articles 9, 9A and 10. He shall make the requisite amendments to List VII by using the data he has received for Lists I to VI and VIIIA.

After Regulation No. 829, there shall be inserted the following new Regulation :

- ADD **829A** § 10A. The List of Stations in the Space Service and in the Radio Astronomy Service (List VIIIA) shall be republished at intervals to be determined by the Secretary-General. Recapitulative supplements shall be published every six months. ,

For Regulation No. 831, there shall be substituted the following Regulation :

- MOD **831** § 12. (1) The forms in which the Lists I to VI inclusive, the Lists VIII and VIIIA and the Radiocommunication Statistics are to be prepared are given in Appendix 9. Information concerning the use of these documents shall be given in the Prefaces thereto. Each entry shall include the appropriate symbol, as shown in Appendix 10, to designate the category of station concerned. Additional symbols, where necessary, may be selected by the Secretary-General, any such new symbols being notified by the Secretary-General to administrations.

SPACE
RADIOCOMMUNICATION
CONFERENCE
GENEVA, 1963

Document No. 207
7 November, 1963

E

R.3

PLENARY MEETING
SECOND READING

The Editorial Committee, having examined the documents 181, 183, 185 and 186, submits the attached texts to the Plenary Meeting for a second reading.

Agreement

Annex 1 (Article 1)

Annex 4 (Article 7)

Resolution

Recommendations

Y. PLACE
Chairman of the Editorial
Committee

Annex : 51 pages



**PARTIAL REVISION OF THE RADIO REGULATIONS,
GENEVA, 1959**

Recommendation No. 36 of the Ordinary Administrative Radio Conference, Geneva, 1959, recommended that the Administrative Council of the Union should consider the convening, in the latter part of 1963, of an Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunication Purposes.

The Administrative Council considered this question during its annual session, in 1962, and, at its session in 1963, adopted Resolution No. 524, which, with the prior concurrence of a majority of the Members of the Union, determined the Agenda of the Conference and decided that it should be convened in Geneva on 7th October 1963.

The Extraordinary Administrative Radio Conference accordingly convened on the appointed date, and in accordance with the provisions of Nos. 60 and 61 of the Convention, revised the relevant portions of the Radio Regulations, Geneva, 1959. Particulars of these revisions are given in the attached Annexes.

The revised provisions of the Radio Regulations, Geneva, 1959, shall form an integral part of the Radio Regulations, which are annexed to the International Telecommunication Convention. They shall come into force on the first of January, 1965, upon which date the provisions of the Radio Regulations, Geneva, 1959, which are cancelled or modified by these revisions, shall be abrogated.

The delegates signing this revision of the Radio Regulations, Geneva, 1959, hereby declare that should an administration make reservations concerning the application of one or more of the revised provisions of the Radio Regulations, Geneva, 1959, no other administration shall be obliged to observe that provision or those provisions in its relations with that particular administration.

In witness whereof the delegates of the Members and Associate Member of the Union represented at the Extraordinary Administrative Radio

Conference, Geneva, 1963, have signed in the names of their respective countries this revision of the Radio Regulations, Geneva, 1959, in a single copy which will remain in the archives of the International Telecommunication Union and of which a certified copy will be delivered to each Member and Associate Members of the Union.

Members and Associate Members of the Union shall inform the Secretary-General of their approval of the revision of the Radio Regulations, Geneva, 1959, by the Extraordinary Administrative Radio Conference, Geneva, 1963. The Secretary-General will inform Members and Associate Members of the Union promptly regarding receipt of such notifications of approval.

Done at Geneva, the 14 of November, 1963.

ANNEX 1

Revision of Article 1 of the Radio Regulations

Article 1 of the Radio Regulations shall be amended as follows:

For Regulation Nos. 34 and 35, there shall be substituted the following Regulations :

Section II. Radio Systems, Services and Stations

- MOD **34** *Aeronautical Station*
 A land station in the aeronautical mobile service. In certain instances an aeronautical station may be placed on board a ship or an earth satellite.
- MOD **35** *Aircraft Station*
 A mobile station in the aeronautical mobile service on board an aircraft or an air-space vehicle.
- Regulation Nos. 70, 71, 72 and 73 shall be repealed.*
For Regulation No. 75, there shall be inserted the following Regulation :
- ADD **75A** *Radio Astronomy Station*
 A station in the radio astronomy service.
- For Regulation No. 84, there shall be inserted the following Regulations :*
- ADD **84AA** *Terrestrial Service*
 Any radio service defined in these Regulations, other than a space service or the radio astronomy service.
- ADD **84AB** *Terrestrial Station*
 A station in a terrestrial service.

- ADD Title **Section IIA. Space Systems, Services and Stations**
- ADD **84 AC *Space Service***
- A radiocommunication service:
- between earth stations and space stations,
 - or between space stations,
 - or between earth stations when the signals are re-transmitted by space stations, or transmitted by reflection from objects in space, excluding reflection or scattering by the ionosphere or within the earth's atmosphere.
- ADD **84 AD *Earth Station***
- A station in the space service located either on the earth's surface, including on board a ship, or on board an aircraft.
- ADD **84 AE *Space Station***
- A station in the space service located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the earth's atmosphere.
- ADD **84 AF *Space System***
- Any group of co-operating earth and space stations, providing a given space service and which, in certain cases, may use objects in space for the reflection of the radiocommunication signals.
- ADD **84 AG *Communication-Satellite Service***
- A space service:
- between earth stations, when using active or passive satellites for the exchange of communications of the fixed or mobile service, or
 - between an earth station and stations on active satellites for the exchange of communications of the mobile service, with a view to their retransmission to or from stations in the mobile service.

- ADD **84AH** *Communication-Satellite Earth Station*
An earth station in the communication-satellite service.
- ADD **84AI** *Communication-Satellite Space Station*
A space station in the communication-satellite service, on an earth satellite.
- ADD **84AJ** *Active Satellite*
An earth satellite carrying a station intended to transmit or re-transmit radiocommunication signals.
- ADD **84AK** *Passive Satellite*
An earth satellite intended to transmit radiocommunication signals by reflection.
- ADD **84AL** *Satellite System*
Any group of co-operating stations providing a given space service and including one or more active or passive satellites.
- ADD **84AM** *Space Research Service*
A space service in which spacecraft or other objects in space are used for scientific or technological research purposes.
- ADD **84AN** *Space Research Earth Station*
An earth station in the space research service.
- ADD **84AO** *Space Research Space Station*
A space station in the space research service.
- ADD **84AP** *Broadcasting-Satellite Service*
A space service in which signals transmitted or re-transmitted by space stations, or transmitted by reflection from objects in orbit around the earth, are intended for direct reception by the general public.

- ADD **84AQ** *Radionavigation-Satellite Service*
A service using space stations on earth satellites for the purpose of radionavigation, including, in certain cases, transmission or retransmission of supplementary information necessary for the operation of the radionavigation system.
- ADD **84AR** *Radionavigation-Satellite Earth Station*
An earth station in the radionavigation-satellite service.
- ADD **84AS** *Radionavigation-Satellite Space Station*
A space station in the radionavigation-satellite service, on an earth satellite.
- ADD **84AT** *Meteorological-Satellite Service*
A space service in which the results of meteorological observations, made by instruments on earth satellites, are transmitted to earth stations by space stations on these satellites.
- ADD **84AU** *Meteorological-Satellite Earth Station*
An earth station in the meteorological-satellite service.
- ADD **84AV** *Meteorological-Satellite Space Station*
A space station in the meteorological-satellite service on an earth satellite.
- ADD **84AW** *Space Telemetry*
The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.
- ADD **84AX** *Maintenance Space Telemetry*
Space telemetry relating exclusively to the electrical and mechanical condition of a spacecraft and its equipment together with the condition of the environment of the spacecraft.

- ADD **84 AY** *Space Telecommand*
- The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate functions of the equipment on a space object, including the space station.
- ADD **84 AZ** *Space Tracking*
- Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.
- ADD Title **Section IIB. Space, Orbits and Types of Objects in Space**
- ADD **84BA** *Deep Space*
- Space at distances from the Earth equal to or greater than the distance between the Earth and the Moon.
- ADD **84BB** *Orbit*
- The path in space described by the centre of mass of a satellite or other object in space.
- ADD **84BC** *Angle of Inclination of an Orbit*
- The acute angle between the plane containing an orbit and the plane of the earth's equator.
- ADD **84BD** *Period of an Object in Space*
- The time elapsing between two consecutive passages of an object in space through the same point on its closed orbit.
- ADD **84BE** *Altitude of the Apogee*
- Altitude above the surface of the Earth of the point on a closed orbit, where a satellite is at its maximum distance from the centre of the Earth.

ADD **84BF** *Altitude of the Perigee*

Altitude above the surface of the Earth of the point on a closed orbit, where a satellite is at its minimum distance from the centre of the Earth.

ADD **84BG** *Stationary Satellite*

A satellite, the circular orbit of which lies in the plane of the earth's equator and which turns about the polar axis of the Earth in the same direction and with the same period as that of the earth's rotation.

ADD **84BH** *Spacecraft*

Any type of space vehicle, including an earth satellite or a deep space probe, whether manned or unmanned.

ANNEX 4

Revision of Article 7 of the Radio Regulations

Article 7 of the Radio Regulations shall be amended as follows:

After Section VI, there shall be inserted the following new Sections VII, VIII and IX:

ADD Section VII. Terrestrial Services sharing Frequency Bands with Space Services between 1 Gc/s and 10 Gc/s

Choice of Sites and Frequencies

ADD 470A § 18. Sites and frequencies for terrestrial stations, operating in frequency bands shared with equal rights between terrestrial and space services, shall be selected having regard to the relevant recommendations of the C.C.I.R. with respect to geographical separation from earth stations.

Power Limits

ADD 470B § 19. (1) The maximum effective radiated power of the transmitter and associated antenna, of a station in the fixed or mobile service, shall not exceed + 55 dbW.

ADD 470C (2) The power delivered by a transmitter to the antenna of a station in the fixed or mobile service shall not exceed + 13 dbW.

ADD 470D (3) The limits given in 470B and 470C apply in the following frequency bands allocated to reception by space stations in the communication-satellite service, shared with equal rights with the fixed or mobile service;

5850-5925 Mc/s (Regions 1 and 3)

5925-6425 Mc/s

7900-7975 Mc/s

7975-8025 Mc/s (for the countries mentioned in 392YY)

8025-8100 Mc/s

ADD Section VIII. Space Services sharing Frequency Bands with
Terrestrial Services between 1 Gc/s and 10 Gc/s

Choice of Sites and Frequencies

ADD 470E § 20. Sites and frequencies for earth stations, operating in frequency bands shared with equal rights between terrestrial and space services shall be selected having regard to the relevant recommendations of the C.C.I.R. with respect to geographical separation from terrestrial stations.

Power Limits

- ADD 470F § 21. (1) Earth Stations in the Communication-Satellite Service
- ADD 470G (2) The mean effective radiated power transmitted by an earth station in any direction in the horizontal plane¹ shall not exceed + 55 dbW in any 4 kc/s band, except that it may be increased subject to the provisions of 470H or 470I. However, in no case shall it exceed a value of + 65 dbW in any 4 kc/s band.
- ADD 470H (3) In any direction where the distance from an earth station to the boundary of the territory of another administration exceeds 400 km, the limit of + 55 dbW in any 4 kc/s band may be increased in that direction by 2 db for each 100 km in excess of 400 km.
- ADD 470I (4) The limit of + 55 dbW in any 4 kc/s band may be exceeded by agreement between the administrations concerned or affected.
- ADD 470J (5) The limits given in 470G apply in the following frequency bands allocated to transmission by earth stations in the

¹ For the purpose of this Regulation, the effective radiated power transmitted in the horizontal plane shall be taken to mean the effective radiated power actually transmitted towards the horizon, reduced by the site-shielding factor that may be applicable. The value of this site-shielding factor shall be determined as indicated in Section 5 of the annex to Recommendation [REDACTED] [Document No. 122 (Rev.)].

communication-satellite service, shared with equal rights with the fixed or mobile service;

4400-4700 Mc/s

5850-5925 Mc/s (Regions 1 and 3)

5925-6425 Mc/s

7250-7750 Mc/s (for earth stations transmitting to passive satellites in conformity with **392D**)

7900-7975 Mc/s

7975-8025 Mc/s (for the countries mentioned in **392YY**)

8025-8400 Mc/s

Minimum Angle of Elevation

- ADD **470K** § 22. (1) Earth Stations in the Communication-Satellite Service
- ADD **470L** (2) Earth station antennas shall not be employed for transmission at elevation angles less than 3 degrees, measured from the horizontal plane to the central axis of the main lobe, except when agreed to by the administrations concerned or affected.
- ADD **470M** (3) The limit given in **470L** applies in the following frequency bands allocated to transmission by earth stations in the communication-satellite service, shared with equal rights with the fixed or mobile service;
- 4400-4700 Mc/s
- 5850-5925 Mc/s (Regions 1 and 2)
- 5925-6425 Mc/s
- 7250-7750 Mc/s (for earth stations transmitting to passive satellites in conformity with **392D**)
- 7900-7975 Mc/s
- 7975-8025 Mc/s (for countries mentioned in **392YY**)
- 8025-8400 Mc/s

Power Flux Density Limits

- ADD **470N** § 23. (1) Communication-Satellite Space Stations
- ADD **470O** a) The total power flux density at the earth's surface, produced by an emission from a communication-satellite space station, or reflected from a passive communica-

- tion satellite, where wide-deviation frequency (or phase) modulation is used, shall in no case exceed -130 dBW/m^2 for all angles of arrival. In addition, such signals shall if necessary be continuously modulated by a suitable waveform, so that the power flux density shall in no case exceed -149 dBW/m^2 in any 4 kc/s band for all angles of arrival.
- ADD 470P b) The power flux density at the earth's surface, produced by an emission from a communication-satellite space station, or reflected from a passive communication satellite, where modulation other than wide-deviation frequency (or phase) modulation is used, shall in no case exceed -152 dBW/m^2 in any 4 kc/s band for all angles of arrival.
- ADD 470Q c) The limits given in 470O and 470P apply in the following frequency bands allocated to transmission by space stations in the communication-satellite service, shared with equal rights with the fixed or mobile services;
- 3400-3500 Mc/s (Region 1)
 - 3500-3700 Mc/s (Regions 1 and 2)
 - 3700-4200 Mc/s
 - 7250-7300 Mc/s (for the countries mentioned in 392Y)
 - 7300-7750 Mc/s
- ADD 470R (2) Meteorological-Satellite Space Stations ¹
- ADD 470S a) The power flux density at the earth's surface, produced by an emission from a meteorological-satellite space station, where wide-deviation frequency (or phase) modulation is used, shall in no case exceed -130 dBW/m^2 for all angles of arrival. In addition, such signals shall if necessary be continuously modulated by a suitable waveform, so that the power flux density shall in no case exceed -149 dBW/m^2 in any 4 kc/s band for all angles of arrival.

¹ In view of the absence of any C.C.I.R. Recommendations relative to sharing between the meteorological-satellite service and other services, power flux density levels applicable to communication-satellite space stations are extended to meteorological-satellite space stations.

DRAFT RESOLUTION No. ~~1~~**Relating to Space Vehicles in Distress and Emergency**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering

- a) that the number of flights by manned space vehicles or satellites is likely to increase;
- b) that as a result the possibility of such vehicles being forced down in emergency anywhere on the earth's surface cannot be ignored;
- c) that in such circumstances the search for and rescue of the occupants and recovery of the vehicles present problems very similar to those encountered by aircraft and ships in distress and emergency;
- d) that the frequency of 20,007 kc/s has been selected by the Conference for search and rescue to augment those already designated in the Radio Regulations for distress, emergency and survival craft;

notes

that although the relevant Radio Regulations for the mobile services concerning distress and emergency contain no specific reference to space vehicles or their occupants;

resolves

that until such time as the Radio Regulations may be revised, the appropriate provisions of Chapter VII and VIII concerning distress and emergency be construed to apply equally to spacemen and space vehicles in the circumstances described herein.

RECOMMENDATION No. **43****To the C.C.I.R. relating to the Broadcasting-Satellite Service**

The Extraordinary Administrative Radio Conference (Geneva, 1963),

considering

- a) that the use of satellite transmissions for direct reception by the general public of sound and television broadcasts may be possible in the future;
- b) that the C.C.I.R. is studying the technical feasibility of sound and television broadcasting via satellites, the technically suitable frequency bands for such a service including the possibility of sharing with terrestrial services;

recommends

that the C.C.I.R., expedite its studies and make early recommendations on Question 241 (IV), Geneva, 1963, in particular, regarding those parts of the question relating to the technical feasibility of broadcasting from satellites, the optimum technical characteristics of the systems to be used, what bands would be technically suitable and whether and under what conditions those bands could be shared between the broadcasting-satellite and terrestrial services.

RECOMMENDATION No. 10

The Extraordinary Administrative Radio Conference, Geneva, 1963,*considering*

- a) that man is progressing rapidly in the conquest of outer space, that all nations will benefit, and that this progress depends upon efficient and orderly space communications;
- b) that this Conference, has taken the first steps in the field of development of space radiocommunications in having allocated frequency bands for space radiocommunications and having established technical criteria and frequency registration and notification procedures designed to facilitate the further development of space radiocommunication;

recognizing

- a) that the development of space services will go on in parallel with the development of terrestrial communication systems;
- b) that all members of the Union have an interest in the rational use of frequency bands allocated for space communication services, in the avoidance of harmful interference to space and other services, and in the international regulation of the use of these frequency bands;
- c) that the decisions of the Conference may be subject to increasing refinement and improvement by future Conferences of the Union;
- d) that there will be available additional data relating to space radiocommunications resulting from further experimental and operational experience;

believing

that such refinement and improvement is in the best interests of all Members and Associate Members of the Union if the full benefits of new technology are to be realised;

recommends

- 1) that Members and Associate Members of the Union make available, to the appropriate permanent organs of the Union, pertinent

data resulting from experimental and operational experience relating to space radiocommunications, as well as their proposals concerning space radiocommunications;

2) that the Administrative Council of the Union should review annually the progress in space radiocommunications made by Administrations, and the available reports and recommendations of the permanent organs of the Union with respect thereto;

and further recommends

3) that until revised by a future conference, including the conference mentioned in 4) below, notification and registration of frequency assignments to space services shall be effected in accordance with the procedures adopted by this present Conference;

4) that the Administrative Council of the Union should, in the light of its annual review, and at a date which it will determine, recommend to Administrations the convening of an Extraordinary Administrative Conference to work out further agreements for the international regulation of the use of radio frequency bands allocated for space radiocommunications by this present Conference.

RECOMMENDATION No. **Calculation of Co-ordination Distance for Earth Stations**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering

a) that Article 9A requires frequency assignments for earth stations in certain shared frequency bands to be co-ordinated with fixed or mobile services, in order to avoid mutual harmful interference;

b) that, in any direction from an earth station there is a distance beyond which the possibility that the use of a given transmitting frequency at that earth station will cause harmful interference to reception to a station in the fixed or mobile services may be regarded as negligible: this is the co-ordination distance in that direction;

c) that, in any direction from an earth station there is a distance beyond which the possibility that the use of a given transmitting frequency at a fixed or mobile station will cause harmful interference to reception at that earth station may be regarded as negligible: this is the co-ordination distance in that direction;

d) that a simple procedure is required to enable administrations to calculate the co-ordination distance from an earth station according to its location and characteristics;

noting

that the Recommendations and Reports of the C.C.I.R. Xth Plenary Assembly provide a technical basis for the calculation of co-ordination distance which is provisional and subject to further study by the C.C.I.R.;

recommends

that the procedure set out in the Annex to this Recommendation should be used to determine co-ordination distances until such time as the C.C.I.R. may recommend a procedure to be used for this purpose;

and invites the C.C.I. R.

to study the question of co-ordination distance and as soon as improved calculation methods and more accurate propagation data become available to make suitable Recommendations to replace the procedure set out in the Annex to this Recommendation.

ANNEX TO RECOMMENDATION No.

**Procedure for Calculating Co-ordination Distance between
Earth Stations and Terrestrial Stations sharing
the Same Frequency Band in the Range 1-10 Gc/s****1. Objectives**

Co-ordination is required when earth stations and terrestrial stations operate in shared frequency bands with equal rights. In specific circumstances, co-ordination may involve more than two administrations depending upon the siting of the stations and the co-ordination distances involved. The co-ordination area around an earth station is arrived at by ascertaining the co-ordination distance measured in the various azimuths from that station.

For the calculation of co-ordination distance three separate cases must be considered:

- a)* interference from an earth station transmitter to terrestrial station receivers;
- b)* interference from terrestrial station transmitters to a communication-satellite or meteorological-satellite earth station receiver;
- c)* interference from terrestrial station transmitters to a space research earth station receiver.

In the case of *a)* it has been assumed, for the purpose of calculation, that the terrestrial receiving station is a line-of-sight radio-relay station designed according to C.C.I.R. Recommendations. In the case of *b)* it has been assumed, for both applications, that the earth station forms a part of a communication-satellite system. Further, in order to ensure that a safe value of co-ordination distance shall be obtained, it has been assumed that in all cases the receiving station antenna is of typically high gain. For the same reason, in all cases, appropriately low-noise sensitive receivers are assumed.

2. Minimum Permissible Basic Transmission Loss (L_b)

The general formula for calculating the required minimum permissible basic transmission loss is:

$$L_b = (P_t + G_t) - F_s - (P_r - G_r) \quad (1)$$

where P_t is the power in dbW supplied by the interfering transmitter to the transmission line input,

G_t is the isotropic gain in db of the transmitting antenna of the interfering station effective in the direction of the receiving station liable to interference, including the effect of all feeder losses, and losses due to any artificial screens,

F_s is the earth station site-shielding factor in db, (see Section 5),

P_r is the maximum permissible interference level in dbW at the receiver input of the receiving station,

G_r is the isotropic gain in db of the antenna of the receiving station effective in the direction of the interfering transmitter, less feeder loss and polarization discrimination if applicable.

When considering interference to telephone transmission systems, particularly in the case of systems using frequency modulation, it is convenient to operate in terms of the power densities in any 4 kc/s bandwidth. Therefore, in the case of interference from an earth station transmitter to terrestrial radio-relay systems, P_t is taken as the maximum power density in any 4 kc/s bandwidth supplied by the earth station transmitter to the transmission line input, and similarly P_r is the maximum permissible power density for any 4 kc/s bandwidth at the receiver input.

When considering interference from a terrestrial transmitter to an earth station receiver, it is more convenient to consider P_t and P_r of (1) as total powers rather than power densities.

It is assumed in calculating co-ordination distances for cases *a)* and *b)* of Section 1 that the communication-satellite system is employing carrier energy dispersal techniques when lightly loaded.

3. Calculation of Minimum Permissible Basic Transmission Loss

In any direction from the transmitting station, the required minimum value of permissible basic transmission loss (L_n) is obtained from the following Tables 1, 2 and 3.

TABLE 1

**Interference from a Communication-Satellite Earth Station Transmitter
to a Terrestrial Line-of-Sight Radio-Relay System**

	Percentage of time	Values to be assumed for co-ordination
Permissible total interference in any telephone channel	0.01 %	-40 dbm0
Permissible interference from one earth station to one radio-relay system receiver, assuming four such non-simultaneous interference entries	0.0025 %	-40 dbm0
Receiver transfer characteristic assuming carrier energy dispersion to distribute interference uniformly over at least 300 kc/s bandwidth	—	1 db * (light loading worst case)
Hence, maximum value of unwanted-to-wanted signal ratio at the receiver input	0.0025 %	-39 db
Minimum level of wanted signal at receiver input	—	-74 dbW *
Hence, permissible level of unwanted signal at receiver input, assuming carrier energy dispersion as above	0.0025 %	-113 dbW
Factor for conversion of interference bandwidth to 4 kc/s from 300 kc/s	—	-19 db
Hence, permissible level of unwanted signal at receiver input in any 4 kc/s bandwidth	0.0025 %	-132 dbW (per 4 kc/s)
Isotropic gain of radio-relay station antenna less feeder losses (Note 1)	—	42 db

* These figures are taken from an example of a 960-channel line-of-sight radio-relay system but the maximum permissible unwanted signal level of -113 dbW is almost independent of the number of channels carried.

	Percentage of time	Values to be assumed for co-ordination
Isotropic gain of earth station antenna effective in the horizontal plane less feeder and polarization losses (Note 2)	2.5%	G_{earth} db
Power supplied by earth station transmitter to the transmission line input per 4 kc/s bandwidth	—	P_{earth} dbW
Earth station site-shielding factor if applicable	—	F_s db
Minimum permissible basic transmission loss, L_b (in decibels)	0.1%	$P_{\text{earth}} + G_{\text{earth}} - F_s + 174$

Note 1 The value of 42 db, given in Table 1, should be used unless it is known that the terrestrial station receiving antenna gain is greater than 42 db, in which case the higher value may be used.

Note 2 For simplicity, the appropriate value of G_{earth} to be used shall be the maximum value obtained in the horizontal plane in the pertinent azimuthal direction rather than the value exceeded for 2.5% of the time. However, when site-shielding is allowed, the value to be used shall be that maximum value obtaining at the angle of elevation of the screening obstacle.

TABLE 2

**Interference from a Terrestrial Line-of-Sight Radio-Relay
Transmitter to a Communication-Satellite Earth Station Receiver**

	Percentage of time	Values to be assumed for co-ordination
Permissible total interference in any telephone channel	0.02%	-38 dbm0
Permissible interference from one terrestrial station to one earth station, assuming four such non-simultaneous interference entries	0.005%	-38 dbm0
Receiver transfer characteristic assuming carrier energy dispersion of the wanted signal	—	10 db *
Hence, maximum value of unwanted-to-wanted signal ratio at the receiver input	0.005%	-28 db
Minimum level of wanted signal at receiver input	—	-117 dbW *
Hence, permissible level of unwanted signal at receiver input	0.005%	-145 dbW
Isotropic gain of earth station antenna effective in the horizontal plane (Note 1)	5%	G_{earth} db
Isotropic gain of radio-relay station antenna less feeder loss	—	$G_{terr.}$ db
Earth station site-shielding factor if applicable	—	F_s db
Power supplied by terrestrial station transmitter to the transmission line input	—	$P_{terr.}$ dbW
Minimum permissible basic transmission loss, L_b , (in decibels) (Note 2)	0.1%	$P_{terr.} + G_{terr.} - F_s + G_{earth} + 145$

* These figures are taken from an example of a 1200-channel communication-satellite system but the maximum permissible unwanted signal level of -145 dbW is almost independent of the number of channels carried.

Note 1 For simplicity, the appropriate value of G_{earth} to be used shall be that maximum value obtained in the horizontal plane in the pertinent azimuthal direction rather than the value exceeded for 5% of the time. However, when site-shielding is allowed, the value to be used shall be that maximum value obtaining at the angle of elevation of the screening obstacle.

Note 2 The application of co-ordination procedures for frequency sharing of this type involves the preparation, by the administration desiring to set up an earth station, of equal-power contours of co-ordination distance in the various azimuthal directions for several discrete levels of radiated power from the terrestrial station.

TABLE 3

**Interference from a Terrestrial Transmitter to a
Space Research Earth Station Receiver**

	Percentage of time	Values to be assumed for co-ordination
Permissible interference in any bandwidth of 1 c/s at receiver input (Note 1)	0.1%	-220 dbW
Permissible interference in any bandwidth of 10 kc/s at receiver input (Note 2)	0.1%	-180 dbW
Isotropic gain of earth station antenna effective in the horizontal plane in the pertinent direction (Note 3)	10%	G_{earth} db
Isotropic gain of radio-relay station antenna less feeder losses	—	$G_{\text{terr.}}$ db
Earth station site-shielding-factor if applicable	—	F_s db
Power supplied by terrestrial station transmitter to the transmission line input	—	$P_{\text{terr.}}$ dbW
Minimum permissible basic transmission loss, L_b , in decibels	1.0%	$P_{\text{terr.}} + G_{\text{terr.}}$ $- F_s + G_{\text{earth}}$ $+ 180$
Factor to convert from use of 1.0% to 0.1% transmission loss curves (Note 4)	—	15 db
Minimum permissible basic transmission loss, L_b , in decibels	0.1%	$P_{\text{terr.}} + G_{\text{terr.}}$ $- F_s + G_{\text{earth}}$ $+ 165$

Note 1 A comparison of the C.C.I.R. criteria for near-earth, deep space and manned space research indicates that the permissible levels of interference at the receiver input are substantially the same.

Note 2 Measurements on terrestrial station emissions indicate that the minimum occupied bandwidth under no-load conditions is of the order of at least 10 kc/s.

Note 3 In order to meet the 0.1% time criteria for which the -220 dbW per cycle per second is permitted, the combination of earth station antenna gain, G_{earth} , in the horizontal plane and pertinent azimuthal direction, exceeded for 10% of the time and the basic transmission loss, L_b , exceeded for 1.0% of the time, is taken as an appropriate combination.

Note 4 From available propagation curves it is noted that $L_b(1\%) - L_b(0.1\%)$ over a range of typical co-ordination distances is about 10 db overland (Zone A) and 15 db oversea (Zones B and C). The conversion ratio of 15 db was selected to permit the use of the 0.1% transmission loss curves employed in connection with Tables 1 and 2.

4. Summary

The formulae giving the required basic transmission loss in db (L_b) not to be exceeded for 0.1% of the time are summarised below:

- (1) For co-ordination between an earth transmitting station and terrestrial receiving stations:

$$L_b = P_{\text{earth}} + G_{\text{earth}}^1 - F_s + 174$$

- (2) For co-ordination between terrestrial transmitting stations and a communication-satellite or meteorological-satellite earth receiving station:

$$L_b = P_{\text{terr.}} + G_{\text{terr.}} - F_s + G_{\text{earth}}^2 + 145$$

- (3) For co-ordination between terrestrial transmitting stations and a space research earth receiving station:

$$L_b = P_{\text{terr.}} + G_{\text{terr.}} - F_s + G_{\text{earth}}^3 + 165$$

¹ See Note 2 of Table 1.

² See Note 1 of Table 2.

³ See Note 3 of Table 3.

5. Site-Shielding Factor

In cases where earth stations are sited below the level of surrounding or nearby terrain it is necessary to adopt the following procedure. Thus, if, in a given azimuthal direction, an obstacle provides an angle of elevation, θ , to the earth station then—for that azimuthal direction—it is necessary, in calculating co-ordination distance, to employ the maximum earth station antenna gain at the angle of elevation, θ , rather than the maximum gain along the horizontal.

As previously discussed, where site-shielding applies, the value of required basic transmission loss, L_b , may be reduced by a site-shielding factor, F_s , expressed in decibels. The following values of site-shielding factor shall apply when the obstacle limiting the angle of elevation is situated more than 5 kilometres away from the earth station.

Minimum angle of elevation, θ , of obstacle, as seen from earth station	Allowable value of site-shielding factor, F_s , in decibels
below 1°	0
between 1° and 2°	5
between 2° and 3°	8
between 3° and 4°	11
between 4° and 5°	13
More than 5°	15

In the case of nearer obstacles the values of site-shielding factor which apply may be obtained by multiplying the tabulated values by the fraction $d/5$, where d is the distance from the earth station to the obstacle in kilometres.

The values of site-shielding factor quoted here shall be used with caution where terrestrial stations may be located, within co-ordination distance, at sites which are substantially above the horizontal plane passing through the earth station.

6. Equivalent Basic Transmission Loss at 4 Gc/s (L_b')

The propagation data considered in the next paragraph relates to the frequency of 4 Gc/s and it is therefore in general necessary to convert the minimum permissible basic transmission loss (L_b) into an equivalent loss at 4 Gc/s (L_b') before using these data to find the co-ordination distance. The equivalent loss in decibels at 4 Gc/s is given by:

$$L_b' = L_b + 13 - 21.6 \log_{10} f$$

where f is the assigned frequency in Gc/s. This relationship is shown in Fig. 1.

7. World Radio-Climatic Conditions and Propagation Data

The propagation curves of Figure 2 are labelled Zone A, Zone B, and Zone C, and correspond to the various basic radio-climatic regions of the world as follows:—

Zone A: Land

Zone B: Sea, at latitudes greater than
23.5° N and 23.5° S.

Zone C: Sea, at latitudes between
23.5° N and 23.5° S inclusive.

In any direction from the earth station the required co-ordination distance is found as follows:

- a) if the equivalent basic transmission loss L_b' is such that the co-ordination distance in the given direction lies wholly within one of the zones, the co-ordination distance may be obtained directly from Figure 2 using the appropriate curve;
- b) if the co-ordination distance lies partly in one zone and partly in another, the curves for mixed paths, Figures 3, 4 and 5 should be used. These curves show the loss L_b' as a function of the path length in each of the two-zones separately. Thus, if the path length in one zone and the required loss are known, the path length in the other zone can be determined. The path length in the first zone is the known distance from the earth station to the zone boundary in the direction concerned,

hence the further length in the second zone can be found. The total path length, or co-ordination distance, is the sum of these two paths lengths. Figures 3, 4 and 5 cover all cases of mixed paths in two zones as follows:

Fig. 3: Zones A and B,

Fig. 4: Zones A and C,

Fig. 5: Zones B and C.

An example of the co-ordination distance calculation for a mixed path is worked out in the Appendix

- c) In certain geographical areas where propagation losses are known to be less than the values given by the pertinent zonal propagation curves, co-ordination distances should be calculated on the basis of the known propagation data.

APPENDIX

Example of Co-ordination Distance Calculation for a Mixed Path

The procedure to be followed in the case of a mixed path is illustrated by the following example, in which it is assumed that a basic transmission loss of 190 db is required to avoid interference from an earth station to terrestrial services in a given direction.

As shown in Fig. 6A, the earth station is situated 50 km from the coast and there is an oversea path of 150 km before the coastline of a neighbouring country is reached. It is required to find the co-ordination distance from the earth station in the given direction using the mixed paths propagation chart represented by Fig. 6B. The procedure is as follows:

1. Starting from the origin, the distance of 50 km from the earth station to the coastline is set off along the A axis of the chart as indicated by the point A_1 .
2. The oversea path length of 150 km is then set off parallel to the B axis of the chart as indicated by the point B_1 .
3. The further overland distance required is then measured parallel to the A axis from the point B_1 to the point of intersection with the 190 db curve, as indicated by X. This distance is found to be 90 km.
4. The co-ordination distance is the sum of the A and B co-ordinates of the point X and is equal to $50 + 150 + 90 = 290$ km.

FIG. 1

FACTEUR DE CORRECTION A AJOUTER A L'AFFAIBLISSEMENT DE TRANSMISSION REQUIS L_b A LA FREQUENCE f POUR OBTENIR L'AFFAIBLISSEMENT EQUIVALENT L'_b A LA FREQUENCE 4 GHz

CORRECTION FACTOR TO BE ADDED TO THE REQUIRED LOSS L_b AT FREQUENCY f TO OBTAIN THE EQUIVALENT LOSS L'_b AT 4 Gc/s

FACTOR DE CORRECCIÓN QUE HA DE AÑADIRSE A LA PÉRDIDA REQUERIDA L_b EN LA FRECUENCIA PARA OBTENER LA PÉRDIDA EQUIVALENTE L'_b EN 4 Gc/s

$L'_b = L_b +$ facteur de correction. $L'_b = L_b +$ correction factor. $L'_b = L_b +$ factor de corrección

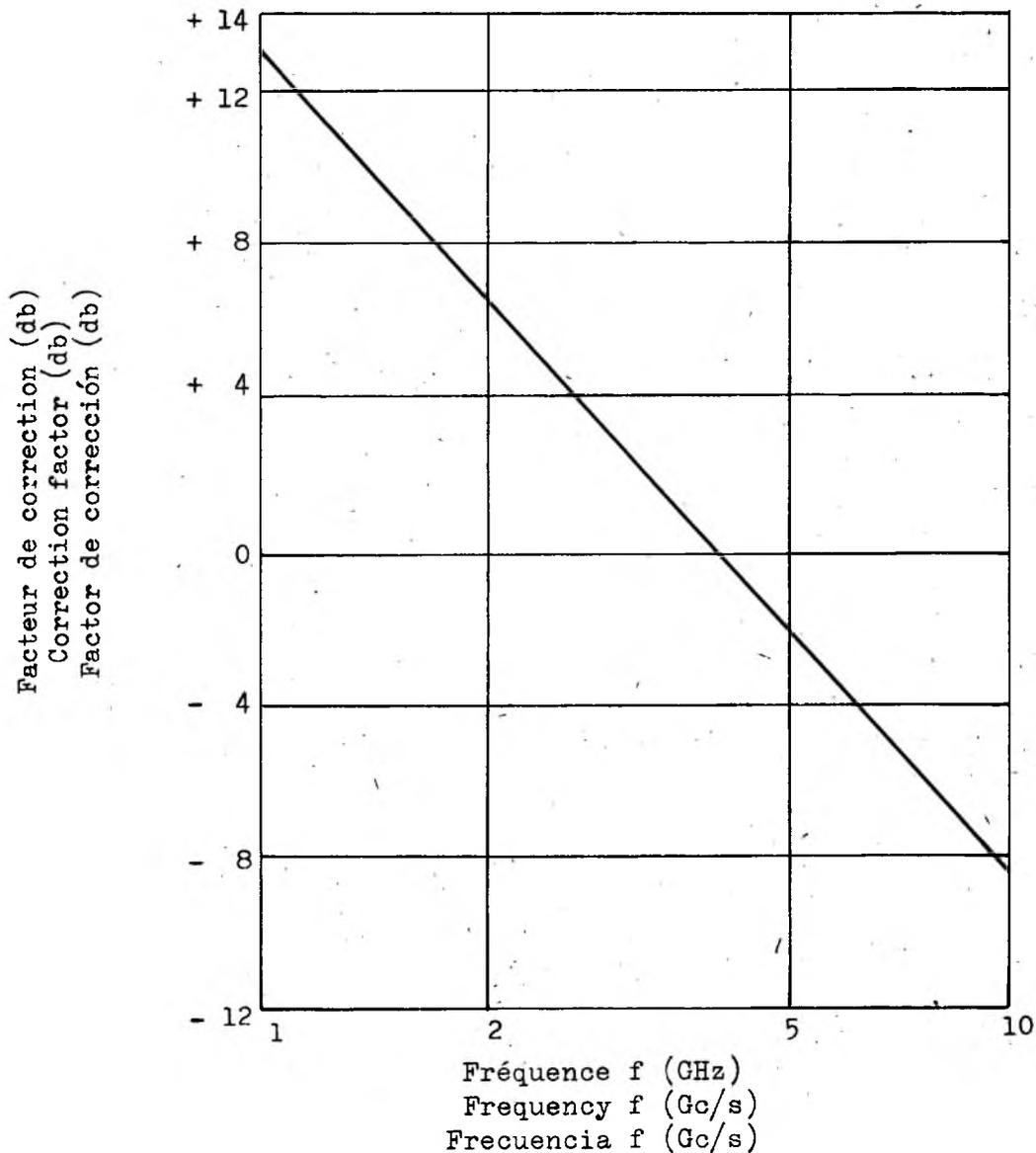


FIG. 2

COURBES DE PROPAGATION TROPOSPHERIQUE SIMPLIFIEES POUR LE CALCUL DE LA DISTANCE DE COORDINATION. AFFAIBLISSEMENT DE TRANSMISSION DE REFERENCE NON DEPASSE PENDANT 0,1 % DU TEMPS, A LA FREQUENCE 4 GHz

SIMPLIFIED TROPOSPHERIC PROPAGATION CURVES FOR CALCULATION OF CO-ORDINATION DISTANCE. BASIC TRANSMISSION LOSS NOT EXCEEDED FOR 0.1 % OF THE TIME AT 4 Gc/s

CURVAS SIMPLIFICADAS DE PROPAGACION TROPOSFERICA PARA EL CALCULO DE LA DISTANCIA DE COORDINACION. PERDIDA DE TRANSMISION DE REFERENCIA NO EXCEDIDA DURANTE EL 0,1 % DEL TIEMPO EN 4 Gc/s

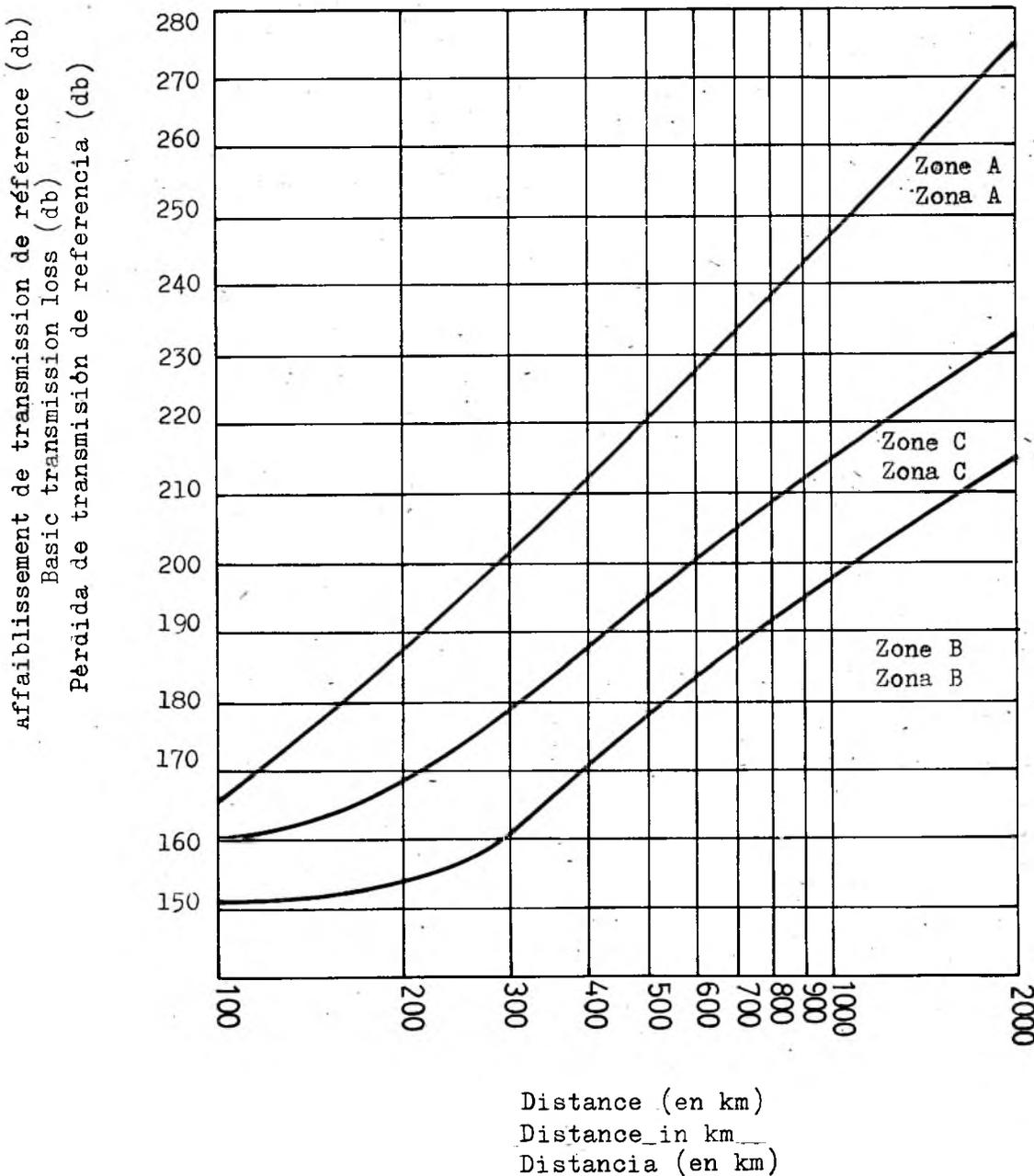


FIG. 3

DIAGRAMME POUR LE CALCUL DE LA DISTANCE DE COORDINATION - TRAJETS MIXTES (ZONES A ET B)

CHART FOR CO-ORDINATION DISTANCE CALCULATIONS - MIXED PATHS IN ZONES A & B

GRÁFICO PARA CALCULAR LA DISTANCIA DE COORDINACIÓN - TRAYECTOS MIXTOS EN LAS ZONAS A Y B

Affaiblissement de transmission de référence non dépassé pendant 0,1 % du temps à la fréquence 4 GHz, L_b' (db)

Basic transmission loss not exceeded for 0,1 % of the time at 4 Gc/s L_b' (db)

Pérdida de transmisión de referencia no excedida durante 0,1 % del tiempo para 4 Gc/s, L_b' (db)

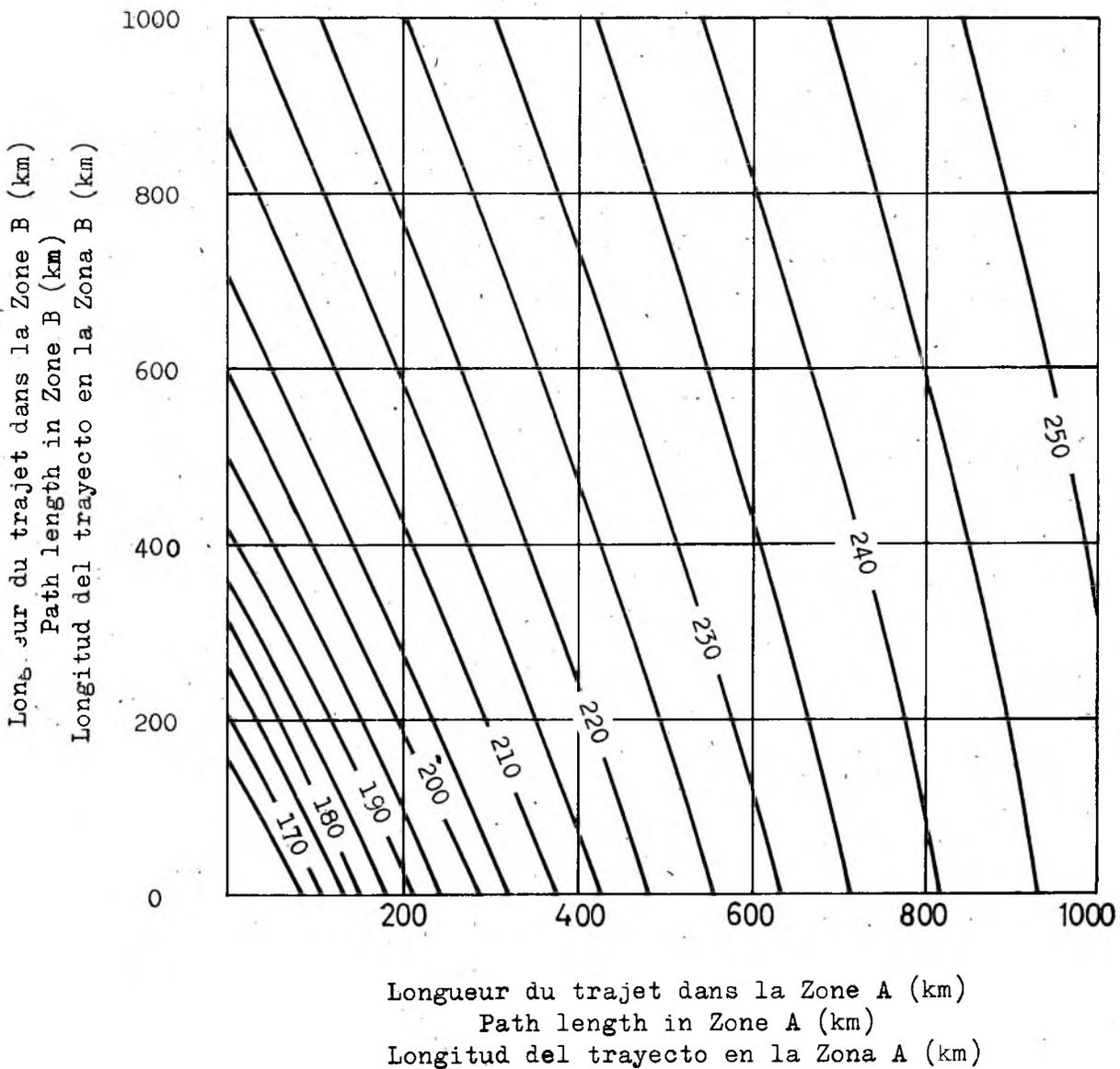


FIG. 4

DIAGRAMME POUR LE CALCUL DE LA DISTANCE DE COORDINATION
TRAJETS MIXTES (ZONES A ET C)
CHART FOR CO-ORDINATION DISTANCE CALCULATIONS
MIXED PATHS IN ZONES A & C
GRÁFICO PARA CALCULAR LA DISTANCIA DE COORDINACIÓN
TRAYECTOS MIXTOS EN LAS ZONAS A Y C

Affaiblissement de transmission de référence non dépassé pendant 0,1 % du temps à la fréquence 4 GHz, L_b' (db)

Basic transmission loss not exceeded for 0,1 % of the time at 4 Gc/s L_b' (db)

Pérdida de transmisión de referencia no excedida durante 0,1 % del tiempo para 4 Gc/s, L_b' (db)

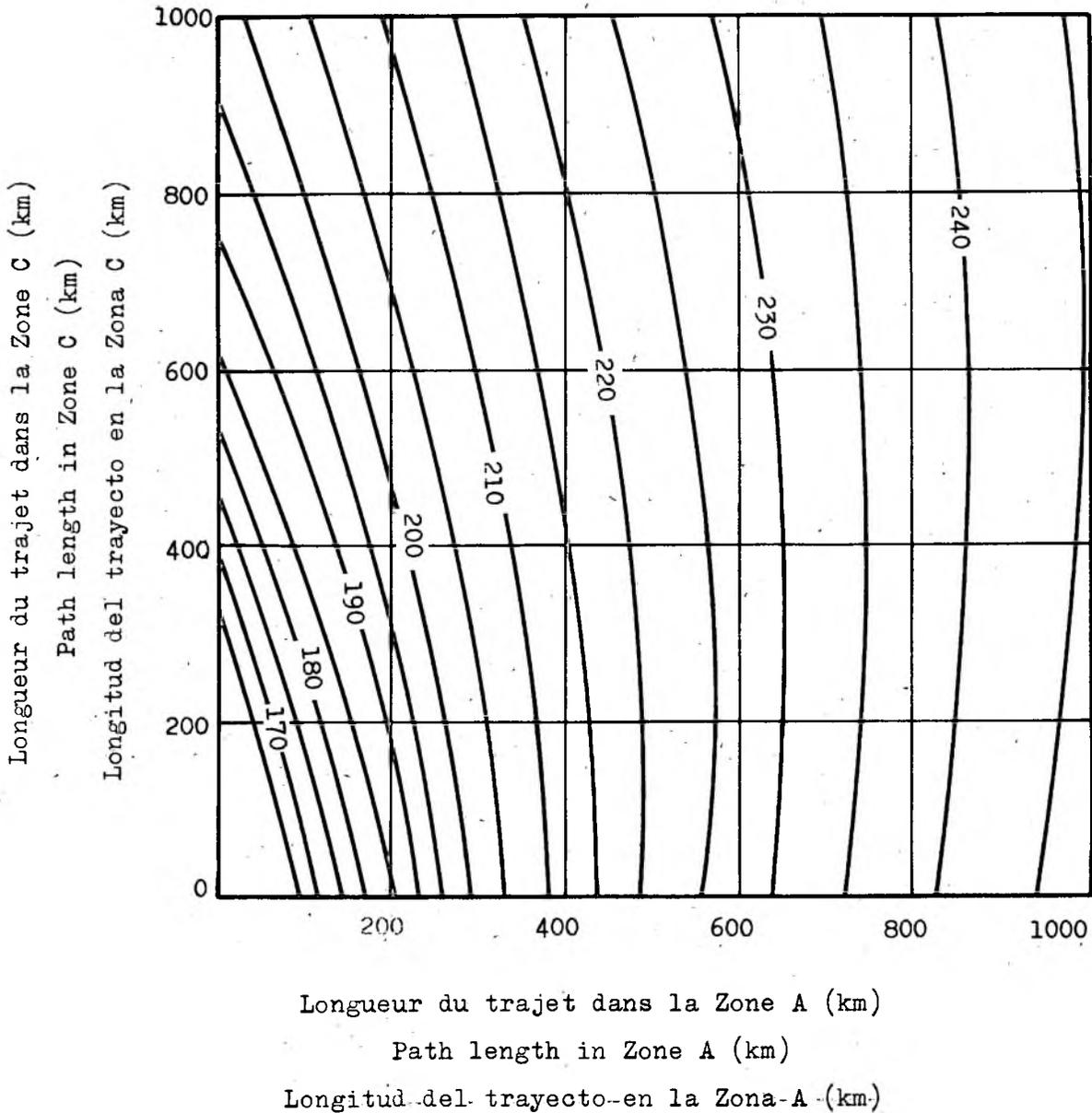


FIG. 5

DIAGRAMME POUR LE CALCUL DE LA DISTANCE DE COORDINATION
TRAJETS MIXTES (ZONES B ET C)

CHART FOR CO-ORDINATION DISTANCE CALCULATIONS
MIXED PATHS IN ZONES B & C

GRÁFICO PARA CALCULAR LA DISTANCIA DE COORDINACION
TRAYECTOS MIXTOS EN LAS ZONAS B Y C

Affaiblissement de transmission de référence non dépassé pendant 0,1 % du temps à la fréquence 4 GHz, L_b' (db)

Basic transmission loss not exceeded for 0,1 % of the time at 4 Gc/s L_b' (db)

Pérdida de transmisión de referencia no excedida durante 0,1 % del tiempo para 4 Go/s, L_b' (db)

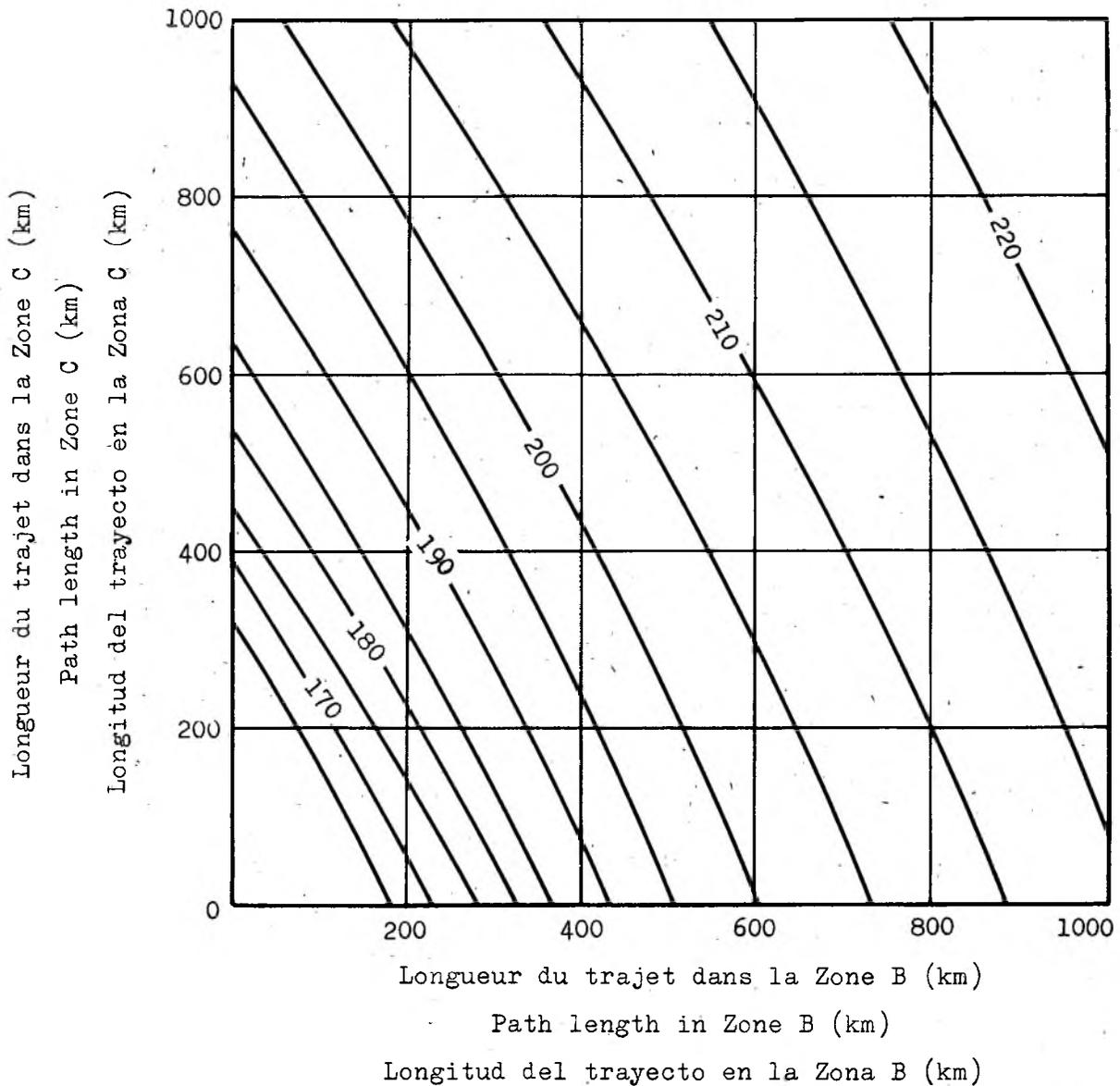
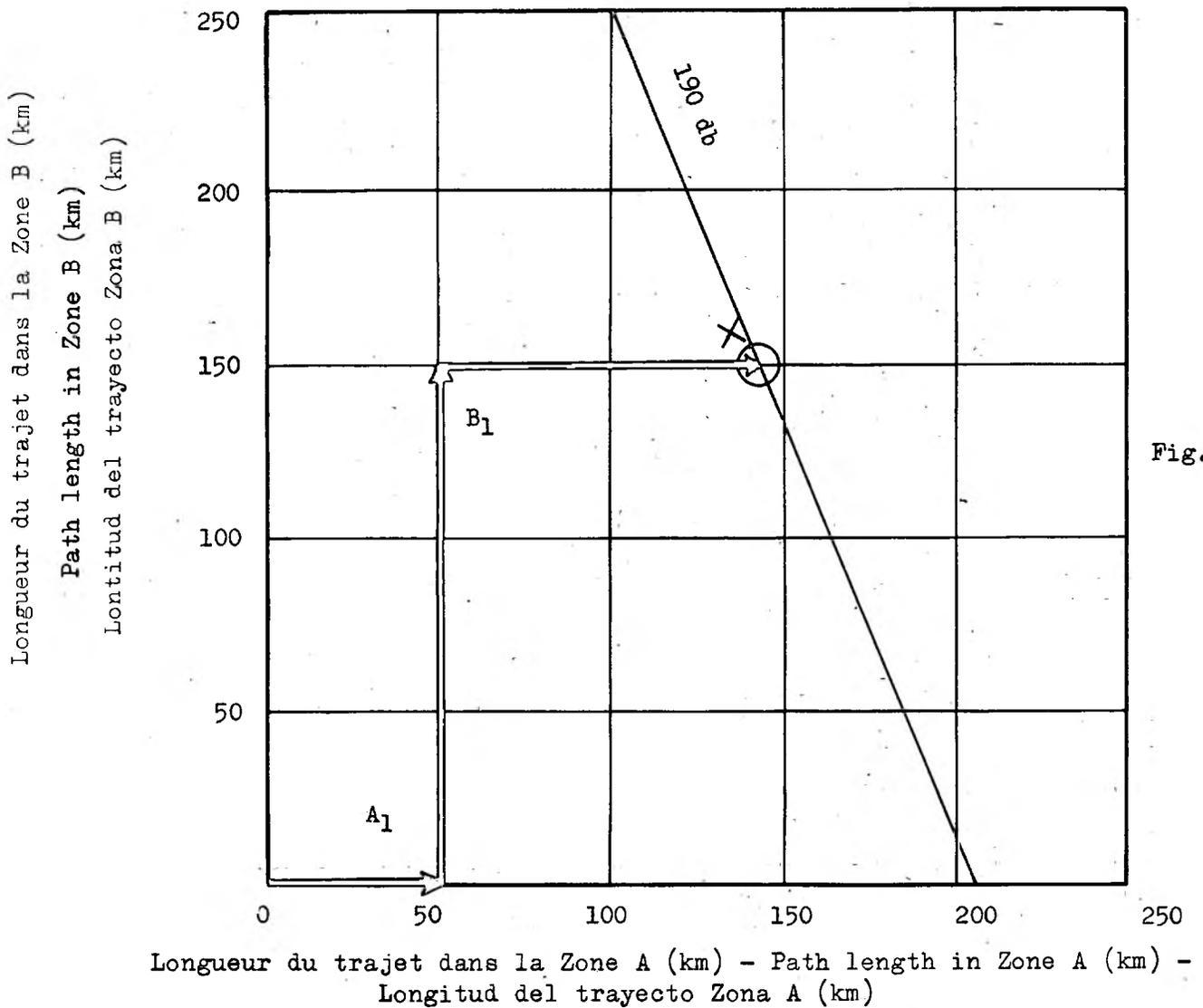
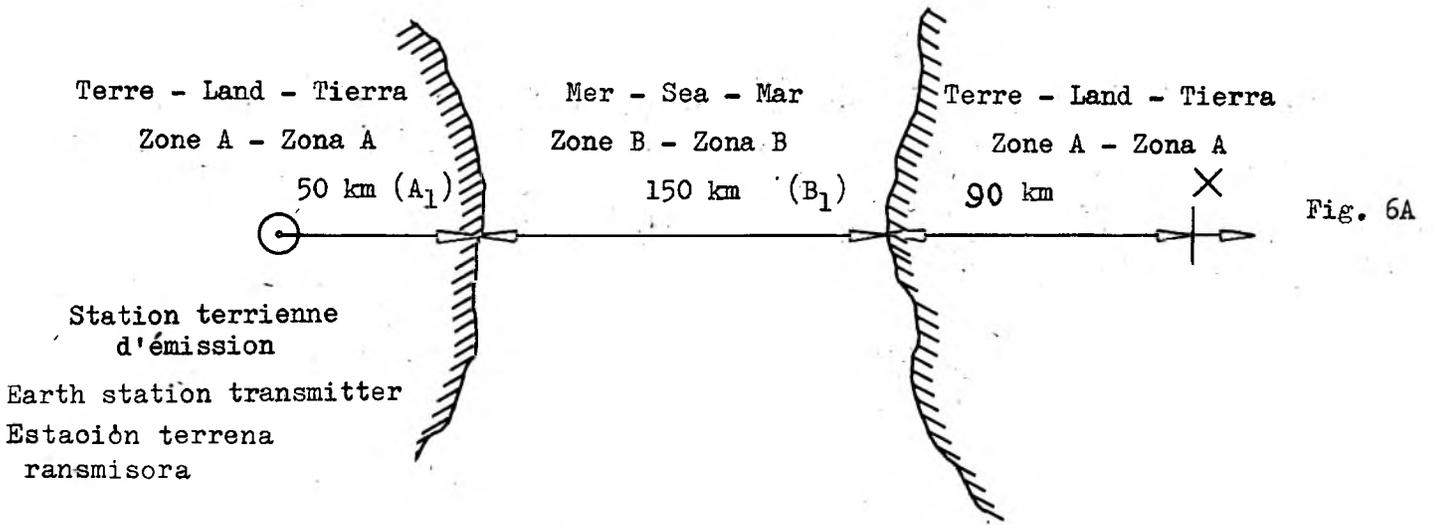


FIG. 6

EXEMPLE DE CALCUL DE LA DISTANCE DE COORDINATION DANS LE CAS D'UN TRAJET MIXTE

EXAMPLE OF CO-ORDINATION DISTANCE CALCULATION FOR MIXED PATHS

EJEMPLO DE CALCULO DE LA DISTANCIA DE COORDINACIÓN PARA TRAYECTOS MIXTOS



RECOMMENDATION No. 39

**Calculation of Probability of Interference between Stations
within Co-ordination Distance**

The Extraordinary Administrative Radiocommunication Conference, Geneva, 1963,

considering

- a) that the technical basis for sharing the frequency bands between terrestrial services and space services, is based *inter alia* on geographical separation between the stations of these two types of services;
- b) that the Final Acts of this Conference refer to the process of co-ordination between administrations, the later stages of which will involve the calculation of the probability of interference between stations of the two services;
- c) that such calculations will require a knowledge of the system parameters of the terrestrial and space services involved and a knowledge of the propagation characteristics in the appropriate geographical areas;
- d) that a concise presentation in readily usable form of the appropriate values of the factors governing interference between a variety of typical systems in the terrestrial and space services would be helpful in the implementation of the co-ordination procedures laid down in the Final Acts of this Conference;

noting

- (i) that C.C.I.R., through its various Study Groups, particularly Study Groups Nos. IV, V and IX, is engaged in the active study of the various parameters which influence the sharing of frequency bands by the terrestrial services and the space services;
- (ii) that, nevertheless, the data available at present from the C.C.I.R. does not make it possible for this Conference to lay down sufficiently precise and detailed methods for calculating in all cases the probability of harmful interference between stations of the two services;

invites administrations

during the period preceding the XIth Plenary Assembly of the C.C.I.R. to submit contributions concerning:

1. the essential steps to be taken in the calculation of the probability of interference between stations of the two services;
2. the values of those factors which govern interference between the stations of typical terrestrial and space systems;

and invites the C.C.I.R.

during the XIth Plenary Assembly, and in the light of contributions submitted under 1 and 2 to decide the most appropriate form, for example a separate manual, in which the material adopted should be published.

RECOMMENDATION No. **Relating to frequency bands shared between Space and Terrestrial Services**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

recognizing

a) the value to the Conference of the material contained in Document No. 1 (results of C.C.I.R. studies relating to space telecommunications concluded at its Xth Plenary Assembly);

b) that further studies on a wide range of problems dealing with space communications form the subject of C.C.I.R. Questions and Study Programmes approved by the Xth Plenary Assembly;

considering however

a) that certain of the C.C.I.R. Recommendations, listed below, are provisional and call for further work and study before they can become definite:

Recommendation 355 “ ACTIVE COMMUNICATION-SATELLITE SYSTEMS
—Feasibility of sharing frequency bands with
terrestrial radio services.”

Recommendation 356 “ COMMUNICATION-SATELLITE SYSTEMS SHARING
THE SAME FREQUENCY BANDS AS LINE-OF-SIGHT
RADIO-RELAY SYSTEMS—Maximum allowable
values of interference in a telephone channel
of a communication-satellite system.”

Recommendation 357 “ COMMUNICATION-SATELLITE SYSTEMS SHARING
FREQUENCY BANDS WITH LINE-OF-SIGHT RADIO-
RELAY SYSTEMS—Maximum allowable values

of interference in a telephone channel of a radio relay system.”

Recommendation 358

“ COMMUNICATION-SATELLITE SYSTEMS SHARING THE SAME FREQUENCY BANDS AS LINE-OF-SIGHT RADIO-RELAY SYSTEMS—Maximum allowable values of power flux density at the surface of the Earth produced by communication satellites.”

Recommendation 406

“ LINE-OF-SIGHT RADIO-RELAY SYSTEMS SHARING THE SAME FREQUENCY BANDS AS THE SATELLITE RECEIVERS OF ACTIVE EARTH-SATELLITE COMMUNICATION SYSTEMS— Maximum effective radiated powers of line-of-sight radio-relay system transmitters.”

b) that as a result of the deliberations of this Conference, particularly in relation to the provisions of Article 7, Sections VII, VIII and IX, and to the Annex to Recommendation [Document No. 157], further information is required in reply to the following Questions and Study Programmes already set for study by the C.C.I.R.:

Question 235 (IV)

“ TECHNICAL CHARACTERISTICS OF COMMUNICATION-SATELLITE SYSTEMS ”

under Decides 4:

Particularly,

- a)* the need for, and application of, maximum limits of power to earth stations and terrestrial stations in shared bands (cf. Regulations 470B and 470G),
- b)* the need for, and application of, escalation clauses on such power limits to permit the use

- of higher powers in certain cases, when stations are situated at substantial distances from the boundary of neighbouring administrations (cf. Regulation **470H**);
- under Decides 5: Particularly, as it may affect the co-ordination of frequency assignments for earth stations (cf. Articles 9 and 9A);
- Study Programme 235A (IV)* “FEASIBILITY OF FREQUENCY SHARING BETWEEN COMMUNICATION-SATELLITE SYSTEMS AND TERRESTRIAL RADIO SERVICES”
- under Decides 1: Particularly, the values which should be allowed for site-shielding factors,
- a) in the application of power limits (cf. Regulation **470G**, footnote 1),
 - b) in the calculation of co-ordination distance (cf. Recommendation [Document No. 157]);
- under Decides 3: Particularly, the minimum angle of elevation which should be employed by earth station antennas, taking account of tropospheric effects (cf. Regulation **470L**);
- under Decides 5: Power flux density limits for communication-satellite space stations in bands shared with terrestrial services (cf. Regulations **470 O**, **470P**);
- under Decides 6: Particularly, as it concerns the selection of sites and frequencies for terrestrial stations and earth stations operating in shared frequency bands (cf. Regulations **470A** and **470E**);

- Question 236 (IV)* "SHARING OF RADIO FREQUENCY BANDS BY LINKS BETWEEN EARTH STATION AND SPACECRAFT"
- under Decides 2: (a) Particularly, sharing between space services and line-of-sight radio-relay systems and
(b) power flux density limits for space stations of the meteorological-satellite service, the radionavigation-satellite service and the space research service, in bands shared with terrestrial services (cf. Regulations 470S and 470T);
- New aspect: Feasibility of sharing frequency bands, and the necessary sharing criteria, in bands below 1 Gc/s and above 10 Gc/s;
- Question 237 (IV)* "TECHNICAL CHARACTERISTICS OF LINKS BETWEEN EARTH STATIONS AND SPACECRAFT"
- under Decides 1, 2, 3 and 4: Particularly the sharing of frequency bands between telecommand, telemetry, tracking or data transmissions of the space services and terrestrial services;
- Question 242 (IV)* "TECHNICAL CHARACTERISTICS OF RADIONAVIGATION-SATELLITE SYSTEMS"
- under Decides 3: Feasibility of sharing frequency bands with other services, and relevant sharing criteria;
- Study Programme 243A (IV)* "RADIO-COMMUNICATION ASPECTS OF METEOROLOGICAL-SATELLITE SYSTEMS"
- under Decides 3: Particularly, feasibility of sharing frequency bands with other services, and relevant sharing criteria;

- Question 244 (IV)* “ RADIOASTRONOMY ”
- under Decides 2.1: Acceptable levels of harmful interference;
- Study Programme 188 (V)* “ INFLUENCE OF IRREGULAR TERRAIN ON TROPOSPHERIC PROPAGATION ”
- Particularly the application of site-shielding factors (cf. Regulation 470G, footnote 1, and Recommendation [Document No. 157]);
- Study Programme 190 (V)* “ TROPOSPHERIC PROPAGATION FACTORS AFFECTING THE SHARING OF THE RADIO-FREQUENCY SPECTRUM BETWEEN RADIO-RELAY SYSTEMS, INCLUDING SPACE AND TERRESTRIAL TELECOMMUNICATIONS SYSTEMS ”
- (See also Study Programmes 185A (V) and 185B (V))
- under Decides 3: Particularly, the provision of more precise data on the minimum values of transmission loss occurring, under various climatic conditions, for very short periods of time (e.g. 1%, 0.1%), for overland, oversea, and mixed land/sea paths;
- under Decides 5: Particularly, the effects of reflections from rain, hail, cloud and aircraft in producing interference at long distances especially when using antennas with extremely narrow beamwidths;
- recommends*
- a)* that all administrations and private operating agencies, through their participation in the work of the C.C.I.R., consider, as a matter of priority, the submission of contributions on these subjects, so that definite Recommendations can be prepared at the Interim Meetings of the relevant Study Group for adoption by the XIth Plenary Assembly of the C.C.I.R.;
- b)* that the C.C.I.R. should study:

1. the permissible interference criteria for the various space and terrestrial services sharing the frequency bands allocated by the E.A.R.C., Geneva, 1963 in order to permit the determination of,
 - 1.1 the co-ordination distance and the probability of interference between stations within that distance;
 - 1.2 the necessary limits of power flux density set up at the earth's surface by space stations;
2. the necessary limitation of spurious emissions and the frequency tolerances to be observed in both the terrestrial and space services in so far as they may affect sharing of frequency bands.

RECOMMENDATION No. 2

**Study of Modulation Methods for Radio-Relay Systems
in Relation to sharing with Communication-Satellite Systems**

The Extraordinary Administrative Radio Conference, Geneva, 1963

considering

- a) that Article 5 of the Radio Regulations permits the sharing of certain frequency bands by the communication-satellite service and the fixed service;
- b) that the sharing criteria to avoid mutual interference between the stations in these two services have been established in Article 7;
- c) that among many factors of over-all efficiency of utilization of frequency bands it seems that the reduction of interference between two services is most important;

noting

- i) that the over-all efficiency of utilization of the frequency bands shared by the two services depends on the methods of modulation used by the systems concerned;
- ii) that studies of the preferred modulation characteristics for communication-satellite systems are to be carried out under Study Programme 235D (IV) of the C.C.I.R.;

recommends

that the C.C.I.R. should study especially, under the general framework of Question 236, modulation methods (such as pulse-code modulation using phase or frequency modulation) in particular for line-of-sight radio-relay systems in relation to sharing with communication-satellite systems.

RECOMMENDATION No. **Relating to the Introduction of the Radionavigation-Satellite Service
in the Bands 149.9-150.05 Mc/s and 399.9-400.05 Mc/s**

The Extraordinary Administrative Radio Conference, Geneva,
1963,

considering

- a) that the frequency bands 149.9-150.05 Mc/s and 399.9-400.05 Mc/s have been allocated to the radionavigation-satellite service on an exclusive world-wide basis;
- b) that many administrations require an extended period of time to re-accomodate existing fixed and mobile operations in other appropriately allocated bands;
- c) that early implementation of the radionavigation-satellite service will be of benefit to all administrations, and particularly in its application to marine navigation;
- d) that interference to users of the radionavigation-satellite service could constitute a hazard to the safety of life and property; and
- e) that the C.C.I.R. is studying the feasibility of sharing frequency bands between the radionavigation-satellite service and terrestrial services but has not yet been able to reach a conclusion in this regard;

recommends

1. that, pending an affirmative determination by the C.C.I.R. that sharing is possible and practicable between stations of the radionavigation-satellite service and the fixed and mobile services; administrations take all possible steps to protect from harmful interference the operations of mobile earth stations using the radionavigation-satellite service;
2. that, in the light of 1) above, administrations be urged to cease operation of their fixed and mobile stations in the bands 149.9-150.05 Mc/s and 399.9-400.05 Mc/s as soon as practicable, with particular emphasis on those stations located in coastal areas.

DRAFT RESOLUTION No. ██████████**The category of the Fixed and Mobile Services
in the band 1525-1540 Mc/s**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering

- a) that the Table of Frequency Allocations, Geneva, 1959, made certain provisions for the fixed and mobile services in the sub-bands 1525-1535 Mc/s and 1535-1540 Mc/s;
- b) that a number of administrations have fixed and mobile services operating in accordance with these provisions;
- c) that the Extraordinary Administrative Radio Conference, Geneva, 1963, has agreed that the space (telemetry) service shall be allocated on a primary basis in the band 1525-1540 Mc/s, and that continuing provision shall be made for fixed and mobile services now operating in this band;
- d) the economic consequences of an early down-grading of the category of the fixed and mobile services are not at present acceptable to the administrations concerned;

resolves

that nevertheless, it is highly desirable that reception of the very weak signals of the space (telemetry) service shall be afforded protection against interference from stations in the fixed and mobile services;

invites

those administrations operating stations in the fixed and mobile services on a primary basis in the band 1525-1540 Mc/s, to consider the possibility of agreeing to modify the category of these services from "primary" to "secondary" at the earliest possible date.

RECOMMENDATION No. **Frequency requirements in the HF bands exclusively
allocated to the Aeronautical Mobile (R) Service**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering,

- a) that for the safety of all aircraft it is essential to provide communications for routine flight of transport aero-space vehicles intended to fly between points on the earth's surface both within and beyond the major part of the atmosphere,
- b) that frequencies in the HF bands (between 2 850 and 22 000 kc/s) are technically suitable for such communications as well as those frequencies above 100 Mc/s now available to the Aeronautical Mobile (R) Service,

recommends

that at the Extraordinary Administrative Radio Conference to be called to revise Appendix 26 in accordance with Resolution No. 13, Geneva, 1959, the necessary measures be taken to provide the high frequency channels required for this purpose.

RECOMMENDATION No. ■■■

**Relating to the use of the Band 136-137 Mc/s
by the Fixed and Mobile Services**

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering

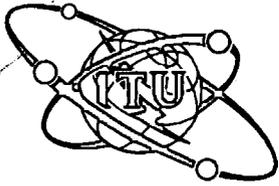
- a) that the Table of Frequency Allocations, Geneva, 1959, made provisions for the fixed and mobile services together with space services in the band 136-137 Mc/s;
- b) that a number of administrations have fixed and mobile services operating in accordance with these provisions;
- c) that the modified Table of Frequency Allocations, Geneva, 1963, makes provision for the space research service on a primary basis in the band 136-137 Mc/s, and makes provision for the continued operation of the fixed and mobile services on a primary basis in this band;
- d) the great importance of affording the space research service protection against interference from stations in the fixed and mobile services, taking into account the very weak signals which may be used in the space research service;

recommends

1. that administrations of all Regions operating, or intending to operate, stations in the fixed and mobile services in the band 136-137 Mc/s take all possible steps to give the required protection to the space research service and to cease the operation of stations of the fixed and mobile services as soon as possible;
2. that administrations notify the International Frequency Registration Board, preferably in advance, of the date when these stations will have ceased operations, and that specific reference should be made to this Recommendation;

and requests the International Frequency Registration Board

to publish this information every six months.



SPACE
RADIOCOMMUNICATION
CONFERENCE

Document No. 208-E
6 November 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

STATEMENT BY THE DELEGATION OF THE

REPUBLIC OF INDONESIA

FINAL PROTOCOL

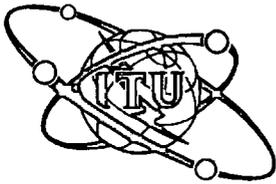
In the opinion of the Delegation of the Republic of Indonesia to the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunications, a country must first accede to the I.T.U. Convention before it has the right to participate in the I.T.U. Conferences. The Indonesian Delegation refers to the representation of Malaysia in which case the Indonesian Delegation could not have any other opinion than that it should be considered as a new country which is assumed to comprise the Member country Malaya (Federation of) and the Associate-Member Singapore-British North Borneo, and to which Article 18 of the Convention applies. As up to the Plenary Session of this Conference on 6 November, 1963, a notification by the Secretary-General concerning the accession of the above-mentioned new country has not been received by the Indonesian Administration, the Delegation of the Republic of Indonesia would like to reserve the right of its Government not to recognize the representation of Malaysia in the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunications, as such recognition would be in contradiction with the said Article 18 of the Convention.

GENEVA, 6 November, 1963.

PRATOMO
Head

of the Delegation of the Republic
of Indonesia





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 209-E
6 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

A G E N D A

FOR THE

7th PLENARY MEETING

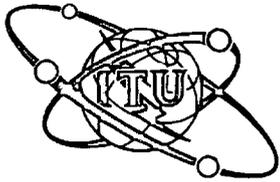
Thursday, 7 November, at 14.30 hours

1. First series of "pink" texts submitted by the Editorial Committee (Document No. 196)
2. Second series of "pink" texts submitted by the Editorial Committee (Document No. 206)
3. Draft Recommendation submitted by the Delegation of the State of Israel (Document No. 166)
4. International Technical Cooperation and Assistance in the field of Space Radiocommunication (Document No. 192)
5. Third series of "pink" texts submitted by the Editorial Committee (Document No. 207)
6. Miscellaneous

Gunnar PEDERSEN

Chairman of the Conference





**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 210-E (Rev.)

7 November, 1963

Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

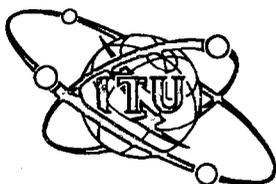
PLENARY MEETING

NOTE BY THE SECRETARIAT

Document No. 210 is withdrawn, the text having been included in the Minutes of the 4th Plenary Meeting.

C. STEAD
Secretary of the Conference





**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 210-E
7 November 1963
Original : Russian

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

STATEMENT BY THE U.S.S.R. DELEGATION
FOR INCLUSION IN THE MINUTES OF THE
FOURTH PLENARY MEETING

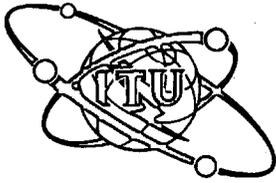
(in connection with the examination of Document No. 176
with reference to Article 9A)

In its Document No. 32 the Telecommunication Administration of the U.S.S.R. pointed out the desirability of adopting an interim procedure for the notification, registration and utilization of frequencies allocated to space communication, bearing in mind that such a procedure could be reviewed and elucidated at the Extraordinary (Special) Conference in the light of experience acquired in the course of space communication operation.

Since the arguments set out in Document No. 180 reflect these views of the Telecommunication Administration of the U.S.S.R., the Soviet Delegation does not insist on having the procedure described in Article 9A designated as an "interim" procedure.

A. BADALOV





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 211-E
6 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

PROPOSAL BY THE DELEGATIONS OF AUSTRALIA, BELGIUM, CANADA, U.S.A.,
FRANCE, LUXEMBOURG, NETHERLANDS, UNITED KINGDOM, AND SWEDEN
RELATING TO RADIO ASTRONOMY.

RECOMMENDATION

The Extraordinary Administrative Radio Conference, Geneva, 1963,
considering that

- a) by definitions 74, 75 and 75A in Article 1 of the Radio Regulations, 1959, Radio Astronomy is a service using reception only;
- b) research in Radio Astronomy is conducted with the use of receiving equipment of the highest attainable sensitivity;
- c) at the Extraordinary Administrative Radio Conference being held in Geneva (October-November 1963), considerable recognition has been given to the needs of the Radio Astronomy service;
- d) in addition to one exclusive allocation on a world wide basis, some Administrations have been able to provide exclusive frequency allocations for Radio Astronomy in some other bands;
- e) the greatest practicable protection from interference is essential to the advancement of the science of Radio Astronomy;

recommends that:

- i) the next Ordinary Administrative Radio Conference should give further consideration to the provision of improved frequency allocations for Radio Astronomy; and
- ii) in the meantime, administrations should afford all practicable protection to the frequencies now allocated to Radio Astronomy on a shared basis with other radio services.



SPACE
RADIOCOMMUNICATION
CONFERENCE
GENEVA, 1963

Document No. 212
7 November, 1963

E

R. 4

PLENARY MEETING
FIRST READING

The Editorial Committee, having examined the documents 167, 172, 175, 177 and 187, submits the attached text to the Plenary Assembly for a first reading.

Art. 5

Y. PLACE
Chairman of the Editorial
Committee

Annex : 47 pages



ANNEX 3

Revision of Article 5 of the Radio Regulations

Article 5 of the Radio Regulations shall be amended as follows :

In the Table of Frequency Allocations for the band 9 995-10 005 kc/s there shall be substituted the following:

kc/s

Allocation to Services		
Region 1	Region 2	Region 3
9 995—10 005		
STANDARD FREQUENCY		
	204 214	215

NOC
MOD

204 214

215 The band 10 003-10 005 kc/s is also allocated, on a secondary basis, to the space research service.

In the Table of Frequency Allocations for the band 15 450-16 460 kc/s there shall be substituted the following :

kc/s

Allocation to Services		
Region 1	Region 2	Region 3
15 450—15 762	FIXED	
15 762—15 768	FIXED <i>Space Research 215A</i>	
15 768—16 460	FIXED	

ADD

215A In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the space research service is a primary service in the bands 15 762-15 768 kc/s and 18 030-18 036 kc/s.

In the Table of Frequency Allocations for the band 18 030-20 010 kc/s there shall be substituted the following :

kc/s

Allocation to Services		
Region 1	Region 2	Region 3
18 030—18 036	FIXED <i>Space Research 215A</i>	
18 036—19 990	FIXED	
19 990—20 010	STANDARD FREQUENCY 204 220 221 221A	

NOC

220

MOD

221 The band 19 990-20 010 kc/s is also allocated, on a secondary basis, to the space research service.

ADD

221A The frequency 20 007 kc/s may also be used, in emergency, in the search for, and rescue of, astronauts and space vehicles. Emissions must be confined in a band of ± 3 kc/s about this frequency.

In the Table of Frequency Allocations for the band 29.7-41 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services.		
Region 1	Region 2	Region 3
29.7—30.005	FIXED 228 229 231 232 MOBILE 233	
30.005—30.010	FIXED 228 229 231 MOBILE SPACE RESEARCH SPACE (Satellite identification) 233	
30.010—37.750	FIXED 228 229 230 231 MOBILE 233	
37.75—38.25	FIXED 228 229 231 MOBILE <i>Radio Astronomy</i> 233	
38.25—41	FIXED 228 229 230 231 MOBILE 233 235 236	

NOC 228 229 230 231 232 233 236

SUP 234

MOD 235

The band 39.986-40.002 Mc/s is also allocated, on a secondary basis, to the space research service.

In the Table of Frequency Allocations for Region 2 and for the band 68-74.6 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
68—74.8	68—73 FIXED MOBILE BROADCASTING	68—70
	73—74.6 RADIO ASTRONOMY 253A 253B	70—74.6

SUP

253

ADD

253A In Region 2, fixed, mobile and broadcasting service operations previously authorized in the band 73-74.6 Mc/s may continue to operate on a non-interference basis to the radio astronomy service.

ADD

253B In Cuba, the band 73-74.6 Mc/s is also allocated to the fixed, mobile and broadcasting services.

In the Table of Frequency Allocations for the band 117-975-144 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
117-975-132 AERONAUTICAL MOBILE (R) 273 273A		
132-136 AERONAUTICAL MOBILE (R) 273A 274 275	132-136 FIXED MOBILE 273A 276 277 278 279	
136-137 FIXED MOBILE SPACE RESEARCH (Telemetering and tracking). 281A	136-137 SPACE RESEARCH (Telemetering and tracking) 281A 281B	136-137 FIXED MOBILE SPACE RESEARCH (Telemetering and tracking) 281A
137-138 METEOROLOGICAL-SATELLITE SPACE RESEARCH (Telemetering and tracking) SPACE (Telemetering and tracking) 275A 279A 281C 281D 281E 281F		
138-143.6 AERONAUTICAL MOBILE (OR) 275 282 283	138-143.6 FIXED MOBILE Radiolocation	138-143.6 FIXED MOBILE 278 279A 284

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
143.6—143.65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (Telemetry and tracking) 275 282 283	143.6—143.65 FIXED MOBILE SPACE RESEARCH (Telemetry and tracking) Radiolocation	143.6—143.65 FIXED MOBILE SPACE RESEARCH (Telemetry and tracking) 278 279A 284
143.65—144 AERONAUTICAL MOBILE (OR) 275 282 283	143.65—144 FIXED MOBILE Radiolocation	143.65—144 FIXED MOBILE 278 279A 284

NOC

273

ADD

273A In the band 117-975-132 Mc/s and in the band 132-136 Mc/s where the aeronautical mobile (R) service is authorized, the use and development, for this service, of systems using space communication techniques may be authorized but limited initially to satellite relay stations of the aeronautical mobile (R) service. Such use and development shall be subject to co-ordination between administrations concerned and those having services operating in accordance with the Table, which may be affected.

NOC

274

MOD

275 In Burundi, the Congo (Leopoldville), Ethiopia, Nigeria, Sierra Leone, Gambia, Portuguese Overseas Provinces in Region 1 south of the equator, Rhodesia and Nyasaland, Rwanda and the R. of South Africa and Territory of South West Africa, the bands 132-136 Mc/s and 138-144 Mc/s are allocated to the fixed and mobile services.

ADD

275A In Burundi, the Congo (Leopoldville), Nigeria, Sierra Leone, Gambia, Portuguese Overseas Provinces in Region 1 south of the equator, Rhodesia and Nyasaland, and Rwanda, the band 137-138 Mc/s is also allocated to the fixed and mobile services.

NOC	276 277	
MOD	278	In New Zealand, the bands 132-136 Mc/s and 138-144 Mc/s are allocated to the aeronautical mobile (OR) service.
MOD	279	In Australia, the band 132-136 Mc/s is allocated to the aeronautical mobile service.
ADD	279A	In Australia, the band 137-144 Mc/s is also allocated to the broadcasting service for television.
SUP	280	
SUP	281	
ADD	281A	For the use of the band 136-137 Mc/s, see Recommendation No.  .
ADD	281B	In Region 2, the band 136-137 Mc/s is also allocated to the fixed and mobile services until 1 January, 1969. Thereafter, in Cuba, the band will continue to be allocated also to the fixed and mobile services.
ADD	281C	In Algeria, Bulgaria, Hungary, Kuwait, Lebanon, Morocco, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 137-138 Mc/s is also allocated to the aeronautical mobile (OR) service. In the remaining countries of Region 1, the band 137-138 Mc/s is also allocated to the aeronautical mobile (OR) service until 1 January, 1969.
ADD	281D	In Norway, Switzerland and Turkey, the band 137-138 Mc/s is also allocated to the fixed service and mobile, except aeronautical mobile, service until 1 January, 1969.
ADD	281E	In Regions 2 and 3, the band 137-138 Mc/s is also allocated to the fixed and mobile services until 1 January, 1969. Thereafter, in Cuba, Malaysia, Pakistan and the Philippines, the band 137-138 Mc/s will continue to be allocated also to the fixed and mobile services.
ADD	281F	The band 137-138 Mc/s will be used mainly for research concerning the establishment, technical improvement, and maintenance of operational space systems.
MOD	282	In Austria, the Netherlands and the United Kingdom, the band 138-144 Mc/s will, at some future date, be allocated to the fixed service and mobile, except aeronautical mobile, service.
MOD	283	In Denmark, Greece, Norway, Portugal, F.R. of Germany, Sweden, Switzerland and Turkey, the band 138-144 Mc/s is also allocated to the fixed service and mobile, except aeronautical mobile (R), service.
MOD	284	In China, the band 138-144 Mc/s is also allocated to the radiolocation service.

In the Table of Frequency Allocations for the band 144-150.05 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
144—146		
AMATEUR 284A		
146—149.9 FIXED MOBILE except aeronautical mobile (R) 274 285 285A	146—148	AMATEUR 289
	148—149.9	FIXED MOBILE 285A 290
149.9—150.05		
RADIONAVIGATION-SATELLITE 285B		

- ADD 284A In the band 144-146 Mc/s, space satellites may be used by the amateur service.
- MOD 285 In Rhodesia and Nyasaland, and the R. of South Africa and Territory of South West Africa, the bands 146-149.9 Mc/s and 150.05-174 Mc/s are also allocated to the aeronautical mobile service.
- ADD 285A The frequencies 148.25 Mc/s \pm 15 kc/s and 154.2 Mc/s \pm 15 kc/s may be used for space telecommand, subject to agreement among the administrations concerned and those having services operating in accordance with the Table, which may be affected.
- ADD 285B Stations operating in the fixed and mobile services may continue to use this band until 1 January, 1969. This cessation date shall not apply in Austria,

Bulgaria, Cuba, Hungary, Iran, Kuwait, Morocco, Pakistan, the Netherlands, Poland, the United Arab Republic, Yugoslavia and Roumania where the fixed and mobile services will continue to have equal primary status with the radionavigation-satellite service. (See Recommendation No. **289**)

NOC

289

MOD

290 In New Zealand, the bands 148-149.9 Mc/s and 150.05-156 Mc/s are allocated to the aeronautical mobile (OR) service.

In the Table of Frequency Allocations for the bands 150-05-174 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
150-05—151 FIXED MOBILE except aeronautical mobile (R) 274 285 286 286A	150-05—174 FIXED MOBILE 285A 287	150-05—170 FIXED MOBILE
151—154 FIXED MOBILE except aeronautical mobile (R) Meteorological aids 285 286 286A		285A 287 290
154—156 FIXED MOBILE except aeronautical mobile (R) 285 285A		170—174 FIXED MOBILE BROADCASTING
156—174 FIXED MOBILE except aeronautical mobile 285 287 288		

MOD	285	
MOD	286	In Region 1, the band 150.05-153 Mc/s is also allocated to the radio astronomy service. In making assignments to new stations of other services to which this band is allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference.
ADD	286A	In the United Kingdom, the band 150.05-151 Mc/s is allocated to radio astronomy, and the band 151-153 Mc/s is allocated to radio astronomy on a primary basis and to meteorological aids on a secondary basis ; however, in this band the provisions of No. 274 apply.
NOC	287	
NOC	288	
MOD	290	

In the Table of Frequency Allocations for the band 174-216 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
174—216 BROADCASTING 291 292 293 294	174—216 FIXED MOBILE BROADCASTING 294 295 296	

NOC
MOD

291 292 293 295 296

294 The band 183·1-184·1 Mc/s is also allocated, on a secondary basis, to the space research service.

In the Table of Frequency Allocations for the band 235-328.6 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
235—267	FIXED MOBILE 305 309	
267—272	FIXED MOBILE Space (Telemetry)	309A 309B
272—273	FIXED MOBILE SPACE (Telemetry)	309A
273—328.6	FIXED MOBILE 310	

NOC 305 309 310

ADD 309A Space stations employing frequencies in the band 267-273 Mc/s for telemetry purposes may also transmit tracking signals in the band.

ADD 309B In the band 267-272 Mc/s individual administrations may use space telemetry in their countries on a primary basis, subject to the agreement of the administrations concerned and those having services operating in accordance with the Table, which may be affected.

In the Table of Frequency Allocations for the band 335.4-401 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
335.4—399.9		
FIXED		
MOBILE		
399.9—400.05		
RADIONAVIGATION-SATELLITE		
311A		
400.05—401		
METEOROLOGICAL AIDS		
METEOROLOGICAL-SATELLITE (Maintenance telemetering)		
SPACE RESEARCH (Telemetering and tracking)		
312A 313 314		

- ADD 311A** Stations operating in the fixed and mobile services may continue to use this band until 1 January, 1969. This cessation date shall not apply in Bulgaria, Cuba, Greece, Hungary, Iran, Kuwait, Lebanon, Morocco, the United Arab Republic and Yugoslavia where the fixed and mobile services will continue to have equal status with the radionavigation-satellite service. (See Recommendation No.)
- SUP 312**
- ADD 312A** In Sweden, the band 400.05-401 Mc/s is also allocated to the fixed and mobile services until 1 January, 1966.
- MOD 313** In Albania, Bulgaria, Greece, Hungary, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 400.05-401 Mc/s, is also allocated to the fixed and mobile services.
- MOD 314** In the United Kingdom, the band 400.05-420 Mc/s is also allocated to the radiolocation service; however, between 400.05 and 410 Mc/s the allocation to the radiolocation service is on a secondary basis.

In the Table of Frequency Allocations for the band 401-406 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
401—402	METEOROLOGICAL AIDS SPACE (<i>Telemetering</i>) <i>Fixed</i> <i>Mobile except aeronautical mobile</i> 314 315 315B 316	315A
402—406	METEOROLOGICAL AIDS <i>Fixed</i> <i>Mobile except aeronautical mobile</i> 314 315 316 317	

- MOD 314
- NOC 315
- ADD 315A Space stations employing frequencies between 401-402 Mc/s for telemetering purposes may also transmit tracking signals in this band.
- ADD 315B In Australia, the space (telemetering) service in the band 401-402 Mc/s is a secondary service.
- NOC 316
- MOD 317 The band 404-410 Mc/s in Region 2 and the band 406-410 Mc/s in Regions 1 and 3 are also allocated to the radio astronomy service. An appropriate continuous band within these limits shall be designated on a national or area basis. In making assignments to stations of other services to which these bands are allocated, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference.

NOC

318 319 320 321 322 323 324

ADD

318A In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 460-470 Mc/s may be used, on a primary basis, by the meteorological-satellite service subject to agreement among administrations concerned and those having services, or intending to introduce services, operating in accordance with the Table, which may be affected.

ADD

319A The band 449.75-450.25 Mc/s may be used for space telecommand, subject to agreement among the administrations concerned and those having services operating in accordance with the Table, which may be affected.

In the Table of Frequency Allocations for the bands 470-890 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
470—582	470—890 BROADCASTING	470—585
582—606		585—610 RADIONAVIGATION
606—790 BROADCASTING 326 329 330 330A 331 332		336 337
790—890		610—890 FIXED MOBILE BROADCASTING
	332	332 338 339

NOC
MOD

326 329

330 In Region 1, except the African Broadcasting Area,* the radionavigation service may continue to operate in the band 606-610 Mc/s until the band is required for the broadcasting service.

* 330-1 For the purposes of this Regulation the term " African Broadcasting Area " means :

- a) African countries, parts of countries, territories and groups of territories situated between the parallels 40° South and 30° North.
- b) Islands in the Indian Ocean west of meridian 60° East, situated between the parallel 40° South and the great circle arc joining the points 45° East, 11° 30' North and 60° East, 15° North.
- c) Islands in the Atlantic Ocean east of Line B defined in No. 131 of these Regulations, situated between the parallels 40° South and 30° North.

ADD	330A	In the African Broadcasting Area,* the band 606-614 Mc/s is allocated to the radio astronomy service.
NOC	331	
MOD	332	In Region 1, except the African Broadcasting Area,* the band 606-614 Mc/s, and in Region 3, the band 610-614 Mc/s may be used by the radio astronomy service. Administrations shall avoid using the band concerned for the broadcasting service as long as possible, and thereafter, as far as practicable, shall avoid the use of such effective radiated powers as will cause harmful interference to radio astronomy observations. In Region 2, the band 608-614 Mc/s is reserved exclusively for the radio astronomy service until the first Administrative Radio Conference after 1 January, 1974 which is competent to review this provision; however, this provision does not apply to Cuba.
NOC	336 337 338 339	
ADD *	See 330.1	

In the Table of Frequency Allocations for the band 890-1215 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
890—942 FIXED BROADCASTING <i>Radiolocation</i> 329 331 333 339A	890—942 FIXED RADIOLOCATION 339A 340	890—942 FIXED MOBILE BROADCASTING <i>Radiolocation</i> 339 339A
942—960 FIXED BROADCASTING 329 331 333 339A	942—960 FIXED 339A	942—960 FIXED MOBILE BROADCASTING 338 339 339A
960—1 215 AERONAUTICAL RADIONAVIGATION 341		

NOC
 ADD
 MOD

333 340

339A Specific portions of the frequency band 900-960 Mc/s may also be used, on a secondary basis, for experimental purposes and space research.

341 The band 960-1 215 Mc/s is 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.

In the Table of Frequency Allocations for the band 1 400-1 660 Mc/s there shall be substituted the following:

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
1 400—1 427		
RADIO ASTRONOMY		
1 427—1 429		
FIXED		
MOBILE except aeronautical mobile		
SPACE (Telecommand)		
1 429—1 525	1 429—1 435	1 429—1 525
	1 435—1 525	
1 525—1 535	1 525—1 535	1 525—1 535
FIXED 350B	SPACE (Telemetry) 350A	FIXED 350B
SPACE (Telemetry) 350A	<i>Fixed</i>	SPACE (Telemetry) 350A
<i>Mobile except aeronautical mobile</i> 350C	<i>Mobile</i> 350D	<i>Mobile</i> 350E
1 535—1 540		
SPACE (Telemetry)		
350A 351 352 352C		
1 540—1 660		
AERONAUTICAL RADIONAVIGATION		
351 352 352A 352B		

SUP
ADD

350

350A Space stations employing frequencies in the band 1 525-1 540 Mc/s for tele-metering purposes may also transmit tracking signals in the band.

- ADD 350B** As regards the category of the fixed service, see Resolution No. 3A.
- ADD 350C** In Albania, Bulgaria, France, Hungary, Lebanon, Morocco, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 1 525-1 535 Mc/s is also allocated, on a primary basis, to the mobile, except aeronautical mobile, service. As regards the category of this service, see Resolution No. 3A.
- ADD 350D** In Cuba, the band 1 525-1 535 Mc/s is also allocated, on a primary basis, to the mobile service.
- ADD 350E** In Japan, the band 1 525-1 535 Mc/s is also allocated to the mobile service, on a primary basis, until 1 January, 1969.
- MOD 351** In Italy, the band 1 535-1 600 Mc/s is also allocated to the fixed service until 1 January, 1970.
- MOD 352** In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 1 535-1 660 Mc/s is also allocated to the fixed service. As regards the category of the fixed service in the band 1 535-1 540 Mc/s, see Resolution No. 3A.
- ADD 352A** The bands 1 540-1 660 Mc/s, 4 200-4 400 Mc/s, 5 000-5 250 Mc/s and 15.4-15.7 Gc/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 or satellite-borne facilities.
- ADD 352B** The bands 1 540—1 660 Mc/s, 5 000-5 250 Mc/s and 15.4-15.7 Gc/s are also allocated to the aeronautical mobile (R) service for the use and development of systems using space communication techniques. Such use and development is subject to agreement and co-ordination between administrations concerned and those having services operating in accordance with the Table, which may be affected.
- ADD 352C** In Morocco and Yugoslavia, the band 1 535-1 540 Mc/s is also allocated to the aeronautical radionavigation service.
- ADD 352D** In Austria, Indonesia and the F. R. of Germany, the band 1540-1660 Mc/s is also allocated to the fixed service.

In the Table of Frequency Allocations for the bands 1 660-1 710 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
1 660—1 664·4	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE 324A 353 354 354A 354B	
1 664·4—1 668·4	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE 324A <i>Radio Astronomy</i> 353 353A 354 354A 354B	
1 668·4—1 670	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE 324A 353 354 354A 354B	
1 670—1 690		
1 690—1 700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE 324A <i>Fixed</i> <i>Mobile except aeronautical mobile</i> 353 354A	1 690—1 700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE 324A 354A 354C	

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
1 700—1 710 FIXED SPACE RESEARCH (Telemetering and tracking) <i>Mobile</i>	1 700—1 710 SPACE RESEARCH (Telemetering and tracking) 355A	1 700—1 710 FIXED MOBILE SPACE RESEARCH (Telemetering and tracking)

- ADD 324A** It is intended that meteorological-satellite space stations operating in this band shall transmit to selected earth stations. The location of such earth stations is subject to agreement among administrations concerned and those having services operating in accordance with the Table, which may be affected.
- NOC 353**
- ADD 353A** In view of the successful detection of two spectral lines in the region of 1 665 Mc/s and 1 667 Mc/s by astronomers, administrations are urged to give all practicable protection in the band 1 664.4-1 668.4 Mc/s for future research in radio astronomy.
- NOC 354**
- ADD 354A** In Algeria, Bulgaria, Cuba, Hungary, Kuwait, Lebanon, Morocco, Pakistan, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the bands 1 660-1 670 Mc/s and 1 690-1 700 Mc/s are also allocated to the fixed service and the mobile, except aeronautical mobile, service.
- ADD 354B** In Australia, Cyprus, Spain, Ethiopia, Indonesia, Israel, New Zealand, Portugal, the Spanish Provinces in Africa, the United Kingdom, Sweden and Switzerland, the band 1 660-1 670 Mc/s is also allocated, on a secondary basis, to the fixed service, and the mobile, except aeronautical mobile, service.
- ADD 354C** In Australia, Indonesia and New Zealand, the band 1 690-1 700 Mc/s is also allocated, on a secondary basis, to the fixed service and the mobile, except aeronautical mobile, service.
- SUP 355**
- ADD 355A** In Cuba, the band 1 700-1 710 Mc/s is also allocated to the fixed and mobile services.

In the Table of Frequency Allocations for the bands 1 710-2 290 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
1 710—1 770 FIXED <i>Mobile</i> 356	1 710—1770 FIXED MOBILE	
1 770—1 790 FIXED <i>Meteorological-Satellite</i> 356AA <i>Mobile</i> 356	1 770—1 790 FIXED MOBILE <i>Meteorological-Satellite</i> 356AA	
1 790—2 290 FIXED <i>Mobile</i> 356 356A	1 790—2 290 FIXED MOBILE 356A	

NOC

356

ADD

356AA In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the meteorological-satellite service, in the band 1 770-1 790 Mc/s, shall be on a primary basis, subject to co-ordination with the administrations concerned and those having services operating in accordance with the Table, which may be affected by the siting of earth stations.

ADD

356A The band 2110-2120 Mc/s may be used for telecommand in conjunction with spacecraft engaged in deep space research, subject to agreement between the administrations concerned and those having services operating in accordance with the Table, which may be affected.

In the Table of Frequency Allocations for the band 2 290-2 300 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
2 290—2 300 FIXED SPACE RESEARCH 356C (Telemetry and tracking in deep space) <i>Mobile</i>	2 290—2 300 SPACE RESEARCH (Telemetry and tracking in deep space) 356B	2 290—2 300 FIXED MOBILE SPACE RESEARCH (Telemetry and tracking in deep space)

- ADD 356B** In Cuba, the band 2 290-2 300 Mc/s is also allocated to the fixed and mobile services.
- ADD 356C** In Austria, the space research service in the band 2 290-2 300 Mc/s is a secondary service.

In the Table of Frequency Allocations for the band 2 550-2 700 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
2 550—2 690	FIXED	
	MOBILE	
	362	363 364
2 690—2 700	RADIO ASTRONOMY	
	363	364A 364B 365

- NOC** **362**
- MOD** **363** In the F.R. of Germany, the band 2 550-2 690 Mc/s is allocated to the fixed service; and the band 2 690-2 700 Mc/s is also allocated to the fixed service.
- MOD** **364** In Region 1, tropospheric scatter systems may operate in the band 2 550-2 690 Mc/s under agreements concluded between administrations concerned and those having services operating in accordance with the Table, which may be affected.
- ADD** **364A** In Algeria, Bulgaria, Cuba, Hungary, India, Israel, Kuwait, Lebanon, Morocco, Pakistan, the Philippines, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 2 690-2 700 Mc/s is also allocated to the fixed and mobile services.
- ADD** **364B** In Algeria, Bulgaria, Hungary, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., tropospheric scatter systems may operate in the band 2 690-2 700 Mc/s under agreements concluded between administrations concerned and those having services operating in accordance with the Table, which may be affected.
- MOD** **365** In making assignments to stations in the fixed and mobile services, administrations are urged to take all practicable steps to protect radio astronomy observations from harmful interference.

In the Table of Frequency Allocations for the bands 3 300-4 200 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
3 300—3 400 RADIOLOCATION 370 371	3 300—3 400 RADIOLOCATION <i>Amateur</i> 376	
3 400—3 600 FIXED MOBILE COMMUNICATION-SATELLITE 374A (Satellite-to-earth) <i>Radiolocation</i> 372 373 374 375	3 400—3 500 RADIOLOCATION COMMUNICATION-SATELLITE 374A (Satellite-to-earth) <i>Amateur</i> 376	
	3 500—3 700 FIXED MOBILE RADIOLOCATION COMMUNICATION-SATELLITE 374A (Satellite-to-earth)	3 500—3 700 RADIOLOCATION COMMUNICATION-SATELLITE 374A (Satellite-to-earth) <i>Fixed</i> <i>Mobile</i> 377 378
3 600—4 200 FIXED COMMUNICATION-SATELLITE 374A (Satellite-to-earth) <i>Mobile</i> 374	3 700—4 200 FIXED MOBILE COMMUNICATION-SATELLITE 374A (Satellite-to-earth) 379	

NOC	370 371 372 374 375 376 377 378
MOD	373 In Denmark, Norway, Sweden and Switzerland, the fixed, mobile, radiolocation and communication-satellite services operate on a basis of equality in the band 3 400-3 600 Mc/s.
ADD	374A This band may also be used for the transmission of tracking and telemetering signals associated with communication-satellite space stations operating in the same band.
MOD	379 In Australia, the band 3 700-3 770 Mc/s is allocated to the radiolocation and communication-satellite services.
SUP	380

In the Table of Frequency Allocations for the bands 4 200-4 400 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
4 200—4 400	AERONAUTICAL RADIONAVIGATION 352A 381 382 383	
4 400—4 700	FIXED MOBILE COMMUNICATION-SATELLITE 392A (Earth-to-satellite)	
4 700—4 900	FIXED MOBILE 354 365	
4 990—5 000 FIXED MOBILE RADIO ASTRONOMY 365	4 990—5 000 RADIO ASTRONOMY 383A	4 990—5 000 FIXED MOBILE RADIO ASTRONOMY 365

MOD	365	
NOC	381	
NOC	382	
NOC	383	
ADD	383A	In Cuba, the band 4 990-5 000 Mc/s is also allocated to the fixed and mobile services, and the provisions of No. 365 apply.
ADD	392A	This band may also be used for the transmission of telecommand signals associated with communication-satellite earth stations operating in the same band.

In the Table of Frequency Allocations for the bands 5 000-5 350 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
5 000—5 250	AERONAUTICAL RADIONAVIGATION 352A 352B	
5 250—5 255	RADIOLOCATION <i>Space Research</i> 384	
5 255—5 350	RADIOLOCATION 384 384A	

MOD 384 In Albania, Austria, Bulgaria, Hungary, Poland, Roumania, Switzerland, Czechoslovakia and the U.S.S.R., the band 5 250-5 350 Mc/s is also allocated to the radionavigation service.

ADD 384A In Sweden, the band 5 255-5 350 Mc/s is also allocated to the radionavigation service.

In the Table of Frequency Allocations for the bands 5 650-6 425 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
5 650—5 670	RADIOLOCATION <i>Amateur</i> 388 389	
5 670—5 725	RADIOLOCATION <i>Amateur</i> <i>Space Research (Deep Space)</i> 388 389 389A	
5 725—5 850 RADIOLOCATION COMMUNICATION- SATELLITE 392A (Earth-to-satellite) <i>Amateur</i> 354 388 390 391	5 725—5 850 RADIOLOCATION <i>Amateur</i> 389 391	
5 850—5 925 FIXED MOBILE COMMUNICATION- SATELLITE 392A (Earth-to-satellite) 391	5 850—5 925 RADIOLOCATION <i>Amateur</i> 391	5 850—5 925 FIXED MOBILE COMMUNICATION- SATELLITE 392A (Earth-to-satellite) <i>Radiolocation</i> 391
5 925—6 425	FIXED MOBILE COMMUNICATION-SATELLITE 392A (Earth-to-satellite)	

NOC	354 388 389 391
ADD	389A In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the space research service is a primary service in the band 5 670-5 725 Mc/s.
MOD	390 In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the band 5 800-5 850 Mc/s is allocated to the fixed, mobile and communication-satellite services.
SUP	392

In the Table of Frequency Allocations for the band 6 425-7 750 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
6 425—7 250	FIXED MOBILE 392F 393 393A	
7 250—7 300	COMMUNICATION-SATELLITE (Satellite-to-earth) 374A 392C 392D 392G	
7 300—7 750	FIXED MOBILE COMMUNICATION-SATELLITE 374A 392D (Satellite-to-earth) 392F	

*ADD

392C Stations of the fixed and mobile services, previously authorized in the bands 7 250-7 300 Mc/s and 7 975-8 025 Mc/s, may continue to operate until 1 January, 1969. This provision does not apply to the countries listed in 392G and 392H.

ADD

392D As an exception, passive communication-satellite systems also may be accommodated in the band 7 250-7 750 Mc/s, subject to:

- a) agreement between administrations concerned and those whose services, operating in accordance with the Table, may be affected;
- b) the co-ordination procedure laid down in Articles 9 and 9A.

Such systems shall not cause any more interference at active earth station receivers than would be caused by fixed or mobile services. Power-flux density limitations at the earth's surface after reflection from the passive communication-satellites shall not exceed those prescribed in these Regulations for active communication-satellite systems.

The maximum effective power radiated in any direction in the horizontal plane by earth stations of passive satellite systems shall not exceed + 55 dbW, not taking the site shielding factor into account. If the distance between a transmitting station of a passive system and the territory of another administration exceeds 400 km, this limitation may be increased in that direction by 2 db for each 100 km in excess of 400 km up to a maximum of 65 dbW.

- ADD** **392F** In the bands 7 200-7 250 Mc/s and 7 300-7 750 Mc/s, the meteorological-satellite service may use a band up to 100 Mc/s in width on a primary basis. These bands may also be used for the transmission of tracking and telemetering signals associated with meteorological-satellite space stations operating in the same band.
- ADD** **392G** In Algeria, Austria, Bulgaria, Cyprus, Cuba, Ethiopia, Finland, Hungary, Japan, Kuwait, Lebanon, Liberia, Malaysia, Morocco, the Philippines, Poland, the United Arab Republic, Yugoslavia, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the band 7 250-7 300 Mc/s is also allocated to the fixed and mobile services.
- MOD** **393** In Italy, the band 6 450-6 575 Mc/s is also allocated to the radiolocation service.
- ADD** **393A** The band 7 120-7 130 Mc/s may be used for telecommand in association with space services, subject to agreement between the administrations concerned and those having services operating in accordance with the Table, which may be affected.

In the Table of Frequency Allocations for the band 7 750-8 500 Mc/s there shall be substituted the following :

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
7 750—7 900	FIXED MOBILE	
7 900—7 975	FIXED MOBILE COMMUNICATION-SATELLITE 392A (Earth-to-satellite)	
7 975—8 025	COMMUNICATION-SATELLITE (Earth-to-satellite) 392A 392C 392H	
8 025—8 400	FIXED MOBILE COMMUNICATION-SATELLITE 392A (Earth-to-satellite) 394 394B	
8 400—8 500 FIXED MOBILE SPACE RESEARCH 394A 394D	8 400—8 500 SPACE RESEARCH 394C	8 400—8 500 FIXED MOBILE SPACE RESEARCH 394A 394D

- ADD** **392H** In Algeria, Bulgaria, Cuba, Ethiopia, Finland, Hungary, Japan, Kuwait, Lebanon, Morocco, Poland, the United Arab Republic, Yugoslavia, Roumania, Sweden, Switzerland, Czechoslovakia and the U.S.S.R., the band 7 975-8 025Mc/s is also allocated to the fixed and mobile services.
- MOD** **394** In Australia and the United Kingdom, the band 8 250-8 400 Mc/s is allocated to the radiolocation and communication-satellite services.
- ADD** **394A** In Australia and the United Kingdom, the band 8 400-8 500 Mc/s is allocated to the radiolocation and space research services.
- ADD** **394B** In Israel, the band 8 025-8 400 Mc/s is allocated, on a primary basis, to the fixed and mobile services and, on a secondary basis, to the communication-satellite service.
- ADD** **394C** In Cuba, the band 8 400-8 500 Mc/s is also allocated to the fixed and mobile services.
- ADD** **394D** In Austria, Belgium, France, Israel, Luxembourg and Malaysia, the allocation to the space research service in the band 8 400-8 500 Mc/s is on a secondary basis.

In the Table of Frequency Allocations for the bands 9 800-10 500 Mc/s there shall be substituted the following:

Mc/s

Allocation to Services		
Region 1	Region 2	Region 3
9 800—10 000	RADIOLOCATION <i>Fixed</i> 400 401 401A	
10 000—10 500	RADIOLOCATION <i>Amateur</i> 401A 402 403	

NOC
ADD

400 401 402 403

401A The band 9975-10025 Mc/s may be used by weather radar on meteorological-satellites.

In the Table of Frequency Allocations for the bands 10.55-10.7 Gc/s there shall be substituted the following :

Gc/s

Allocation to Services		
Region 1	Region 2	Region 3
10.55—10.68		
10.68--10.7		
RADIO ASTRONOMY		
405A 405B		

SUP

405

ADD

405A In Australia and the United Kingdom, the band 10.68-10.7 Gc/s is also allocated on a secondary basis, to the radiolocation service.

ADD

405B In Algeria, Bulgaria, Cuba, Hungary, Japan, Kuwait, Lebanon, Pakistan, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 10.68-10.7 Gc/s is also allocated to the fixed and mobile services.

In the Table of Frequency Allocations for the bands 14-15.7 Gc/s there shall be substituted the following :

Gc/s

Allocation to Services		
Region 1	Region 2	Region 3
14—14.3	407	
14.3—14.4	RADIONAVIGATION-SATELLITE	
14.4—15.25	FIXED MOBILE	
15.25—15.35	SPACE RESEARCH 409A 409B	
15.35—15.4	RADIO ASTRONOMY 409C	
15.4—15.7	AERONAUTICAL RADIONAVIGATION 352A 352B 407	

MOD

407 In Albania, Bulgaria, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the bands 13.25-13.5 Gc/s, 14.175-14.3 Gc/s, 15.4-17.7 Gc/s, 21-22 Gc/s, 23-24.25 Gc/s and 33.4-36 Gc/s are also allocated to the fixed and mobile services.

- ADD 409A In Algeria, Bulgaria, Cuba, Hungary, Kuwait, Lebanon, Pakistan, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 15.25-15.35 Gc/s is also allocated to the fixed and mobile services.
- ADD 409B In Austria, Belgium, Japan, the Netherlands, Portugal, the F.R. of Germany, the United Kingdom and Switzerland, the band 15.25-15.35 Gc/s is also allocated, on a secondary basis, to the fixed and mobile services.
- ADD 409C In Algeria, Bulgaria, Cuba, Hungary, Japan, Kuwait, Lebanon, Pakistan, Poland, the United Arab Republic, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 15.35-15.4 Gc/s is also allocated to the fixed and mobile services.

*In the Table of Frequency Allocations for the bands
17.7-21 Gc/s there shall be substituted the following :*

Gc/s

Allocation to Services		
Region 1	Region 2	Region 3
17.7—19.3	FIXED MOBILE,	
19.3—19.4	RADIO ASTRONOMY 409D	
19.4—21	FIXED MOBILE	

ADD

409D In Bulgaria, Cuba, Hungary, Kuwait, Lebanon, Poland, the United Arab Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 19.3-19.4 Gc/s is also allocated to the fixed and mobile services.

In the Table of Frequency Allocations for the bands 25-25-40 Gc/s there shall be substituted the following :

Gc/s

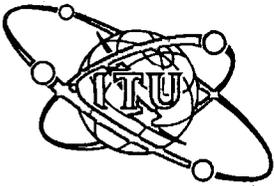
Allocation to Services		
Region 1	Region 2	Region 3
25-25-31	FIXED MOBILE	
31-31-3	FIXED MOBILE <i>Space Research</i> 412H	
31-3-31-5	RADIO ASTRONOMY 412A	
31-5-31-8 SPACE RESEARCH <i>Fixed</i> <i>Mobile</i>	31-5-31-8 SPACE RESEARCH 405C	31-5-31-8 SPACE RESEARCH <i>Fixed</i> <i>Mobile</i>
31-8-32-3	RADIONAVIGATION <i>Space Research</i> 412B	
32-3-33	RADIONAVIGATION	

Gc/s

Allocation to Services		
Region 1	Region 2	Region 3
33—33.4 RADIO ASTRONOMY RADIONAVIGATION	33—33.4	RADIONAVIGATION 412F
33.4—34.2	RADIOLOCATION 408 412G	
34.2—35.2	RADIOLOCATION <i>Space Research</i> 407 408 412 412C 412D	
35.2—36	RADIOLOCATION 407 408 412	
36—40	FIXED MOBILE 412E	

- ADD 405C In Cuba, the band 31.5-31.8 Gc/s is also allocated, on a secondary basis, to the fixed and mobile services.
- MOD 407
- NOC 408 412
- ADD 412A In Bulgaria, Cuba, Hungary, Poland, the United Arab Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 31.3-31.5 Gc/s is also allocated to the fixed and mobile services.
- ADD 412B In Bulgaria, Cuba, Hungary, Poland, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the space research service is a primary service in the band 31.8-32.3 Gc/s.

- ADD 412C In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the space research service is a primary service in the band 34.2-35.2 Gc/s.
- ADD 412D The band 34.4-34.5 Gc/s may be used by weather radar devices on meteorological-satellites for the detection of cloud.
- ADD 412E In Bulgaria, Cuba, Hungary, Morocco, Poland, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 36.5-37.5 Gc/s is also allocated to the radio astronomy service.
- ADD 412F In Cuba and India, the band 33-33.4 Gc/s is also allocated to the radio astronomy service.
- ADD 412G In Algeria, Bulgaria, Cuba, Hungary, Morocco, Poland, Yugoslavia, Roumania, Czechoslovakia and the U.S.S.R., the band 33.4-34 Gc/s is also allocated to the radio astronomy service.
- ADD 412H In Bulgaria, Cuba, Hungary, Poland, Roumania, Czechoslovakia and the U.S.S.R., the space research service is a primary service in the band 31-31.3 Gc/s.



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 213-E
7 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES
OF THE
SECOND PLENARY MEETING

Tuesday, 5 November, 1963, at 9.30 a.m.

Chairman : Mr. Gunnar PEDERSEN (Denmark)

Subjects discussed :

1. Approval of the Agenda
2. Approval of the Minutes of the Opening Plenary Meeting (Document No. 74)
3. Second series of "blue" texts submitted by the Editorial Committee (Document No. 171)
4. Preliminary discussion of the first series of "blue" texts submitted by the Editorial Committee (Document No. 167)



The following countries were represented :

Algeria (Democratic and Popular Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.E.; Bulgaria (People's Republic of); Canada; China; Cyprus (Republic of); Vatican City State; Colombia (Republic of); Congo (Republic of the) (Léopoldville); Korea (Republic of); Cuba; Denmark; Group of Territories represented by the French Overseas Post and Telecommunication Agency; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Jamaica; Japan; Kuwait; Lebanon; Liberia; Luxembourg; Malaysia; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Uganda; Pakistan; Netherlands (Kingdom of the); Philippines (Republic of the); Poland (People's Republic of); Portugal; United Arab Republic; Federal Republic of Germany; Federal Socialist Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; South Africa (Republic of) and Territory of South-West Africa; Sweden; Switzerland (Confederation of); Tanganyika; Czechoslovak Socialist Republic; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Union of Soviet Socialist Republics; Kenya (Associate Member).

International Organizations

United Nations Organization; United Nations Educational, Scientific and Cultural Organization; World Meteorological Organization; Fédération Internationale des Editeurs de Journaux et Publications; International Broadcasting and Television Organization; European Broadcasting Union; International Amateur Radio Union.

International Telecommunication Union

General Secretariat, I.F.R.B., C.C.I.T.T., C.C.I.R.

1. Approval of the Agenda

The Chairman stressed the necessity of giving prior consideration to texts originating from Committee 6, so that these might be in the hands of the Drafting Committee at the earliest possible moment. To this end, he proposed that Document No. 171 be taken immediately after approval of the Minutes of the Opening Meeting.

The Delegate of the U.A.R. raised a point of procedure: the first item on the Agenda of the Conference, as established by the Administrative Council in consultation with Members of the Union was to examine the technical progress in the use of radiocommunications, and only in the light of this examination to decide on the allocation of frequency bands. He felt that allocations proposed by Committee 5 might be subject to modification after consideration of texts from Committee 4 and that it might be preferable first to study the latter.

The Chairman explained that the Agenda of the Conference was independent of the arrangement of the internal work of the Committees and that, in any case, the "blue" texts were not final. There would be the possibility of taking into account the result of examination of technical progress before the texts were issued in pink form.

The Agenda, in the order proposed by the Chairman, was adopted.

2. Approval of the Minutes of the Opening Plenary Meeting (Document No. 74)

Approved without comment.

3. Second series of "blue" texts submitted by the Editorial Committee (Document No. 171)

The Chairman of the Editorial Committee, requested delegates to hand in to his office any minor drafting changes, and not to raise these points in the Plenary Meeting.

The Chairman of Committee 6, introduced the document and recalled that the terms of reference given to Committee 6 were to prepare revised texts of the Radio Regulations to ensure efficient implementation of decisions of the Conference concerning the notification, registration and use of frequencies in the bands to be allocated to Space Services. The mandate of the Committee concerning radio astronomy also was to draw up additional provisions to this end.

The outcome of the work of the Committee appeared mainly in "blue" Documents Nos. 171 and 176, though Document No. 180, published that day, contained a Draft Recommendation from the Chairman of the Conference, relating to the work of Committee 6, which document would be considered in a later Plenary Meeting. He summarized the three main phases of the procedure prescribed by the Committee, as follows:

Firstly, in order to ensure that international satellite systems satisfied the interests and requirements of all countries and to enable the I.T.U. closely to follow their development in relation to telecommunication systems, an Administration, or group of Administrations would notify the I.F.R.B. of its intentions to use an international satellite system. The Board would then publish a general description of the system planned, for all Administrations concerned to comment upon it. Should any Administration have reason to believe that the system planned might give rise to harmful interference to its existing or projected space services, it should state its views, and the countries concerned would then endeavour to reach a satisfactory solution for the rational use of these bands and might request the Board to make any suggestions deemed appropriate.

The second step was co-ordination to be carried out by the countries intending to use a satellite system, and therefore wishing to establish earth stations. Such countries would have to undertake the co-ordination of their frequencies with those countries situated within co-ordination distance of the earth stations concerned. This co-ordination must be made before notification of the assignments to the Board for registration. This preliminary procedure had to be followed prior to any notification; where the Administration concerned so desired, the I.F.R.B. might carry out such co-ordination.

The third stage consisted of notification to the Board of assignments to earth and space stations once co-ordination had been made. The Board would intervene, in accordance with the provisions of new Article 9, to ascertain whether co-ordination had been carried out, or whether the Board should try to do it. It would also have to find out whether it was appropriate for a technical study to be made to ascertain the probability of harmful interference to stations of the fixed or mobile service sharing the bands with the space services, the provisions relating to which appeared in Article 9 MOD.

Part of the procedure was contained in Document No. 171, at present before the Meeting.

The Chairman went through Document No. 171 page by page and called for comments.

Page 6

A member of the I.F.R.B. proposed modifying 570AE c) to read as follows: ". . . service rendered by an earth receiving station . . . in conformity with the provisions of No. 639, and if the corresponding frequency assignment to the space transmitting station, has not, in fact . . . (unchanged)".

The Delegates of the United Kingdom and the United States supported this proposal, which was adopted.

Page 17

The Delegate of Australia referred to paragraph 2 of Section A of Appendix 1A and suggested modifying the last sentence along the following lines: "In the case of a passive satellite system, except for resonant satellites, only earth transmitting and receiving assignments shall be notified." His reason was that one source of interference in the radio spectrum which did not seem to be covered by the present text was caused by resonant passive satellites, known as needles, which could give rise to interference just as real as that caused by a transmitter and more harmful than that caused by a receiving station. Were such a modified text to be adopted by the Meeting, a corresponding amendment would have to be made to page 26, giving details for the purposes of frequency notification.

The Chairman was of the opinion that it would be useful to have available some written text for consideration by a small working group, and was supported in this view by the Delegate of the U.S.S.R.

As the Delegate of Sweden also believed that the point raised by the Delegate of Australia was quite important, the Chairman requested a small group to debate the problem during recess, under the guidance of the Head of the Swedish Delegation in which the following delegations would participate: Australia, United Kingdom, United States and the U.S.S.R.

Page 24

A member of the I.F.R.B. pointed out that item 6 would have to be amended according to the definitions to be finally adopted by the Plenary Assembly in Article 1 of the Radio Regulations. This would also apply to item 4 on page 27. It was understood that Committee 7 would undertake this task.

Page 31

The Delegate of the U.S.S.R. proposed, to avoid ambiguity, the deletion of the words "as appropriate" wherever they occurred in the table. This was agreed and also that the words "in Mc/s or Gc/s" should be included in parenthesis.

The Chairman of Committee 7 suggested the addition of "639AB and 639AC" to the footnote, to include radio transmission reception and the radio astronomy service. Agreed.

The Delegate of the Argentine Republic pointed out that, at the meeting of Committee 4 the previous day, certain modifications had been made to definitions of stations which would entail a corresponding change in the title of the table on page 31. It was agreed that this would be taken care of by Committee 7.

Page 34 A member of the I.F.R.B. stated that the Remarks column of the table should be revised in accordance with Article 1, when the latter was approved by the Plenary Assembly. This would apply also to pages 34, 36 and 38 and could be left to Committee 7.

Page 39 The observer of I.U.C.A.F. suggested that it was important to incorporate in table 9, concerning radio astronomy stations, details as to the type of antenna system used in radio astronomy observatories: whether fixed or steerable, as well as the actual dimensions, etc. He therefore proposed that a new column - column 5 - be added to the table to read "type and dimensions of antenna system used" and to re-number the original column 5.

This proposal was supported by the Delegate of Sweden.

The Delegate of Canada felt that this point could be usefully related to item 5 on Page 29, and suggested that a small working group could discuss this question.

The Chairman appointed this small group consisting of the Delegates of Canada and Sweden, the observer of I.U.C.A.F., and a member of the I.F.R.B. After the recess, the member of the I.F.R.B. announced that the Group had found satisfactory wording based on the document which would be submitted to the Drafting Committee.

Page 41 The Delegate of Italy considered that the wording of the paragraph "observing" in the Resolution was very vague and it was not at all clear which body of the Union would be responsible for the evaluation of information. This might give rise to conflict within the permanent organs and might lead to lengthy and costly discussions in the Administrative Council itself.

The Delegates of the Argentine Republic, Portugal, Belgium and Luxembourg supported the last speaker.

The Delegates of the U.S.S.R. and the United States were in favour of leaving the paragraph unchanged.

The Delegate of the United Kingdom suggested deleting the word "observing" and calling the paragraph in question "g)" of the "considering".

The Chairman set up a small group composed of the Delegates of the Argentine Republic, Italy, United Kingdom, the U.S.S.R. and the Chairman of the Drafting Committee. This group, after the recess, announced that it had accepted the proposal to call the paragraph "considering" "g)", and to change the wording to read " . . . and evaluated by the C.C.I.R., C.C.I.T.T. and the I.F.R.B."

The Delegate of Morocco agreed to this modification but considered that the Resolution contained two different substances and should be presented as two separate Resolutions, the first to finish at "resolves 2", relating to the provision of information, the second to start at "resolves 3", concerning the procedure of co-ordination in cases of harmful interference.

He was supported by the Delegate of the F.S.R. of Yugoslavia.

The Delegates of the Argentine Republic and of the United Kingdom did not see the utility in splitting the Resolution into two, and felt that one text would facilitate ready consultation.

The Chairman of Committee 7 pointed out that the two parts of "resolves" had considerations in common, and this would give rise to drafting problems.

The Delegate of the United States proposed a compromise; to add "and further resolves" between points 2 and 3, and to add the words "and Use" between "Provision" and "of" in the title of the Resolution.

As this proposal did not convince the Delegate of Morocco who maintained his opinion that the text should form two separate Resolutions, and at the suggestion of the Delegate of the U.S.S.R., the Chairman set up a small group, consisting of those delegates who had spoken on the Resolution, under the Chairmanship of the Chairman of Committee 6, which would endeavour to find a satisfactory solution to the problem by the afternoon's session.

The Delegate of the F.S.R. of Yugoslavia was of the opinion that the text of various Resolutions and Recommendations might be subject to amendment in the light of study of other documents and suggested that consideration of such texts should be left to the last. This point would also be reviewed by the Group.

Pending the result of discussions in the two small groups, Document No. 171 was provisionally adopted.

4. Preliminary discussion of the first series of "blue" texts submitted by the Editorial Committee (Document No. 167)

The Chairman of Committee 7 made a remark of a general nature with regard to all documents concerning frequency allocation tables, of which Document No. 167 was one. The other documents in question were, in particular, numbers 172 and 175. Many parts of the tables presented in the first "blue" documents only reflected a part of the decisions adopted by Committee 5, as that Committee had studied the table service by service and not band by band. It was the task of the Drafting Committee to present the data in the latter form, as prescribed by the Radio Regulations. At its last meeting, the previous day, Committee 5 had considerably modified allocations in certain parts of the tables and, as an example, he pointed out that, in Document No. 167, the table at the bottom of page 1 and those on pages 4 and 7, would have to be deleted.

In view of the explanation by the Chairman of Committee 7, the Delegate of the U.S.S.R. suggested it would be a more convenient and time-saving procedure to review the Allocation Tables only when the Drafting Committee had been given the time to present them band by band.

The Chairman of Committee 5, pointed out that in the presentation contained in the documents just referred to, in no case were the same portions of the frequency bands concerned, because in cases of shared bands, the three Working Groups concerned with the study of the various services had always co-ordinated to facilitate the work. Committee 5 had considered and taken decisions on all proposals concerning individual Space Services and the radio astronomy Service. The work had been completed the previous day, thanks to the excellent preparation by the three Working Groups and by special ad hoc groups. The proposals put forward to the Plenary Meeting had, in part, been unanimously agreed, or were partly based on a sounding of majority views on a worldwide or region-wide basis and sometimes based on formal votes.

In conclusion, he suggested that the best procedure would be to take up consideration of one band after another and he would be glad to give information about the situation in each, as and when it was studied.

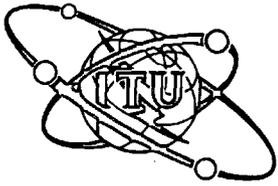
Further consideration of Document No. 167 was deferred to a later Plenary Meeting.

The Meeting rose at 12.30 p.m.

Rapporteur
R. UMBERG

The Secretary of the Conference
C. STEAD

Chairman
G. PEDERSEN



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 214-E
7 November 1963
Original : French

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

REPORT BY THE BUDGET CONTROL COMMITTEE

The Budget Control Committee met twice during the Space Conference and considered the various points arising from its terms of reference.

At the first meeting, the Committee created a Working Group, under the chairmanship of Mr. Caruso (Italy), in the work of which Delegates of Belgium, the U.S.A., the Roumanian P.R. and the United Kingdom took part. The responsibility of this Committee was to examine in detail the Conference budget and expenditure.

As a result of this work, and in accordance with Article 5 of Chapter 9 of the General Regulations annexed to the International Telecommunication Convention, Geneva, 1959, the present report is submitted to the Plenary Assembly for consideration.

1. Conference Budget (Document No. 53)

The Budget Control Committee noted the Conference budget, which was adopted by the Administrative Council at its 18th session, 1963.

2. Statement of Conference expenditure

In accordance with Rule 5 of Chapter 9 of the General Regulations, the Budget Control Committee shall present to the Plenary Assembly a report showing, as accurately as possible, the estimated total expenditure at the close of the Conference.

In accordance with these provisions, a statement showing the budget approved by the Administrative Council, the credit transfers and actual commitments up to 4 November 1963 for account of the Space Radio-communication Conference is submitted to the Plenary Meeting for examination. This statement, which is shown at Annex 2 to the present document, is supplemented by the actual commitments up to this same date and the estimated expenditure up to the close of the Conference, on the assumption that the Conference closes on Friday, 8 November, 1963.



It may be seen from this statement that the total expenditure is estimated at 1,070,000.-- Swiss francs, leaving a margin over the budget approved by the Administrative Council (1,075,000.-- Swiss francs) of 5,000.-- Swiss francs.

In accordance with the provisions of No. 575, Article 5, Chapter 9 of the General Regulations annexed to the International Telecommunication Convention, Geneva, 1959, the present report will be forwarded, together with the observations of the Plenary meeting, to the Secretary-General for transmission to the Administrative Council at its next annual session.

The report of the Working Group of Committee 3 on the estimates of expenditure of the Conference is attached to Annex 1 to the present report.

3. Publication of the Final Acts of the Conference

In regard to publication of the Final Acts of conferences, Resolution No. 83 of the Administrative Council provides :

"If a conference or meeting prints, for its own use, documents of which typographical composition can subsequently be used, in whole or in part, for the printing of the Final Acts, it must bear a percentage of the composition costs and the whole of the printing costs of the said documents.

The percentage of the composition cost shall be decided by the Plenary Assembly of the Conference."

After discussion, the Budget Control Committee proposes to the Plenary Assembly that the composition cost of the Final Acts should be allocated as follows :

1/3 against the Space Radiocommunication Conference

2/3 against the sale of I.T.U. documents.

* * *

A statement of the recognized private operating agencies, of the scientific or industrial organizations and of the international organizations taking part in the Conference, together with the number of contributory units chosen, is contained in Annex 3 hereto.

Chairman :

B. IONITA

A N N E X 1

REPORT

BY THE WORKING GROUP OF COMMITTEE 3

1. The Working Group of Committee 3 (Budgetary Control) set up at the first meeting of that Committee (Document No. 89), met on 31 October and 6 November, 1963 to examine the budget of the Conference.

The following delegations took part in the work of the Group: Belgium, United States, the Roumanian P.R., and the United Kingdom. The Secretariat was represented by Mr. Prélaz, Head of Administrative Services of the Conference and by Mr. Monti, Head of the Bureau of the I.F.R.B. Mr. A. Caruso (Italy) acted as Chairman.

2. The Group examined the expenditure of the Conference as at 24 October, 1963 and 4 November, 1963, and the estimated expenditure up to the closing of the Conference.

The expenses were examined section by section and item by item, in the light of information and explanations provided by the representatives of the Secretariat.

3. The Group felt that it might be useful to indicate the reasons put forward to justify the amounts shown under various items in the budget as overtime for conference staff. The reasons were :

- a) The assimilation of I.T.U. salaries into the United Nations common system was automatically reflected in the overtime rates.
- b) The need to keep a certain number of staff in the various sections throughout the time when delegates were present at the Conference Building, so as to be certain of being able to cope at all times with urgent requests from the Chairmen of Committees, Working Groups and Sub-Groups, in connection with the preparation of documents.
- ~~c) The decision of the Conference to work on Saturdays.~~

- d) The decision of the Conference to organize its work by radio services rather than by frequency band, which entailed the rearrangement and publication of all proposals concerning the table of frequency allocation by services (see Documents Nos. 17, DT 10 - DT 13 and DT 15 - DT 17).
- d) The decision of the Conference to organize its work by radio services rather than by frequency band, which entailed the rearrangement and publication of all proposals concerning the table of frequency allocation by services (see Document No. 17).

4. The Working Group considered that the presentation of the statement of expenditure should be slightly amended by the addition of a new column showing, for each item, the expenditure already incurred but not payable until the end of the Conference.

5. The Working Group, considering that certain miscellaneous expenses - such as the decoration of the front of the Conference building - and others could not be correctly debited under budgetary sub-head 7.509, Unforeseen, requested that the expenses concerned be transferred to the appropriate sub-head (7.505. Premises, furniture, machines).

6. At the 1st Meeting of Committee 3, credit transfers from article to article amounting to 58,000 Swiss francs had been approved. The Working Group draws the attention of the Committee to the fact that, on the basis of the estimate of expenditure at 4 November, 1963, credit transfers from article to article amounting to only 31,000, Swiss francs will be necessary.

7. The Working Group requests Committee 3 to approve the budget of the Extraordinary Administrative Conference on Space Radiocommunication as set out in Annex 1 to the present report, showing a total expenditure of 1,070,000.- Swiss francs, which falls within the figure of 1,075,000.- Swiss francs approved by the Administrative Council of the I.T.U.

8. A list of the recognized private operating agencies, scientific or industrial organizations, and international organizations taking part in the Conference, together with the number of contributory units chosen, is contained in Annex 3 hereto.

A. CARUSO
Chairman of the Working Group

A N N E X 2

STATEMENT OF EXPENDITURE FOR THE SPACE RADIOCOMMUNICATION CONFERENCE AT 4 NOVEMBER 1963

Articles and subheads	Budget approved by the C.A.	Credit transfers from sub-head to subhead	Credit transfers from article to article	Total credits available	Actual expenditure at 4. 11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
<u>Article I Staff</u>								
<u>7.501 Administration</u>								
- Salaries					45,769.25	18,846.05	8,520.--	73,135.30
- Travel					1,059.05	475.10	100.--	1,634.15
- Overtime					34,316.90	12,000.--	17,000.--	63,316.90
- Other expenses						2,000.--	913.65	2,913.65
	115,000.--	+ 26,000.--	--	141,000.--	81,145.20	33,321.15	26,533.65	141,000.--
<u>7.502 Language service</u>								
- Salaries					302,895.30	118,958.--	4,707.--	426,560.30
- Travel					22,275.15	2,649.85	143.--	25,068.--
- Overtime					11,980.55	5,000.--	10,000.--	26,980.55
- Other expenses					438.75	1,700.--	7,252.40	9,391.15
	500,000.--	- 76,000.--	-31,000.--	493,000.--	337,589.75	128,307.85	22,102.40	488,000.--
<u>7.503 Document Reproduction</u>								
- Salaries					35,401.--	12,666.--	9,396.--	57,463.--
- Travel					--	--	--	--
- Overtime					21,824.55	5,000.--	10,000.--	36,824.55
- Other expenses					--	300.--	412.45	712.45
	50,000.--	+ 45,000.--	--	95,000.--	57,225.55	17,966.--	19,808.45	95,000.--
<u>7.504 Insurance</u>								
- Accident insurance					--	3,000.--	--	3,000.--
- Pension Fund/Sickness insurance					1,879.90	3,868.30	251.80	6,000.--
	4,000.--	+ 5,000.--	--	9,000.--	1,879.90	6,868.30	251.80	9,000.--
TOTAL, ARTICLE I	769,000.--	--	-31,000.--	738,000.--	477,840.40	186,463.30	68,696.30	733,000.--

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Articles and Subheads	Budget approved by the C.A.	Credit transfers		Total credits available	Actual expenditure at 4.11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
		from subhead to subhead	from article to article					
<u>Article II. Premises and equipment</u>								
<u>7.505 Premises, furniture, machines</u>								
- Renting of premises					-.	50,400.--	-.	50,400.--
- Lighting					-.	10,000.--	-.	10,000.--
- Installation					507.70	15,247.30	-.	15,755.--
- Hiring of furniture and machines					824.--	7,270.--	-.	8,094.--
- Machine maintenance and repairs					-.	-.	2,000.--	2,000.--
--Transport					5,905.60	-.	100.--	6,005.60
- Miscellaneous					- 14.25	200.--	559.65	745.40
	70,000.--	+23,000.--	-.	93,000.--	7,223.05	83,117.30	2,659.65	93,000.--
<u>7.506 Document production</u>								
- Paper					19,105.75	4,200.--	8,500.--	31,805.75
- Stencils					3,278.25	400.--	1,000.--	4,678.25
- Ink					2,465.--	-.	-.	2,465.--
- Offset workshop					666.65	2,000.--	3,000.--	5,666.65
- Final documents					-.	-.	40,000.--	40,000.--
- Miscellaneous					2,330.--	260.--	2,794.35	5,384.35
	75,000.--	+ 1,000.--	+14,000.--	90,000.--	27,845.65	6,860.--	55,294.35	90,000.--
<u>7.507 Office supplies and overheads</u>								
- Office supplies					14,001.45	250.--	-4,500.--	9,751.45
- Postage					1,258.45	-.	4,000.--	5,258.45
- Telephone					- 72.70	2,500.--	500.--	2,927.30
- Telegrams					150.05	-.	1,000.--	1,150.05
- Removal costs					471.50	-.	1,000.--	1,471.50
- Guides, badges etc.					7,493.40	90.--	-.	7,583.40
- Night taxis					542.35	500.--	500.--	1,542.35
- Miscellaneous					- 163.40	875.--	1,603.90	2,315.50
	40,000.--	- 8,000.--	-.	32,000.--	23,681.10	4,215.--	4,103.90	32,000.--
<u>7.508 Simultaneous interpretation and other technical equipment</u>								
- Hiring I.T.U. equipment					-.	13,000.--	-.	13,000.--
- Tapes					-.	-.	1,000.--	1,000.--
- Installation costs					48.40	5,000.--	-.	5,048.40
- Removal costs					105.--	-.	846.60	951.60
	25,000.--	- 5,000.--	-.	20,000.--	153.40	18,000.--	1,846.60	20,000.--
<u>7.509 Unforeseen</u>								
	21,000.--	-11,000.--	-.	10,000.--	2,225.95	2,410.--	5,364.05	10,000.--
TOTAL, ARTICLE II	231,000.--	-.	+14,000.--	245,000.--	61,129.15	114,602.30	69,268.55	245,000.--

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Articles and sub-heads	Budget approved by the C.A.	Credit transfers from sub-head to sub-head	Credit transfers from article to article	Total credits available	Actual expenditure at 4.11.63	Commitments at 4.11.63	Estimated expenditure	Total estimated expenditure
<u>Article III. Preparatory work</u>								
<u>7.510 I.F.R.B. preparatory work</u>								
- Staff					13,929.65	2,626.60	-.--	16,556.25
- Mission expenses					1,000.75	-.--	-.--	1,000.75
- Equipment					247.50	-.--	-.--	247.50
- Miscellaneous					-.--	-.--	195.50	195.50
	40,000.--	-22,000.--	-.--	18,000.--	15,177.90	2,626.60	195.50	18,000.--
<u>7.511 Preparation and despatch of preparatory documents</u>								
- Staff expenses								
Salaries					26,320.85	-.--	-.--	26,320.85
Travel					721.50	-.--	-.--	721.50
Overtime					8,865.10	-.--	-.--	8,865.10
Offset workshop					4,197.10	3,370.10	-.--	7,567.20
- Service taxi					300.45	-.--	-.--	300.45
- Supplies and equipment					18,174.55	-.--	-.--	18,174.55
- Despatch					12,050.35	-.--	-.--	12,050.35
	35,000.--	+22,000.--	+17,000.--	74,000.--	70,629.90	3,370.10	-.--	74,000.--
TOTAL, ARTICLE III.	75,000.--	-.--	+17,000.--	92,000.--	85,807.80	5,996.70	195,50	92,000.--
TOTAL SECTION 7.5 SPACE CONFERENCE	1,075,000.--	-.--	-.--	1,075,000.--	624,777.35	307,062.30	138,160.35	1,070,000.--

MARGIN IN RELATION TO
THE BUDGET

5,000.--

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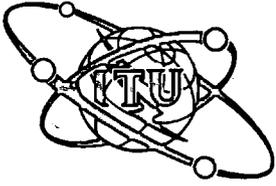
A N N E X 3

LIST OF RECOGNIZED PRIVATE OPERATING AGENCIES, SCIENTIFIC OR
INDUSTRIAL ORGANIZATIONS AND INTERNATIONAL ORGANIZATIONS
TAKING PART IN THE CONFERENCE

	<u>No. of contributory units</u>
<u>1. Recognized private operating agencies</u>	
Companhia Portuguesa Radio Marconi.....	1/2 unit
Italcable	*)
Cable and Wireless	1 unit
American Cable and Radio Corp.	1/2 unit
France Cables et Radio	*)
Compagnie générale de télégraphie sans fil	1/2 unit
<u>2. International organizations</u>	
United Nations	**)
International Civil Aviation Organization	**)
United Nations Educational, Scientific and Cultural Organization	**)
World Meteorological Organization	**)
International Air Transport Association	**)
International Chamber of Shipping	**)
International Radio-Maritime Committee	**)
Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science	**)
Committee on Space Research	**)
International Council of Scientific Unions	**)
Federation internationale des éditeurs de journaux et publications	**)
International Broadcasting and Television Organization ...	**)
European Broadcasting Union	**)
International Amateur Radio Union	**)
International Scientific Radio Union	**)

*) The Secretariat has not yet been informed of the choice of contributory class.

***) Exempt from any contribution under the terms of Administrative Council Resolution No. 22 (amended).



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 215-E
8 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES
OF THE
THIRD PLENARY MEETING

Tuesday, 5 November at 14.30 hours

Chairman : Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen : Mr. Ashot BADALOV (U.S.S.R.)
Mr. Joseph H. McCONNELL (U.S.A.)

Secretary of the Conference : Mr. Clifford STEAD

Subjects discussed :

1. Second series of "blue" texts submitted by the Editorial Committee - conclusion of discussion (Document No. 171)
2. Draft Recommendation by the Chairman of the Conference (Document No. 180)
3. First series of "blue" texts submitted by the Editorial Committee (Document No. 167)
4. Third series of "blue" texts submitted by the Editorial Committee (Document No. 172 and Addendum)



The following countries were represented :

Algeria (Democratic and Popular Republic of), Argentine (Republic), Australia (Commonwealth of), Austria, Belgium, Bielorussian S.S.E., Bulgaria (People's Republic of), Cambodia (Kingdom of), Canada, China, Cyprus (Republic of), Vatican City State, Colombia (Republic of), Congo (Republic of the)(Léopoldville), Korea (Republic of), Cuba, Denmark, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Spain, United States of America, Ethiopia, Finland, France, Ghana, Greece, Hungary (People's Republic of), India (Republic of), Indonesia (Republic of), Iran, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Kuwait, Lebanon, Liberia, Luxembourg, Malaysia, Morocco (Kingdom of), Mexico, Norway, New Zealand, Uganda, Pakistan, Panama, Netherlands (Kingdom of the), Philippines (Republic of the), Poland (People's Republic of), Portugal, United Arab Republic, Federal Republic of Germany, Federal Socialist Republic of Yugoslavia, Ukrainian Soviet Socialist Republic, Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, South Africa (Republic of) and Territory of South-West Africa, Sweden, Switzerland (Confederation of), Tanganyika, Czechoslovak Socialist Republic, Territories of the United States of America, Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Union of Soviet Socialist Republics, Kenya (Associate Member).

Recognized Private Operating Agencies :

Cable and Wireless.

International Organizations :

International Civil Aviation Organization, World Meteorological Organization, Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science, Committee on Space Research, Fédération Internationale des Editeurs de Journaux et Publications, International Broadcasting and Television Organization, International Amateur Radio Union, International Scientific Radio Union.

1. Second series of "blue" texts submitted by the Editorial Committee.
Conclusion of discussion (Document No. 171)

At the invitation of the Chairman, the Delegate of Argentina, who had presided the ad hoc Working Group set up to study the Draft Resolution appearing on pages 41 to 43 of Document No. 171, reported to the Meeting on the outcome of its deliberations. The Group had been composed of Delegates from the United Kingdom, the United States of America, the U.S.S.R. and Italy; unfortunately the Delegate of Morocco had not attended the Meeting. Agreement had been reached on some small amendments which would be submitted to the Editorial Committee, and the insertion of "and use" after "provision" in the title.

The Delegate of Morocco apologised for his absence from the Working Group Meeting. He had been attending another meeting elsewhere. He proposed that the draft resolution concerned be split up into two parts, and suggested that his amendment be passed to the Editorial Committee.

The Chairman said that it would not be procedurally correct for the Editorial Committee to be asked to handle a proposal from the floor. A decision should first be taken by the Plenary Meeting as to which amendments were acceptable.

The United Kingdom recalled that the matter had been given thorough discussion at the second Plenary Meeting, and the various viewpoints put forward. A Working Group had also been set up to consider the matter during the lunch hour and its chairman had reported on the outcome thereof. In his opinion, the Meeting should now proceed with consideration of the conclusions reached by that Working Group and which the United Kingdom fully supported.

A vote was then held on the Draft Resolution appearing on pages 41 - 43 of Document No. 171 as amended by the ad hoc Working Group; by 50 votes to 2, with 5 abstentions, it was approved.

The Delegate of Morocco requested that, in view of the vote, his proposal be recorded in the Minutes of the Meeting (see Annex 1).

The Chairman then invited the Delegate of Sweden, Chairman of the second ad hoc Working Group which had been set up that morning, to report to the Meeting.

The Delegate of Sweden said that the Working Group had held two meetings. It had decided to follow the Chairman's ruling that the proposal by the Australian Delegation should be issued as an official document of the Conference and it had appeared as Document No. 190. The technical and

other aspects of the proposal had been discussed but no agreement had been reached on a recommended course of action. The majority view had been that the text of blue Document No. 171 should remain unaltered. On the other hand, however, it had been agreed that the Australian proposal should be placed before the Plenary Meeting. He suggested that it might be advisable to allow delegates some time in which to study the proposal before it was discussed.

The Chairman said that he sympathised with that point of view but could not postpone consideration of the document to a later meeting in view of the timetable. He could, however, suspend the Meeting to give delegates a short time in which to study Document No. 190.

After a thirty-minute recess, the Chairman re-opened the discussion on Document No. 190.

The Delegate of New Zealand said that the Australian Delegate had raised a very interesting point. However, it would be impractical at that stage for the proposal to be adopted since it would entail a considerable amount of redrafting. He suggested that the Australian Delegation might be content with having raised the point, it being understood that the matter could be put before a future Radio Conference if he so desired.

The Delegate of Australia, in reply to a question from the Chairman, said that he understood that his proposal would entail more redrafting than he had at first thought and, since he had the right to place the matter before a subsequent conference, he would be content for the time being with the publication of Document No. 190 as an official conference document.

The Delegate of U.S.S.R. expressed his support of the decision to publish the Australian proposal in the form of an official document.

2. Draft Recommendation by the Chairman of the Conference (Document No. 180)

The Chairman said that, as was apparent from the statement made at the second Plenary Meeting by the Chairman of Committee 6, no agreement had been reached on Documents No. 32 submitted by the U.S.S.R., No. 39 by Israel and No. 109 by U.S.A. concerning the situation in the future with regard to space radiocommunications and the convening of a future Extraordinary Administrative Radio Conference to deal with that subject.

To facilitate the work of the Plenary Meeting, he had consulted a number of delegates and could now present a compromise text based on the three documents to which he had referred; that compromise text appeared in Document No. 180.

The Delegate of New Zealand congratulated the Chairman on the Draft Recommendation before the Meeting. Further development of space services was inevitable and his Delegation was of the opinion that the Recommendation before them was in the interests of all administrations and their obtaining maximum benefit from progress in technology. His Delegation therefore warmly supported the Draft Recommendation before the Meeting.

The Delegations of Belgium, Luxembourg, the Netherlands and Israel supported the draft recommendation contained in Document No. 180.

The Delegate of the United Arab Republic also warmly supported the proposed recommendation. He suggested, however, that in view of the reference in the second paragraph to frequency bands having been allocated, it was a little premature to finalise such a recommendation.

The Chairman pointed out that ~~that~~ point was covered since the recommendation would not come into force until the Final Acts of the Conference were signed and the allocations had become valid.

The Delegate of Italy could not agree to the word "proposals" in the last line of paragraph 1 under "recommends", which he felt should read "projects" or "recommendations". He did not see how administrations could submit proposals to the permanent organs of the Union.

The Delegate of U.S.S.R. said that, although the proposal contained in Document No. 180 did not entirely satisfy his Delegation's point of view, if the majority supported it he would raise no objection provided the text of paragraph 1 under "recommends" remained unaltered.

It was agreed to leave the wording of that paragraph for the consideration of the Editorial Committee, on the understanding that the opposition of the Delegation of Italy would be recorded in the minutes of the meeting.

The Delegate of India supported the substance of the proposal but requested clarification in regard to paragraph 2 under "recommends".

At the request of the Chairman, the Deputy Secretary-General explained that it was current practice for the permanent organs of the Union, including the I.F.R.B., to report to the Administrative Council each year on developments and progress in space telecommunications with particular reference to the action being taken by them in that connection. These reports also enabled the Council to report to E.C.O.S.O.C. each year in accordance with Resolution 1721 of the General Assembly of the United Nations. The purpose of paragraph 2 under "recommends" was thus to prescribe a procedure very similar to that which was already in force.

The Chairman of the I.F.R.B. referred to No. 477 of Article 8 of the Radio Regulations. He stated that the text of the draft recommendation proposed appeared to be quite appropriate in reference to the I.F.R.B., which clearly had the authority to make recommendations concerning its work particularly to the Administrative Council.

The Delegate of the F.S.R. of Yugoslavia fully supported the substance of the proposed recommendation in Document No. 180 but felt that all draft recommendations and resolutions should be given a final review when the conference had exhausted its agenda.

The Chairman said that it would be quite in order for comments to be made on the recommendation later when it came before the Plenary Meeting in final form.

The Delegate of Algeria also favoured a final review of all recommendations and resolutions of the Conference after completion of their agenda.

In reply to a question from the Delegate of Morocco who, while agreeing with the principle of the draft recommendation, considered the provisions of paragraph 1 under "and further recommends" superfluous, the Chairman said that, as the matter had been referred to in several documents, he considered it useful to make the situation perfectly clear by retaining the wording concerned.

The Delegate of the United States of America expressed appreciation of the Chairman's efforts in submitting Document No. 180 to the meeting and his whole-hearted support of the draft recommendation contained therein.

The Delegate of Ethiopia while also supporting the draft recommendation, reserved the position of his delegation in the matter since no alternative proposals had been considered.

The Delegate of Cuba attached great importance to the draft recommendation but also reserved the position of his delegation.

The draft recommendation contained in Document No. 180 was approved for submission to the Editorial Committee.

3. First series of "blue" texts submitted by the Editorial Committee
(Document No. 167)

The Chairman pointed out that some parts of the "blue" texts were not appropriate for consideration by the Plenary since they had been amended at the last meeting of Committee 5. He indicated those parts of the document which were for the consideration of the Plenary Meeting.

Page 01: 9 995 - 10 005 kc/s - approved

Page 02: 30 005 - 30 010 Mc/s - approved

Page 03

The Chairman of Committee 5 pointed out that there had been lengthy discussion of the band in Working Group 5C and the text before the Plenary Meeting was the result of a vote. There had not been a great majority, however, in favour of that text.

The Delegate of U.S.S.R said that his delegation had reserved its opinion during the discussion in Committee 5. In addition to footnote 279A, the Working Group had considered footnote 279B appearing in Document No. 95 together with a draft resolution to the effect that the C.C.I.R. should study

and recommend upon the technical principles of the use of space satellites by radio amateurs, to avoid harmful interference. The U.S.S.R. favoured the inclusion of footnote 279B.

The Delegates of Italy, Portugal, the United Arab Republic, Belgium, Luxembourg, Liberia, India and Cuba said that they could not accept the second sentence of footnote 279A as it appeared in the document before the meeting, since in their countries the PTT administrations co-ordinated frequency usage and radio amateur organisations could not be made responsible for doing so.

The Delegate of Israel shared these views and moved the deletion of the second sentence of footnote 279A.

The Delegate of Morocco also shared those views and suggested that, while mention of national amateur organisations should be deleted, the reference to Article 41 might be retained.

The Delegate of the United States of America explained that the working group's intention in the sentence concerned had been to encourage radio amateur organisations to co-ordinate such frequency usage among themselves in addition to the normal co-ordination carried out independently by national administrations.

The Delegate of Portugal said that it was not for the Conference to establish rules for radio amateurs; they decided such matters for themselves.

The Delegate of U.S.S.R. referred to Document No. 140 of the Radio Regulations and said that his delegation favoured the retention of the second sentence of footnote 279A since it did not in any way limit the rights of national administrations.

The Delegates of Italy, Israel and Belgium insisted on the deletion of that sentence. The Chairman proposed, as a compromise, that footnote 279A be amended to read: "In the band 144 - 146 Mc/s, space satellites may be used on a co-ordinated basis by the Amateur Service."

The Delegate of the F.S.R. of Yugoslavia thought that non-essential transmissions such as those of radio amateurs, which would be on a world-wide basis when using space satellites, might cause harmful interference, not only to other radio amateurs, but also to essential services. It was for that reason that the working group had decided to include the sentence together with a reference to the provisions of Article 41. Obviously national administrations had to approve of the activities of the radio amateurs of their countries in accordance with Article 41.

The Delegate of the United Kingdom was content with the wording of the footnote as it appeared in the document before the meeting. If there was a measure of support for the Chairman's compromise text, his Delegation could also support that. In view of the fact that the meaning of footnote 279A

did not appear to be self-evident, he suggested that the draft resolution to which the Delegate of the U.S.S.R. had referred, and which appeared in Document No. 95, should be given further consideration and perhaps amplified.

The Delegate of Portugal could not agree with the Chairman's compromise text; co-ordination would be difficult if thousands of radio amateurs were using space satellites on a world-wide basis. The only possible result would be harmful interference. He could only accept the deletion of the second sentence from footnote 279A.

The Chairman announced that a vote would be taken on the amendment the furthest removed from the original proposal, which was the deletion of the second sentence of footnote 279A.

By 42 in favour and 18 against, with 3 abstentions, it was decided to delete the second sentence of footnote 279A.

The Chairman then opened discussion on the U.S.S.R. proposal to insert footnote 279B and the relevant draft resolution contained in Document

The Delegates of the United Kingdom, the Czechoslovak Socialist Republic and the United States of America supported that proposal, while the Delegates of Portugal and Denmark expressed their opposition.

The Delegate of Italy, supported by the Delegate of France, said 95 was not on the agenda of the meeting. Those countries wishing the C.C.I.R. to study the subject were quite free to request it to do so; according to the Convention such a request would be complied with if emanating from 12

The Delegate of Belgium referred to Document No. 107 from the International Amateur Radio Union which, in his opinion, should not have been published as a conference document. He saw no reason why the conference should recommend co-ordination of radio amateur frequency usage in view of the contents of that document, particularly in view of the essential nature of the services with which Administrations, Members of the Union, had to deal, such as safety of life, space services and essential fixed and mobile services. He was therefore opposed to the draft resolution contained in Appendix 2 to Document

The Delegate of the People's Republic of Poland said that if no co-ordination among national amateur organisations was provided for, his delegation would have to reserve its position on the band concerned.

On a point raised by the Delegate of Uganda, the Delegate of the U.S.S.R., speaking as sponsor of the proposal, said that Article 41 had in no way been overlooked. The draft resolution merely requested the C.C.I.R. to give attention to the use of space satellites by radio amateurs.

The Delegate of Italy, supported by the Delegates of Portugal and Belgium, requested that, since the point at issue entailed expenditure for Members of the Union, the vote be taken by roll-call.

A roll-call vote was then taken on footnote 279B and the relevant draft resolution contained in Document No. 95.

The results were as follows:

For: 23 Algeria (Democratic and Popular Republic of);
Bielorussian (Socialist Soviet Republic of);
Bulgaria (People's Republic of); Colombia (Republic
of); Cuba; United States of America; Hungary
(Popular Republic of); India (Republic of); Liberia;
Norway; New Zealand; Uganda; Pakistan; Poland
(People's Republic of); Federal Socialist Republic
of Yugoslavia; Roumanian People's Republic; Great
Britain and Northern Ireland; Tanganyika;
Czechoslovak Socialist Republic; Territories of the
United States of America; Overseas Territories of
Great Britain; Union of Soviet Socialist Republics;
Ukrainian Soviet Socialist Republic.

Against: 38 Argentine (Republic); Australia; Austria; Belgium;
Canada; China; Cyprus (Republic of); Vatican City
State; Korea (Republic of); Denmark; French Overseas
Territories; Spain; Ethiopia; Finland; France; Ghana;
Indonesia (Republic of); Iceland; Israel (State of);
Italy; Jamaica; Japan; Kuwait; Lebanon; Principality
of Liechtenstein; Luxembourg; Malaysia; Morocco
(Kingdom of); Mexico; Monaco; Netherlands; Portugal;
Spanish Provinces in Africa; United Arab Republic;
Federal Republic of Germany; South African Republic
and Territory of South West Africa; Sweden;
Switzerland (Confederation of).

Abstention: Ireland.

With the deletion of the second sentence of footnote 279A and the correction of "SUP" to read "MOD" before footnote 279, page 05 was approved.

Page 05: 174 - 216 Mc/s. Approved.

Page 06: 401 - 402 Mc/s and footnotes 314, 315, 315A, 315B and 316 approved, subject to drafting changes and the deletion of Pakistan from footnote 315B.

Page 07: All bands with the exception of 450 - 470 Mc/s and footnote 319A Approved.

Page 08: Approved.

Page 09: 1525 - 1535 Mc/s. The Chairman of the I.F.R.B. gave a clarification of the interpretation given by the I.F.R.B. to footnotes and referred to the explanation that had been given by representatives of the I.F.R.B. in Committee 5. He then proposed that footnotes 350C, 350D, and 350E read as follows so that the footnotes would follow the standard terminology used:

- ADD 286A In the United Kingdom the band 150.05 - 151 Mc/s is allocated to Radio Astronomy and the band 151 - 153 Mc/s is allocated to Radio Astronomy on a primary basis and Meteorological Aids service is a secondary service; however, in this band the provisions of No. 274 apply.
- ADD 350C In Albania, Bulgaria, France, Hungary, Lebanon, Morocco, Poland, United Arab Republic, Yugoslavia, Rumania, Czechoslovakia and the U.S.S.R., the mobile, except the aeronautical mobile service in the band 1525 - 1535 Mc/s is a primary service. As regards the category of this service, see Resolution No.
- ADD 350D In Cuba, the mobile service in the band 1525 - 1535 Mc/s is a primary service.
- ADD 350E In Japan, the mobile service in the band 1525 - 1535 Mc/s is a primary service until 1 January 1969.

Since the suggested re-wording was not supported, the Chairman considered it was not necessary at this late date to revise the text since this was not a matter of substance and there was no objection to the suggestion or the interpretation given by the Chairman of the I.F.R.B.

Approved with the addition of Lebanon and Morocco in footnote 350C.

On a point raised by the Delegate of Sweden, it was agreed that the Editorial Committee would add a reference "SUP" to footnote 280 wherever necessary throughout the document.

The Delegates of the Federal Socialist Republic of Yugoslavia and Morocco requested the insertion of a new footnote in connection with band 1535 - 1540 Mc/s to the effect that, in their countries, that band was also allocated to Aeronautical Radionavigation.

Page 11: Approved, with the deletion of Ethiopia from footnote 356A.

Page 12: Approved, with the addition of Lebanon and Morocco in footnote 364A and Algeria in footnote 364B and the deletion of the last sentence of footnote 365 which had become redundant due to new Regulation 116A.

Page 13: 4990 - 5000 Mc/s. Approved with the deletion of the second sentence of footnote 365.

Page 14: Approved.

Page 15: Approved, subject to the deletion of New Zealand, Cyprus and Ethiopia and the addition of Belgium and Luxembourg in footnote 394B.

Page 17: Draft Resolution. Approved subject to the insertion of "that" at the beginning of paragraph d) of the consideranda.

As amended, the first series of "blue" texts (Document No. 167) was approved.

4. Third series of "blue" texts submitted by the Editorial Committee (Document No. 172 and Addendum)

Page 01: Approved.

Page 02: The Chairman of Committee 5 explained that majority agreement had been reached in that Committee on footnote 373. One or two countries had, however, insisted on the text of footnote 373 shown in the Addendum to Document No. 172. Both texts were therefore submitted to the Plenary Meeting.

As to the views of the Delegation of Switzerland, they were quite satisfied with the footnote as shown on page 02 of the document.

The Delegate of Denmark said that the subject had been discussed at length in Committee 5 and in an ad hoc group of that Committee but it had proved impossible to find wording to cover the point which had been raised by the Delegate of Sweden, although there was no disagreement of substance.

The Delegate of Israel thought that "equality" should be replaced by "equal rights" in footnote 373 to bring the wording into line with that adopted elsewhere.

The Delegate of the U.S.S.R. said that his Delegation had insisted at the working group that the existing wording of the Radio Regulations be retained. In view, however, of the concern expressed by the Delegates of Sweden and Switzerland he was prepared, as a compromise, to accept mention of those countries in footnote 373.

The Delegate of Norway said that footnote 373 as it appeared in Document No. 172 did not fully meet protection requirements for the continued use of that band by the radiolocation service in Norway. With regard to the allocations proposed in the band 3400 - 3600 Mc/s he wished to inform the Conference that for several years Norway had been operating radiolocation stations occupying part of that band. It was for that reason that footnote 373 had been requested at the 1959 Ordinary Administrative Radio Conference. Coordination between that service and the fixed and mobile services had been carried out successfully. Since the effect of high power radiolocation stations on the new communication-satellite service at present seemed

uncertain with regard to interference range, the Norwegian Delegation drew the attention of other countries not listed in footnote 373 to the fact that Norway operated radiolocation stations in that band and could not terminate such operation or transfer the service elsewhere. To enable agreement to be reached on the frequency band concerned, the Norwegian Delegation would agree with the footnote as it stood in Document No. 172. If difficulties arose, Norway was prepared to discuss matters and attempt to reach satisfactory solutions with those concerned. The Norwegian Delegation reserved its position, however, in that connection and the right to revert to the matter at a later stage.

The Delegate of Denmark said that the situation in his country with regard to the use of the band concerned was similar to that prevailing in Norway, and he associated his Delegation with the statement just made. In his opinion, the text of the footnote contained in the Addendum reflected the situation correctly. He would not press for a vote on the choice between the two versions of the footnote but reserved the right of his Delegation to revert to the matter in Plenary or at the time of signature of the Final Acts of the Conference.

The Delegate of Sweden said that the situation in his country was also similar to that of Norway and Denmark. He would prefer the wording of the footnote given in the Addendum but would accept the text which appeared in Document No. 172 on the understanding that his Delegation reserved its right to revert to the matter in Plenary or when signing the Final Acts.

Page 02 was thus approved.

Page 03: Approved.

Page 04: The Delegate of the Czechoslovak S.R. and the Roumanian P.R. requested the addition to footnote 390 or a reference to the fact that, in their countries, the band 5725 - 5850 Mc/s might also be used for the fixed and mobile services and for the communication-satellite service.

The Delegate of Sweden made the following statement in connection with the band 5725 - 5850 mc/s in Region 1:

"Article 9 of the Radio Regulations does not anticipate the notification of mobile stations in the Radiolocation Service. Priority thus cannot be given to stations in the Radiolocation and Communication Satellite Services according to the date of notification. Therefore Sweden requests that the putting into use of stations in the Communication Satellite Service which need protection from mobile stations in the Radiolocation Service shall be subject to agreement between Administrations concerned and affected."

The Delegate of Cuba reiterated the reservation he had made in Committee 5 concerning the bands 5725 - 5850 and 5850 - 5923 Mc/s and reserved his right to revert to the subject in a later Plenary Meeting.

Page 04 was thus approved.

Page 05: The Chairman of Committee 5 explained that the band 7250 - 7300 Mc/s had given rise to much discussion in that committee and a majority decision had finally been reached by secret ballot that the text shown in the table would be inserted. Some countries had strongly objected thereto since they would have preferred the table to include the communication-satellite service and the fixed and mobile services on an equal footing.

Subject to the correction of drafting errors in the English and French texts, page 05 was approved.

Page 06: It was agreed, at the request of the countries concerned, to insert Malaysia and the Philippines in footnote 392Y.

The Delegate of the U.S.S.R. pointed out that there were now 23 countries of the same region listed in footnote 392Y. Many of those countries had stated that they would not be able to vacate the band concerned for 6 or more years. There appeared to be a majority of countries wishing to use the band 7250 - 7300 Mc/s for the fixed and mobile services and in his opinion the table should be amended accordingly and the footnote removed. Allocations on a regional basis had already been made, such as in the case of the communication-satellite service. The administrations not using those bands for the fixed and mobile services would not be forced to do so. He therefore proposed, supported by the Delegations of the Czechoslovak S.R. and the Bielorussian S.S.R. that the band concerned be dealt with region by region.

The Chairman said that the conference was international and could not hold regional votes.

The Delegate of the U.S.S.R. said that such an important problem could not be dealt with merely by a vote. It was obvious from footnote 392Y that a majority of countries would continue to use the band 7250 - 7300 Mc/s as stated for a considerable time. That fact had to be taken into account.

The Delegate of the F.S.R. of Yugoslavia said that, since footnote 392Y listed countries belonging to Regions 1 and 3, the territories of which far exceeded the area of a Region, the mention of those countries in a footnote as a derogation from the table, frequency band 7250 - 7300 Mc/s, was not in accordance with Article 5, Section II, Nos. 140 - 145 of the Radio Regulations. It would therefore be more correct for the position in most countries, and especially in Region 1, with regard to the fixed and mobile services, to be reflected in the table rather than in a footnote. The Region 1 countries not represented at the Conference would not conceive that the Conference should deprive them of the right they had in the 1959 Radio Regulations; since they probably did not think the present Conference was competent to do so. With regard to footnote 392F which indicated the possibility of using meteorological satellites on a primary basis in a band 100 Mc/s wide without specifying frequencies or frequency limits in the 7300 - 7750 Mc/s band in the table, the overall position of the band seemed uncertain and the position of the other services given in the table equally vague. The Delegation of the F.S.R. of Yugoslavia could not, therefore, accept the wording of footnote 392F.

The Delegate of Italy, supported the Chairman's statement that the Conference could not deal with its work on a regional basis as would be seen from the Convention. In any case, with regard to the statement that the number of countries listed in footnote 392Y represented a majority, he could only see 19 of the 78 countries in Region 1 listed. The number of countries given in the footnote therefore appeared to him to represent a minority.

The Delegate of U.S.S.R., supported by the Delegate of the Bulgarian People's Republic, asked if the number of countries present from Region 1 could be counted.

The Chairman said that the Secretariat would ascertain from Conference documentation how many countries from Region 1 were present and inform the fourth Plenary Meeting accordingly.

The Delegate of Italy said that 45 countries from Region 1 were participating in the work of the conference; he opposed the procedure suggested which he considered a waste of time.

The Delegate of Morocco associated his Delegation with the statement made by the Delegate of the F.S.R. of Yugoslavia in connection with footnote 392F and asked that consideration of page 06 be deferred until a decision had been taken on the frequency bands covered by that footnote. With regard to footnote 392Y, he supported the opinion that the countries should be considered from the regional point of view since such a procedure had been followed in other cases such as space research.

The Delegate of the F.S.R. of Yugoslavia reiterated that footnote 392Y was contrary to the Radio Regulations because it did not concern a region or territories smaller than a region.

The Delegates of the P.R. of Bulgaria, the U.S.S.R. and the Czechoslovak S.R. supported the statement made by the Delegate of the F.S.R. of Yugoslavia and reserved their position with regard to footnote 392Y.

With the addition of Malaysia and the Philippines in footnote 392Y, page 06 was approved.

Page 07 with the exception of the first band listed

Approved, subject to reservations by the Delegates of the F.S.R. of Yugoslavia and the Czechoslovak S.R. on frequency band 7975 - 8025 Mc/s in connection with the footnote 392YY.

The third series of "blue" texts (Document No. 172), as amended, was thus approved.

The Meeting rose at 7.15 p.m.

Rapporteur,
V. BOULADON

Secretary,
Clifford STEAD

Chairman,
Gunnar PEDERSEN

A N N E X

MOROCCO

AMENDMENT TO THE DRAFT RESOLUTION
ON PAGE B2 41 OF DOCUMENT No. 171

DRAFT RESOLUTION No.

INTERFERENCE IN THE OPERATION OF
INTERNATIONAL SATELLITE SYSTEMS

The Extraordinary Administrative Radio Conference, Geneva, 1963,

considering

that it has been decided that the radio spectrum will be shared between terrestrial and space services;

considering

that the various systems of telecommunication should be able to take advantage of the fair and rational use of shared frequencies;

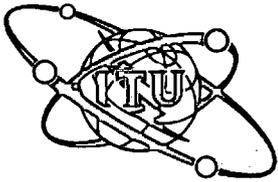
considering

that interference may occur between different services operating, or not, in a single frequency band;

considering

that the International Frequency Registration Board will regularly publish information from the various Administrations concerning the operation of international satellite systems (See Resolution No. Document No. 171).

Resolves (there follow points 3, 4, 5, 6, 7 of Document No. 171, pages B2 42 and 43).



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 216-X
7 November, 1963
Original : French

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 4

PROPOSALS BY BELGIUM, SPAIN, FRANCE AND PORTUGAL

FOR THE AMENDMENT OF ARTICLE 1 OF THE RADIO REGULATIONS

(former DT/46, 21 October 1963)

1. Basic principles for drawing up the definitions:

1.1 The services between points on the surface of the earth, including ships and aircraft, should retain their names whatever the means of radio transmission employed - ionospheric reflection, ionospheric or tropospheric scatter, reflection or scatter from a passive satellite or retransmission via an active satellite.

Thus, a service between two given fixed points should always be called a "fixed service". Similarly, a service between an aeronautical and an aircraft station should always be called an "aeronautical mobile service".

1.2 For some requirements of the Regulations (Articles 9, 9A and others), a distinction should be made between means of transmission that can be called conventional (ionospheric reflection, ionospheric or tropospheric scatter) and transmission using active or passive satellites or other spacecraft.

1.3 The use of artificial earth satellites and other spacecraft introduces the possibility of new services, which must be defined.

1.4 The definitions should be drawn up in such a way that they leave no doubt in their application to the Table of Frequency Allocations. This means that they should be sufficiently clear to avoid any possibility of different interpretations. It is indispensable to this end, that the texts should precisely reflect the notion to be defined.



This means discarding any system of definitions in which the stations are defined by the use of the definition of the corresponding service, the definition of the service being itself based on the definition of the station. Such a system would merely be an unacceptable vicious circle.

1.5 The following main categories of services have to be considered:

- Conventional services : those which are defined in the Regulations (fixed, mobile, broadcasting, amateur, etc.); for the purposes of Article 9 they can be called "terrestrial services"
- Services using earth satellites or other spacecraft, that can be called "space services"
- Conventional services using earth satellites, excluding other types of spacecraft, that can be called "satellite services"; "satellite services" are thus a special case of "space services".

1.6 For services already defined in the Regulations, and which may, in future, use earth satellites, two possibilities exist for the revision of the Radio Regulations.

1.6.1 The first possibility would be to introduce into the Regulations a paragraph drafted as in 2.1 below.

This procedure would not overload the Regulations. One of the results, for instance, would be that a service between given fixed points on the surface of the earth using an earth satellite would become a "fixed service by satellite"; each of the stations on the surface of the earth operating in this service would be a "fixed earth station".

1.6.2 The second possibility would be to insert, in the Regulations, a set of definitions, parallel with those already existing for the conventional services, when using earth satellites and also for the corresponding earth stations.

1.6.3 The first solution (1.6.1) seems more practical and it has been adopted in the following set of definitions. It is obvious that, if the second solution is preferred (1.6.2), its application would be immediate, according to the formula given for the examples shown in 2.1.

2. Definitions

Note: The definitions marked with an asterisk follow the general concept of Document No. 99 and also that in the documents of the C.C.I.R., or when the texts differ only slightly as a result of the difference of two points of view.

2.1 Paragraph to be added to the Regulations:

When, for the execution of one of the services defined in Section II of Article 1 of the present Regulations, one or more active or passive satellites are used, this service, while retaining its basic name, is then also qualified by the word "satellite".

The stations belonging to such services situated either on the surface of the earth, including on board ship, or on board an aircraft are then also qualified by the word "earth".

Examples:

2.1.1 A service of **radiocommunications** between specified fixed points in which one or more active or passive satellites are used: Fixed service by satellite.

2.1.2 A station in the fixed satellite service: Fixed earth station.
Note: The adjective "earth" is also used to describe a station situated on the surface of the earth, including on board ship, or on board an aircraft, operating in association with a space station (definition 2.3).

2.1.3 A service of radiocommunication between mobile stations and land stations, or between mobile stations, in which one or more active or passive satellites are used: Mobile service by satellite.

2.1.4 A station in the mobile satellite service intended to be used while in motion or during halts at unspecified points: Mobile earth station.

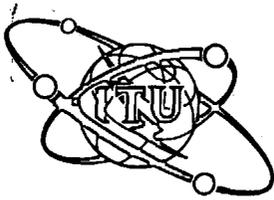
2.2 Space station: A station on an object outside the major part of the earth's atmosphere, including a satellite station.

2.3 Satellite station: A station on an artificial earth satellite.

2.4 Note : The space stations and satellite stations defined under 2.2 and 2.3 retain their name when passing through the major part of the earth's atmosphere.

- 2.5*) Active satellite: An earth satellite carrying a station intended to transmit or retransmit radiocommunication signals.
- 2.6*) Passive satellite: An earth satellite intended to transmit radiocommunication signals by reflection or by scatter.
- 2.7 Earth station: A station either on the surface of the earth, including on board a ship, or on board an aircraft intended:
- to establish radiocommunication with space stations; or
 - to transmit radiocommunication signals towards a passive satellite; or
 - to receive radio communication signals reflected or scattered by such a satellite.
- 2.8 Space service: Radio service between space and earth stations; or between space stations.
- 2.9 Terrestrial service: Any radio service defined in the present Regulations, in which neither space stations nor passive satellites are used.
- 2.10*) Terrestrial station: A station in a terrestrial service.
- 2.11 Radiocommunication satellite service: A general term designating any or all services in which one or more earth stations and one or more active or passive satellites simultaneously participate.
- 2.12*) Satellite system: Any group of co-operating stations providing a given radiocommunication satellite service and which includes one or more active or passive satellites.
- 2.13*) Radioastronomy station: A station in the radioastronomy service.
- 2.14*) Space research service: A space service in which spacecraft are used for scientific or technical research.
- 2.15*) Space research space station: A space station in the space research service.
- 2.16*) Space research earth station: An earth station in the space research service.
- 2.17 Broadcasting satellite service: Application of 2.1 above.

- 2.18 Broadcasting satellite station: A satellite station in the broadcasting satellite service.
- 2.19 Radionavigation satellite service: Application of 2.1 above.
- 2.20 Radionavigation satellite station: A satellite station in the radionavigation satellite service.
- 2.21*) Radionavigation earth station (land, mobile, or aeronautical): Application of 2.1 above.
- 2.22 Meteorological Aids satellite service: Application of 2.1 above.
- 2.23 Satellite station in the Meteorological Aids satellite service: A satellite station in the Meteorological Aids satellite service.
- 2.24*) Earth station in the Meteorological Aids service: Application of 2.1 above.
- 2.25*) Space telemetering: Telemetering used for the transmission from a space station of the results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.
- 2.26*) Space telemetering: Telemetering from a spacecraft.
- 2.27*) Space telecommand: Transmission of radiocommunication signals to a space station to put into operation the station or apparatus on board the spacecraft, or to modify or stop their functions.
- 2.28*) Space tracking: Determination of the orbit, speed, or instantaneous position of an object in space by the use of radiodetermination (excluding primary radar).



SPACE
RADIOCOMMUNICATION
CONFERENCE

Document No. 217-E (Rev.)
7 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AGENDA

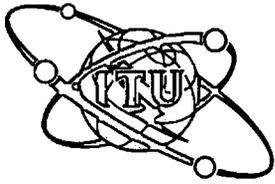
FOR THE 8th PLENARY MEETING

Friday, 8 November 1963, at 10.00 hours

1. Minutes of the 2nd Plenary Meeting (Document No. 213)
2. Fourth and last series of "pink" texts submitted by the Editorial Committee (Document No. 212)
3. Statements for inclusion in the Final Protocol
4. Proposal relating to Radio Astronomy (Document No. 211)
5. Report by the ad hoc group under the chairmanship of Mr. Rao
6. Miscellaneous

Gunnar PEDERSEN
Chairman of the Conference





SPACE
RADIOCOMMUNICATION
CONFERENCE

Document No. 217-E
7 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AGENDA

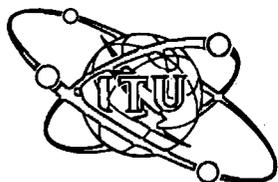
FOR THE 8th PLENARY MEETING

Friday, 8 November 1963, at 09.30 hours

1. Minutes of the 2nd Plenary Meeting (Document No. 213)
2. Third series of "pink" texts submitted by the Editorial Committee (Document No. 207)
3. Statements for inclusion in the Final Protocol
4. Miscellaneous

Gunnar PEDERSEN
Chairman of the Conference





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 218-E (Rev.)
7 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AGENDA

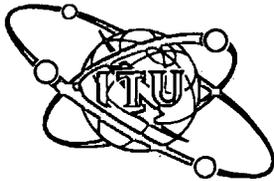
FOR THE 9TH PLENARY MEETING

Friday, 8 November, 1963 at 14.30 hours

1. Any further statements for inclusion in the Final Protocol
2. Final Report by Committee 3 - Budget Control Committee
(Document No. 214)
3. Miscellaneous

Gunnar PEDERSEN
Chairman of the Conference





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 218-E
7 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AGENDA

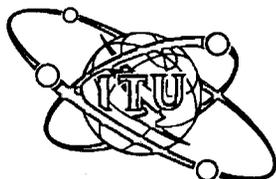
FOR THE 9TH PLENARY MEETING

Friday, 8 November, 1963 at 14.30 hours

1. Minutes of the 3rd Plenary Meeting (Document No. 215)
2. Fourth and last series of texts submitted by the Editorial Committee (Document No. 211)
3. Any further statements for inclusion in the Final Protocol
4. Final Report by Committee 3 - Budget Control Committee (Document No. 214)
5. Miscellaneous

Gunnar PEDERSEN
Chairman of the Conference





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 219-E
7 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Denmark, Norway, Sweden and Switzerland

FINAL PROTOCOL

In signing the Final Acts of the Extraordinary Administrative Radio Conference, Geneva, 1963, the Delegations of the above-mentioned countries declare that, as Radiolocation Service on land, on board ships and in the air has been established, is being introduced or is planned in the frequency bands 3400-3600 Mc/s and 5725-5850 Mc/s in conformity with the Table of Frequency Allocations of the Radio Regulations, Geneva, 1959, the Administrations of the above-mentioned countries find difficulty in affording general protection to the Communication-Satellite Service in other countries, the Communication-Satellite Service having been authorized in these bands according to the new Radio Regulations, Geneva, 1963. However, the Administrations of the above-mentioned countries are willing to take all practicable steps in order to coordinate the two services after agreements with Administrations concerned.

For the Delegation
of Denmark

Børge NIELSEN

For the Delegation
of Norway

N. J. SØBERG

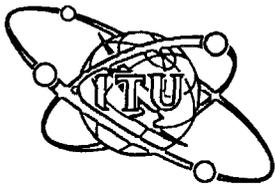
For the Delegation
of Sweden

Håkan STERKY

For the Delegation
of Switzerland

W. KLEIN





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 220-E
7 November, 1963
Original : Spanish

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Argentine Republic

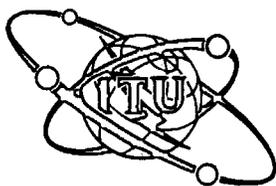
FINAL PROTOCOL

The Argentine Delegation states that its country does not recognize any frequency assignments that may be made directly or indirectly on behalf of any other Power or Powers for any type of service, in any portion of the spectrum, for the Malvinas Islands, the South Georgian Islands or the South Sandwich Islands, over which territories the Argentine Republic exercises sovereign rights. The non-mention of other territories must not be taken to imply renunciation of the Argentine Republic's sovereignty over them. In any event, the Argentine Republic reserves the right to use as its own any radio frequencies that may be assigned under the above-mentioned conditions.

Head of the Argentine Delegation

Juan A. AUTELLI





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 221-E
7 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

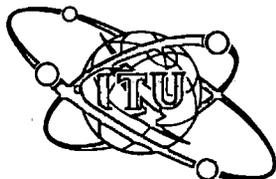
United States of America and Territories of the United States of America

FINAL PROTOCOL

The Delegations of the Territories of the United States of America, and the United States of America, in signing the Final Acts of the Extraordinary Administrative Radio Conference, Geneva, 1963, declare that :

1. There has heretofore always existed between all countries of Region 2 very close cooperation and agreement in the application of the Table of Frequency Allocations contained in the Radio Regulations of the Union;
2. this cooperation has in large measure been necessary since most countries in Region 2 are either in close geographical proximity to one another or are separated by relatively short distances over water, such over-water separation affording substantially less protection from harmful interference than does the same separation over land;
3. by virtue of the cooperation referred to in 1. above, it has not in the past been necessary for any country of Region 2 to request the insertion of any footnotes in the Table of Frequency Allocations which constitute an exception, insofar as a particular country is concerned, to the international allocation of a particular frequency band or bands;
4. the Delegation of Cuba to the present Conference has decided to disassociate its country from the decisions of all other delegations from Region 2 with respect to certain provisions of the Table of Frequency Allocations as modified by this Conference;
5. In light of the foregoing, the Delegations of the Territories of the United States of America, and the United States of America cannot accept on behalf of the Government of the United States of America any obligation to observe the exceptions claimed by Cuba in those footnotes to the Table of Frequency Allocations which were adopted by the present Conference and which specifically name Cuba.





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 222-E

7 November 1963

Original : Spanish

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Cuba

FINAL PROTOCOL

In signing the Final Acts of the Extraordinary Administrative Conference on Space Radiocommunication (Geneva, 1963) on behalf of the Republic of Cuba, the Delegation of Cuba makes the following statement :

Considering

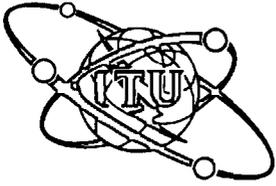
- a) that a world-wide plan for the space radiocommunication service has not been established;
- b) that principles guaranteeing participation by all countries in the space radiocommunication service on an equal footing have not been adopted;
- c) that some of the clauses contained in the procedure for frequency notification and coordination do not satisfy the interests of Cuba;
- d) that changes have been made in the Table of Frequency Allocations which might impair the normal operation of Cuban radiocommunications;

Cuba herewith formally reserves its complete freedom of action and the right to reject those provisions of the Extraordinary Administrative Conference on Space Radiocommunications (Geneva, 1963) which are prejudicial to the interests of Cuba.

Pedro W. LUIS TORRES

Head of the Delegation of Cuba





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 223-E
7 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Republic of Pakistan

FINAL PROTOCOL

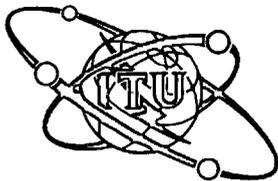
While the Delegation of Pakistan is fully conscious of the desirability of early implementation of the decisions of E.A.R.C., Geneva, 1963, with a view to expediting the development and establishment of Space Radiocommunications on a world-wide basis, it cannot overlook the fact that the Space Radiocommunication techniques are still in a state of development and experimentation. The provisions regarding sharing criteria and the interference potentialities between Space Radiocommunications and Terrestrial systems are not based on practical experience between operational Space and Terrestrial systems and these problems are still under the study of the C.C.I.R., whose present Recommendations are provisional. No sharing criteria has been laid down for the sharing of the bands below 1 Gc/s. Pakistan being a new and developing country in two parts, whose internal communications are also dependent on Radio, the ability of Pakistan to follow in these circumstances, the new and amended provisions of the Radio Regulations agreed by this Conference will depend upon the freedom from any interference, which can be caused by the space services.

The Delegation of Pakistan therefore, reserves for its country the right to take, in the last resort, necessary measures for the fulfilment of its telecommunication need. In so doing, Pakistan will however, endeavour to avoid harmful interference to the Radio services of other administrations.

A.B.M. TAHER

for Head of the Delegation of
Pakistan





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 224-E
7 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

FINAL PROTOCOL

The Democratic and Popular Republic of Algeria

The State of Kuwait

The United Arab Republic

considering

that the effective implementation of the United Nations Resolution on the International Co-operation on the peaceful uses of outer space (Resolution No. 1721 (XVI)) must eventually be based on the establishment by Members and Associate Members of the Union, of world-wide plans concerning all categories of space service which will provide for the equitable participation of all countries of the world in such service in the spirit of the above-mentioned Resolution;

Considering

1. that no such world-wide plan reflecting the needs of all countries of the world for space services has yet been established;
2. that, the frequency bands allocated for communication satellite services, as contained in Article 10 of the revised Radio Regulations, are based on entirely empirical derivations and do not in any way correspond to the actual requirements of all countries;
3.
 - a) that, the frequency sharing between communication satellite services, and terrestrial services as allocated in the frequency tables were based on provisional criteria, as provided by the C.C.I.R.;
 - b) that, the same provisional sharing criteria for communication satellite services, were applied to other services, where no sharing criteria were available, thus protection of terrestrial services from harmful interference is doubtful;



- c) that, the procedure of calculation of co-ordination distances is provisional, and, in no way provides assurance of interference-free operation of satellite communications;
4. that, the technical progress in all the development of the various categories of space services is not sufficiently advanced;
5. that, the economic considerations involved in the establishment and operation of such services, could not, so far, be assessed, thus placing small countries at a great disadvantage;
6. that, the said cost, the legal and other conditions that shall govern the use of such a system are not yet evident for consideration.

The above-mentioned countries reserve the right:

- a) to take all the necessary measures to protect their existing as well as planned services without placing any limitations whatsoever on the equipment in use or to be used in the future in all frequency bands;
- b) to adopt all measures necessary to protect their rights concerning frequency registration priority after the implementation of the revised Radio Regulations.

However, the above-mentioned countries do contribute towards the advance of the new space telecommunication technique that was started by the pioneering countries and accept the frequency bands allocated for the safety of lives, space research and world-wide meteorological services.

Ahmed A. AL-SAADON

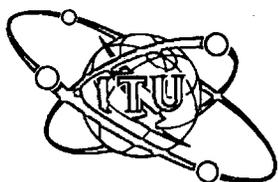
A.B. EID

Mohamed BOUGARA

Head of the
State of Kuwait Delegation

Head of the
United Arab Republic
Delegation

Head of the
Democratic and Popular
Republic of Algeria
Delegation



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 225-E
8 November, 1963
Original: French
English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 5

SUMMARY RECORD OF THE 9th AND LAST MEETING OF COMMITTEE 5

Thursday, 7 November, 1963 at 11 a.m.

Chairman: Mr. W. KLEIN (Switzerland)

Vice-Chairman: Mr. S. FUJIKI (Japan)

1. Agenda

The Agenda (Document No. 203) was approved.

2. Summary Records (Document No. 203)

The Summary Records listed in Document No. 203 were approved with the following comments:

Second meeting (Document No. 153 (Rev. 2))

No changes.

Third meeting (Document No. 142)

No changes.

Fourth meeting (Document No. 140)

With the following amendment:

In the English text, at the end of §2, "Document No. 124" should read "Document No. 114".



Fifth meeting (Document No. 158 (Rev.))

With the following amendment:

In the English text, at the beginning, read: "Chairman Mr. W. Klein".

Sixth meeting (Document No. 162 (Rev. 2))

With the following amendment in §5, page 4:

Add "(OR)" after the words "Aeronautical Mobile Service" in the footnote on page 283B.

Seventh meeting (Document No. 182)

With the following amendments :

In §3 a), in the English text, delete "Chairman of Working Group 5A" in the 4th line.

In §3 g), before the last sentence add :

"Cyprus asked whether footnote 392Y really meant that any country which intended to use 7250 - 7300 Mc/s for communication-satellites would have to co-ordinate with those countries which appear in footnote 392Y. The Chairman of the I.F.R.B. confirmed this."

Eighth meeting (Document No. 199)

§3, next to last line on page 1, add "N. Desta (Ethiopia)".

3. Working Group 5B

3.1 Dr. V. Rao (Rep. of India), Chairman of Working Group 5B requested the following statement be inserted into the record for the benefit of the Drafting Committee : "Foot-note 310 was examined in Working Group 5B and it was agreed that this footnote would be retained in the Radio Regulations without change."

It was so agreed.

3.2 Furthermore, Dr. V.V. Rao wished to take this opportunity to place on record his deep appreciation, and that of all Delegations, to the Chairmen of the two Sub-Working Groups, Mr. W.A.E. Nicolson, Deputy Leader of the Australian Delegation, and Mr. B. Costa, Head of the Ethiopian Delegation, for their capable direction of the work of the Sub-Groups. The success of their efforts is directly reflected in the decisions that have since been taken in connection with the Radio Astronomy and Space Research Services respectively.

4. Closing of the meeting

4.1 The Chairman stated:

"Ladies and Gentlemen, the Allocations' Committee has had a great deal of hard work to accomplish in a short time, and on occasions heavy pressure was unavoidable, however I am happy to say that finally successful results have been achieved: the new Table of Frequency Allocations making provisions for the new space services. It seems to me to be reasonable and a fair compromise. From a frequency allocations point of view, it clears the way for the further development of the various types of Space Radiocommunications.

" I am particularly pleased to observe the considerable progress in further safeguarding the essential needs and interests of Radio Astronomy, which is the most interesting, and indeed, awe inspiring branch of modern science. The progress made is the more significant because it involves sacrifices by the Telecommunication Administrations.

" In these closing remarks I wish to make special reference to the excellent preparatory work carried out by the General Secretariat and the I.F.R.B. in re-arranging and publishing, prior to the opening of the Conference, the formal proposals by Administrations concerning the Table of Frequency Allocations. In Documents Nos. 17 and 41, respectively, the Committee was well served with the proposals set out in frequency band order. These documents, together with the working documents in the series DT/10 to DT/17 prepared during the early days of our meetings and containing the same proposals set out by radio services, greatly assisted the Committee in the orderly and expeditious conduct of its work. I am sure to be interpreting correctly the sentiments of the many smaller delegations in this regard.

" I wish also to thank Dr. M.B. Sarwate, Vice-Secretary-General, and Mr. A.H. Catá and Mr. J. Ziołkowski, members of the Board, for their most valuable assistance and advice at all times.

" My special thanks are addressed to Mr. S. Fujiki our Vice-Chairman, for his able collaboration in conducting the work of the Committee; also to the Chairmen of the three main Working Groups, Mr. P. Mortensen (Norway), Dr. V.V. Rao (India) and Mr. J.T. Penwarden (United Kingdom), together with the Chairmen of the principal ad hoc Groups, Dr. V. Popović (Yugoslavia), Mr. B. Nielsen (Denmark), Mr. D.E. Baptiste (United Kingdom) and Mr. F.W. Mohr (F.R. of Germany), all of whom have done so much in preparing the decisions which the Committee have now taken.

" The Committee has been greatly assisted in the expeditious conduct of its work by the Secretariat. In particular I wish to thank Mr. A.A. Matthey of the I.F.R.B. Secretariat for his very efficient work, both day and night, throughout the activity of the Committee; the Document and Linguistic Services including the typing pools, the reproduction and distribution sections, on whom the Committee has made heavy demands constantly during the four weeks of its work and these more often at night and on the week-ends; and finally to the interpreters and meeting-room services, all of whom contributed greatly to the expeditious completion of the Committee's mandate."

4.2 Dr. H. Sterky, Director-General of the Swedish Board of Telecommunications, speaking on behalf of all Delegations, complimented and warmly thanked Mr. Klein on the masterly fashion with which he had led the Allocations Committee to the successful accomplishment of a most difficult and complex task.

Dr. Sterky added:

"Many times agreement was reached as a result of your capable and patient conduct of the discussions in Committee. Often you yourself gave clear and concise replies to difficult questions posed during the debate.

" Furthermore, Mr. Chairman, I was especially touched by your references to the importance of the science of Radio Astronomy in contributing to the advancement of the knowledge of mankind which, as you know, is also one of my firm convictions. It is, therefore, Mr. Chairman, most appropriate that decisions of direct concern to the Radio Astronomy Service should have been prepared in this Committee under your able leadership.

In the name of all delegations, Mr. Chairman, I thank you most warmly."

Prolonged applause.

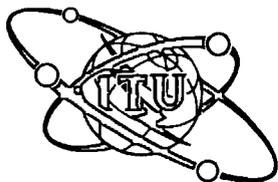
The meeting rose at 1125 hours.

Rapporteurs:

J. BUSSY
J.P. WEST

The Chairman:

W. KLEIN



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 226-E
7 November 1963
Original : French,
English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 4

SUMMARY RECORD

OF THE 6TH AND LAST MEETING

Monday, 4 November, 1963 at 9.30 a.m.

Chairman : M. E. ESPING (Sweden)

Vice-President : M.M. ZAHRADNICEK (Czechoslovak S.R.)

1. Agenda

The agenda as set out in Document No. 156 (Rev.), was adopted.

2. Summary record of 5th meeting

Document No. 138 was approved.

3. Report of Working Group 4A (Document No. 155)

Colonel Lochard, Chairman of Working Group 4A introduced the document and explained that the definitions in the document were listed in the order in which they should appear in the Radio Regulations. The definitions were considered one by one.

3.1 Aeronautical Station (No. 34)

After some discussion by a majority decision it was decided to adopt the version of the definition which consists of the existing definition in the Radio Regulations with the words "or an earth satellite" added at the end of it.

3.2 The following definitions were adopted as they appear in Document No. 155 :

75 a - 84 aa - 84 ab - 84 ad - 84 ae - 84 ai - 84 ak - 84 an -
84 au - 84 av - 84 aw - 84 ax - 84 ay - 84 bb - 84 bd - 84 be -
84 bf - 84 bg - 84 bh.



The delegation of the U.S.S.R. objected to the adoption of definition 84 ay.

3.3 The following definitions appearing in Document No. 155 were adopted after the amendments indicated hereunder :

84 ay - modification of the English text to agree with French and Spanish;

84 ac - removal of the words "or by scattering" in the 5th line of the definition;

84 af - 84 ag and 84 ah - the title of the French and Spanish texts to include the word "telecommunication" instead of "radiocommunication";

84 aj - removal of the words "or by scattering" at the end of the definition;

84 al - adopted subject to the inclusion of the C.C.I.R. definition for "Space craft" with the "etc." in the C.C.I.R. definition deleted;

84 am - modification of the Spanish text to agree with French and English;

84 ao - removal of the words "or by scattering" from the second line of the definition. The French Delegation wanted to delete definition 84 ao entirely;

84 az - the definition for Space Telecommand was amended to read as follows : "The use of radiocommunication for the transmission of signals to initiate, modify or terminate functions of the equipment in the space object including the space station";

84 ba - addition of the following words to the end of the definition : "for the purpose of following the movement of the object";

84 bc - replacement of the words "centre of gravity" by the words "centre of mass";

3.4 The following definitions were deleted :

84 ap - 84 aq - 84 aq bis.

3.5 The following new definitions were adopted :

Space System - any group of cooperating earth and space stations providing a given space service and which, in certain cases, may use objects in space for the reflection of radio-communication signals.

Spacecraft (C.C.I.R. definition)

Document No. 155 with the amendments indicated above was then adopted by the meeting.

4. Report of Working Group 4C (Document Nos. 122(Rev.), 126(Rev.2), 159(Rev.), 163(Rev.) and 168)

Mr. Schultz, the Chairman of Working Group 4C, introduced the documents.

4.1 Document No. 122(Rev.): The document was discussed as a whole.

The United Kingdom Delegation pointed out some inaccuracies in Figures 3, 4, 5 and 6 and undertook to give the required corrections to the Secretariat.

The Norwegian Delegation indicated that they had some difficulty with the site shielding factor in certain cases and proposed the following text to be included at the end of Section 5 (p.9)

"The values of site shielding factor quoted here shall be used with caution where terrestrial stations may be located, within co-ordination distance, at sites which are substantially above the horizontal plane passing through the earth station."

The document was then adopted with the inclusion of the above amendments.

4.2 Document No. 126(Rev.2):

The Indian Delegate proposed an alternative wording of the proposed regulations 470D, 470J, 470M, 470Q and 470U

After some discussion, it was decided that footnote 4 should remain in the document.

The document was then accepted.

4.3 Document No. 163(Rev.):

In order to clarify the draft recommendation an addition to the title was proposed. The words to be added to the title are "in relation to sharing with communication-satellite systems".

With the above amendment the document was adopted

4.4 Document No. 159(Rev.):

This draft recommendation was adopted after the addition of a title which will read "Calculation of Interference between Stations within Co-ordination Distance" and deletion of the words "with equal rights" in considering a).

4.5 Document No. 168:

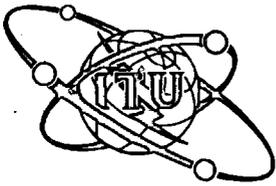
A number of amendments to this document which were agreed at a lunchtime meeting were outlined by Mr. Schultz. It was agreed by the meeting that Mr. Schultz assisted by the United Kingdom Delegation, should prepare the final form of this document for submission to the Secretariat. This procedure was agreed.

5. The Chairman suggested that as there would be no further meeting of Committee 4, it should be left to him to approve the summary record of the sixth meeting. This procedure was agreed to by the meeting.

The meeting was then closed at 5 p.m.

Rapporteur :
E F. SANDBACH

Chairman :
E ESPING



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 227-E
7 November, 1963
Original : French

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

COMMITTEE 3

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 3
(BUDGET CONTROL)

Thursday, 7 November, 1963 at 9.30 a.m.

Chairman : Mr. B. IONITA (Roumanian People's Republic)

On the Chairman's proposal, the Agenda (Document No. 205), amended as follows, was adopted :

- the item "Miscellaneous" became item 5,
- a further item was inserted in the Agenda : "Examination of the draft report by the Budget Control Committee" (Document No. DL/45).

Item 1 of the Agenda

The report on the first meeting of Committee 3 (Document No. 89) was approved.

Item 2 of the Agenda

Examination of the report by the Working Group (Document No. 204).

Mr. Caruso (Italy), Chairman of the Working Group, presented the document.

Mr. Stead (Conference Secretary) said that, if the work of the Conference was to be completed by the evening of 8 November, Committee 3 should recommend the Plenary Assembly to consider signing the Final Acts on the pink documents amended by hand.

Committee 3 adopted that proposal.

The report and its Annexes I, II and III (Document No. 204), having been examined item by item and section by section respectively, were approved.



The Chairman thanked Mr. Caruso (Italy) for the work which he had performed so efficiently.

Committee 3 accepted Mr. Caruso's proposal that the following gratuities be allowed :

- PTT personnel at the Bâtiment Electoral	500 Frs.
- Concierge at the Bâtiment Electoral	200 Frs.
- Cleaning service at the Bâtiment Electoral	50 Frs.
- Concierge at the Palais des Expositions	100 Frs.
- Cleaning service at the Palais des Expositions	<u>50 Frs.</u>
TOTAL	900 Frs.

Item 3 of the Agenda

Decision to be taken concerning the percentage of composition costs of the Final Acts to be debited to the Conference accounts.

The Chairman stated that the task of the Plenary Assembly would be simplified if a proposal were submitted to it by Committee 3.

After discussion, and having regard to the opinion of the Conference Secretary that no doubt the sales of new documents would be lower than the sales of the Radio Regulations (Geneva, 1959), the Committee decided to propose that the composition costs of the Final Acts be allocated on the basis of :

- 1/3 to the Conference budget,
- 2/3 to documents sold by the I.T.U.

Item 4 of the Agenda

Consideration of the draft report of the Budget Control Committee to the Plenary Assembly (Document No. DL/45).

After general discussion, Committee 3 decided to include in the report a reference drawing the Plenary Assembly's attention to the fact that the estimates of expenditure were based on the assumption that the Conference would complete its work on Friday, 8 November.

Document No. DL/45 was then adopted by Committee 3, subject to :

- 1) a minor amendment on page 4, paragraph 1;

- 2) the indication in the report of a paragraph reflecting the provisions of the General Regulations annexed to the International Telecommunication Convention, Chapter 9, Rule 5, paragraph 4,
- 3) the insertion of the proposed percentages for the allocation of the composition costs of the Final Acts.

Item 5 of the Agenda

Miscellaneous

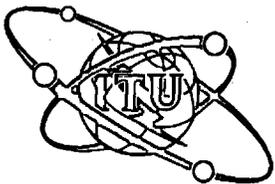
The Chairman proposed that any comments which delegates might wish to make on the present summary record should be submitted **directly** to him or addressed to the **Secretariat**. Before closing the meeting, the Chairman expressed his sincere thanks for the help received from the I.F.R.B. Secretariat, and for the support and collaboration of all the members of the Committee.

Dr. Sarwate, Deputy Secretary-General, stressed the importance of the work of the Budget Control Committee, which was perhaps less well known than that of other committees, but which was, nevertheless, of considerable importance. The work had been of great use to the Secretariat and had enabled the credits to be so apportioned as to enable the Conference to conduct its work up to the scheduled date, without exceeding the amount estimated. Committee 3 deserved thanks for that result.

The meeting rose at 10.30 a.m.

Chairman :

B. IONITA



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 228-E
7 November 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Malaysia

FINAL PROTOCOL

The Delegation of Malaysia declares that it does not accept the statement of the Indonesian Delegation contained in its declaration regarding Malaysia. The original Constitution of the Federation of Malaya, which made provisions for amendments, was amended by an Act of the Malayan Parliament before Malaysia Day on 16th September, 1963. This Act took account of the incorporation of Singapore, Sarawak and Sabah (N. Borneo) with the former Federation of Malaya and brought about a change of name to Malaysia. This Agreement has been possible following an Agreement between Her Majesty's Government in the United Kingdom and the Government of the Federation of Malaya, and by giving the Royal Assent to the Act, Her Majesty relinquished sovereignty in Singapore, Sarawak and Sabah.

In effect, Malaysia is Malaya as it was before September 16, 1963, but with the addition of new territories. This principle was publicly stated in a broadcast by the Malaysian Permanent Secretary of External Affairs on September 16. There is thus complete legal continuity as a single entity between Malaya and Malaysia.

It is clear therefore that Malaya and Malaysia are one and the same state. It may be recalled that recently Malaysia was elected to the U.N. Security Council - to alternate with Czechoslovakia - without the identity of Malaysia being called into question.

Mah SECK WAH



SPACE
RADIOCOMMUNICATION
CONFERENCE
GENEVA, 1963

Document No. 229
7 November, 1963

E

R.5

PLENARY MEETING
SECOND READING

The Editorial Committee, having examined document 166, submits the attached text to the Plenary Meeting for a second reading.

Recommendation No. 10A.

Y. PLACE
Chairman of the Editorial
Committee

Annex : 1 page



RECOMMENDATION No. 10A

PLENARY MEETING

The Extraordinary Administrative Radio Conference, Geneva,
1963,

considering

Resolutions 1721 (XVI) part D and 1802 (XVII) part IV para. 3 of the General Assembly of the United Nations which refer inter alia to the unanimous belief of the members of the United Nations that communication satellites should be organized on a global basis with non-discriminatory access for all nations;

considering

the economic and social implications for all nations of global communications by satellites recently expressed in the report prepared for Member States and Associate Members of U.N.E.S.C.O. in accordance with the decision of the 12th session of its General Conference in December 1962;

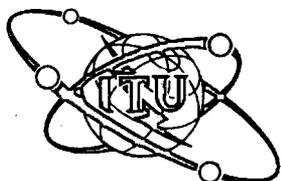
recognizing

that all Members and Associate Members of the Union have an interest in and right to an equitable and rational use of frequency bands allocated for space communications;

recommends

to all Member States and Associate Members of the I.T.U.;

that the utilization and exploitation of the frequency spectrum for space communication be subject to international agreements based on principles of justice and equity permitting the use and sharing of allocated frequency bands in the mutual interest of all nations.



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 230-E
8 November, 1963
Original : Spanish

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Mexico

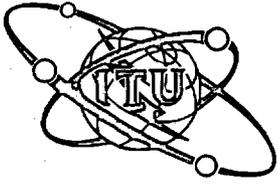
FINAL PROTOCOL

While signing the Final Acts of the Extraordinary Administrative Radio Conference, Geneva, 1963, the Delegation of Mexico announces that its Administration intends to comply with the provisions resulting from the revised Radio Regulations. Nevertheless, the Delegation states that the Government of Mexico reserves the right to take any steps it may deem necessary to safeguard its interest in cases where any Member or Associate Member of the Union fails to comply with the provisions of the said Regulations or where a reservation made by another country has a harmful effect on its telecommunication services.

J. HERNÁNDEZ

Head of the Delegation





**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 231-E
8 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

AD HOC GROUP

The representatives of India, Pakistan, Yugoslavia, United Kingdom, United States of America and U.S.S.R. considered Document No. 192 and after considerable discussion agreed unanimously on the draft resolution attached.

V.V. RAO
Chairman of Ad Hoc Group

Annex : 1



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A N N E X

DRAFT RESOLUTION

RELATING TO INTERNATIONAL COOPERATION AND
TECHNICAL ASSISTANCE IN THE FIELD OF
SPACE-RADIOCOMMUNICATION

The E.A.R.C., Geneva, 1963,

considering

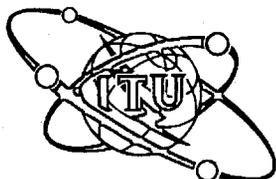
- a) that a large number of countries, Members of the I.T.U., are not in a position to take immediate advantage of the satellite techniques for the development of their telecommunication services,
- b) that such countries would benefit immensely through the technical assistance programmes sponsored by the I.T.U., and

recognizing

- a) that International Space Satellite systems will be subject to the I.T.U. Convention and Regulations and that they will permit participation of all countries including, in particular, the developing countries in Space Communication systems, and
- b) that a number of problems need to be solved in order that the developing countries may participate effectively in International Space Communication systems and integrate these systems with their national communication networks,

resolves to invite the Administrative Council

- a) to draw to the attention of Administrations the means by which they may avail themselves of technical assistance in connection with the introduction of Space communications;
- b) to consider the most effective manner in which requests for such assistance by Member Administrations may be formulated and presented in order to secure maximum financial and other assistances;
- c) to consider how best to make use of funds made available by the United Nations in accordance with the Resolution No. 1721 to give technical and other assistances to Member Administrations to make effective use of Space communications; and
- d) to consider in what way the work of the Consultative Committees and other bodies of the I.T.U. may be utilized in the most effective way for the information and assistance of Member Administrations in the development of Space-radiocommunications.



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 232-E
8 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

United Kingdom of Great Britain and Northern Ireland

FINAL PROTOCOL

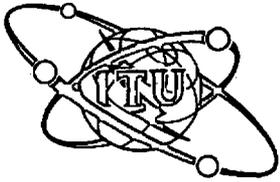
The Delegation of the United Kingdom of Great Britain and Northern Ireland declares :

That it does not accept the statement of the Argentine Delegation contained in its declaration insofar as this statement disputes the sovereignty of Her Majesty's Government in the United Kingdom over the Falkland Islands and the Falkland Islands Dependencies and it wishes formally to reserve the rights of Her Majesty's Government on this question. The Falkland Islands and the Falkland Islands Dependencies are and remain an integral part of the territories together making up the Member hitherto known as : Colonies, Protectorates, Overseas Territories and Territories under Mandate or Trusteeship of the United Kingdom of Great Britain and Northern Ireland on behalf of which the United Kingdom of Great Britain and Northern Ireland acceded to the International Telecommunication Convention (Buenos Aires, 1952) on 16 November 1953, and which is described in the International Telecommunication Convention (Geneva, 1959) as: Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible.

The statement of the Argentine Delegate that "non-mention of other territories must not be taken to imply renunciation of the Argentine Republic's sovereignty over them" is noted. Insofar as this may be intended to refer to the British Antarctic Territory, Her Majesty's Government in the United Kingdom of Great Britain and Northern Ireland have no doubt as to their sovereignty over the British Antarctic Territory, and wish to bring to the attention of the Argentine Government Article IV of the Antarctic Treaty to which both the Argentine Government and the United Kingdom Government are parties.

Charles F. BOOTH
Head of the
United Kingdom Delegation





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 233-E
8 November 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Canada

FINAL PROTOCOL

The Canadian delegation wishes to record its concern at the appearance of footnotes in Region 2 concerning the use of frequencies for space purposes. The question of such footnotes breaks the long-established pattern to which all countries in this region have adhered, sometimes by sacrifices on their parts as for example we have seen to be the case at this conference.

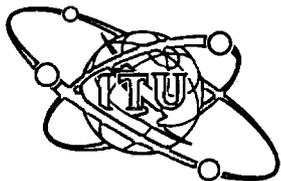
Canada would view with grave concern any radio operations in Region 2 which would detract from the efficient and agreed use of the radio spectrum.

The Republic of Cuba, we note, formally reserves its complete freedom of action to reject those provisions of the Final Acts of the E.A.R.C. which she may feel are prejudicial to the interests of Cuba. Because all countries of Region 2 have hitherto displayed a continued desire to cooperate, we hope that this reservation by Cuba does not imply an intention not to cooperate fully with other members of the Region in the rational use of the spectrum.

In these circumstances, Canada has no choice but to associate itself with the protocol submitted by the United States of America and Territories of the United States of America, insofar as it concerns these footnotes subscribed to by Cuba which may be found now or in the future to be objectionable to Canada. It is understood, of course, that the same reservations apply to the Final Protocol submitted by the Republic of Cuba.

William A. CATON
Head of the Canadian
Delegation





**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 234-E
8 November, 1963
Original: Spanish

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Republic of Colombia

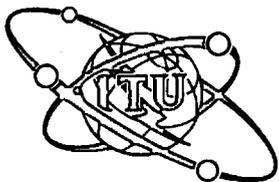
FINAL PROTOCOL

The Republic of Colombia reserves the right to take all necessary steps to safeguard its services operating in conformity with the provisions of the Radio Regulations in all cases where such services are affected by those of other countries operating in contravention of the said Regulations and, in particular, of the Table of Frequency Allocations.

The Republic of Colombia will also take similar steps in cases where the rights recognized by the Convention are affected as a result of the application of the Radio Regulations.

Elisao ARANGO
Head of the
Colombian Delegation





**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 235-E
8 November, 1963
Original : Spanish

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

Argentina

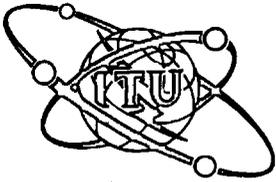
FINAL PROTOCOL

The Argentine delegation declares that its country reserves the right to take all necessary steps to protect its radio services in cases where any Member or Associate Member of the Union fails to comply with the provisions of the Radio Regulations as revised by the present Conference or where the reservations made by such Members have a harmful effect on its telecommunication services.

Head of the Argentine
Delegation

Juan A. AUTELLI





SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 236-E
12 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

FOURTH PLENARY MEETING

Wednesday, 6 November, at 09.30 hours

Chairman: Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen: Mr. Ashot BADALOV (U.S.S.R.)

Ambassador Joseph H. McCONNELL (United States)

Secretary of the Conference: Mr. Clifford STEAD

Subjects discussed :

1. Fifth series of "blue" texts submitted by the Editorial Committee (Document No. 176)
2. Fourth series of "blue" texts submitted by the Editorial Committee (Document No. 175)
3. Sixth series of "blue" texts submitted by the Editorial Committee (Document No. 177)
4. Eighth series of "blue" texts submitted by the Editorial Committee (Document No. 181)



The following countries were represented :

Algeria (Democratic and Popular Republic of), Argentine (Republic), Australia (Commonwealth of), Austria, Belgium, Bielorussian S.S.R., Bulgaria (People's Republic of), Cambodia (Kingdom of), Canada, China, Cyprus (Republic of), Vatican City State, Colombia (Republic of), Congo (Republic of the) (Léopoldville), Korea (Republic of), Cuba, Denmark, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Spain, United States of America, Ethiopia, Finland, France, Ghana, Greece, Hungarian People's Republic, India (Republic of), Indonesia (Republic of), Iran, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Kuwait, Lebanon, Liberia, Liechtenstein (Principality of), Luxembourg, Malaysia, Morocco (Kingdom of), Mexico, Monaco, Norway, New Zealand, Uganda, Pakistan, Panama, Netherlands (Kingdom of the), Philippines (Republic of the), Poland (People's Republic of), Portugal, United Arab Republic, Federal Republic of Germany, Federal Socialist Republic of Yugoslavia, Ukrainian Soviet Socialist Republic, Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, South Africa (Republic of) and Territory of South-West Africa, Sweden, Switzerland (Confederation of), Tanganyika, Czechoslovak Socialist Republic, Territories of the United States of America, Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Union of Soviet Socialist Republics, Kenya (Associate Member).

Recognized Private Operating Agencies

Cable and Wireless, American Cable and Radio Corp., France Cables et Radio, Compagnie Générale de Télégraphie sans fil.

International Organizations

International Civil Aviation Organization, World Meteorological Organization, Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science, Committee on Space Research, International Astronautical Federation, Fédération Internationale des Editeurs de Journaux et Publications, International Broadcasting and Television Organization, International Amateur Radio Union, International Scientific Radio Union.

Permanent Organs of the I.T.U.

General Secretariat, I.F.R.B., C.C.I.R., C.C.I.T.T.

1. Fifth series of "blue" texts (Document No. 176)

The Chairman of Committee 6 introduced Document No. 176 concerning the procedure, under Article 9A, for the notification and registration in the Master International Frequency Record of frequency assignments to stations in the space and radioastronomy services.

The new frequency procedure also envisaged the steps to be taken by Administrations to ensure co-ordination when earth stations were installed. That procedure was related to that to be followed for the assignment of frequencies to stations of terrestrial services under Article 9 MOD, approved the previous day.

Referring to the suggestion of the Soviet Union (Document No. 32, last paragraph page 3) concerning the procedure established under Article 9A, he reported that at the last meeting of Committee 6, the U.S.S.R. Delegation, after stating that it was difficult to establish whether the procedure was adequate or not - in the absence for the time being of experience in the space service - proposed that the whole procedure should be considered as provisional. That statement had been supported by the delegations of Bulgaria, Hungary and Roumania. The Delegate of the U.S.A. had declared that, insofar as the decisions of an administrative conference were subject to amendment by subsequent conferences, the procedure could be regarded as provisional, but he could not accept that the decisions of the present conference were more provisional in nature than those of any other Administrative Radio Conference.

The Delegate of the United Kingdom had spoken in similar terms.

The statements of the U.S.A. and U.K. were supported by the Delegations of the Federal Republic of Germany, Australia, Belgium, Canada, China, Spain, France, Italy, Israel, Japan, Liechtenstein, New Zealand, Netherlands, Portugal and Switzerland.

It was now for the Plenary Meeting to decide the issue.

The Chairman then took Document No. 176 page by page.

Page B5-01 was approved without comment.

Page B5-02 :

The Delegate of the United States of America, referring to regulation 639AD, reported that, as a result of the findings of Committee 5, Working Group 6A1 had found it necessary to restrict the co-ordinating procedure to bands allocated with equal rights to the space service and fixed or mobile services. However, to make footnote 639AD perfectly clear, he proposed the addition, at the end of the first sentence, the words "but only in respect to fixed or mobile services", so that the co-ordination procedure would not apply to any other services which might have equal rights in one of the bands in question.

The amendment, supported by a number of delegations, was approved.

Page B5-02, as amended, was then approved.

Page B5-03 :

The Delegate of the United States of America, replying to a point raised by the Delegate of Cuba with regard to regulation 639AF, explained that some of the services in the bands mentioned did not meet with the sharing criteria laid down in Article 7.

The Delegate of Cuba expressed satisfaction with the reply given.

Page B5-03 was then approved.

Page B5-04 :

The Delegate of Cuba, referring to the conclusion reached by Working Group 5A (Document No. 139), reserved his position with regard to the exclusion of co-ordination in the bands mentioned in regulation 639AF.

Pages B5-05 to B5-13 :

These pages were approved, subject to the rewording of the Spanish version of page B5-11.

Page B5-14 :

The Delegate of Cuba raised a point with regard to the procedure outlined in regulation 639CI but, after explanations by a member of the I.F.R.B., did not press the point.

Page B5-14 was therefore approved.

Page B5-15: Was approved without comment.

Page B5-16 :

In reply to a request for clarification of the third paragraph at the top of the page concerning the termination of radio emissions, the Delegate of the United States of America suggested that a cross-reference should be made in the appropriate paragraph of Article 7.

The Delegate of Portugal saw no need for any reference in the regulation to footnote 470G.

The Delegate of the U.S.S.R., supported by the Delegate of the Ukrainian S.S.R., referring to regulation 735.1, proposed the deletion of the words "space systems".

The Delegate of the United States of America said that the regulation, as drafted, was a simple statement of fact. It was not always possible to identify satellites by the transmission of signals and his Delegation, therefore, was in favour of the text as written. He was supported by the Delegates of the United Kingdom and France.

The Delegate of the U.S.S.R. was not altogether convinced of the need to retain the reference to space systems but would not press the point.

Page B5-16 was then approved

Page B5-17 :

On the proposal of the Delegate of Denmark, the heading "Space Stations" preceding regulation 773A, was amended to read "Stations in the Space Service", and the page thus amended was approved.

Page B5-18: Approved without comment.

The Delegate of the U.S.S.R. made the following statement :

"In its Document No. 32 the Telecommunication Administration of the U.S.S.R. pointed out the desirability of adopting an interim procedure for the notification, registration and utilization of frequencies allocated to space communication, bearing in mind that such a procedure could be reviewed and elucidated at the Extraordinary (Special) Conference in the light of experience acquired in the course of space communication operation.

" Since the arguments set out in Document No. 180 reflect these views of the Telecommunication Administration of the U.S.S.R., the Soviet Delegation does not insist on having the procedure described in Article 9A designated as an "interim" procedure."

The Chairman said that Document No. 176 was thus approved, as amended.

2. Fourth series of "blue" texts submitted by the Editorial Committee
(Document No. 175)

The Delegate of France introduced the document, indicating those parts of the tables which it was not necessary to examine at the present meeting.

The Chairman took the document page by page.

Page B4-01

On the suggestion of the Chairman of Committee 5, it was agreed to delete the word "directly" in footnote 273A but to retain the final sentence.

Page B4-01 as amended was approved

Page B4-02 :

At the request of the Delegates of Ethiopia, Israel and Japan, footnote 309C was deleted.

The Delegate of Japan, supported by the Delegate of Pakistan, urged that the C.C.I.R. be requested to study the problem of sharing criteria between fixed or mobile services and space telemetering and tracking services in bands below 1 Gc/s.

Page B4-02 as amended was approved.

Pages B4-03 to B4-06 were approved without comment.

Page B4-07: Was approved with the inclusion of Algeria in footnote 405B.

Page B4-10: Approved without comment.

Page B4-12 :

Draft Recommendation - was approved subject to the replacement of the word "aerospace" by "airspace", in sub-paragraph a).

Document No. 175, as amended, was approved.

3. Sixth series of "blue" texts submitted by the Editorial Committee
(Document No. 177)

The Chairman took the document page by page.

Page B6-01 :

On the proposal of the Delegate of the Republic of South Africa the reference in footnote 275A to the Republic of South Africa and Territory of South-West Africa was deleted.

The Delegate of the U.S.A. made two proposals : (1) the addition of the words "Telemetry and Tracking" after "Space Research" in the table relating to bands 137-138; (2) the inclusion of the following footnote for bands 137-138 Mc/s:

"This band will be used primarily for research on the development and maintenance of operational systems in the space services".

Page B6-01, with the above amendments, was approved.

Page B6-02 :

The Delegate of Denmark explained that Committee 5, after explanations by the I.F.E.B., had considered footnote 281 to be unnecessary since the table itself covered mobile, including aeronautical services on a primary basis, and might give rise to confusion. He therefore suggested deletion of the footnote in question.

The Delegate of Cuba requested that the final sentence of footnote 281B be amended to read : "Thereafter, in Cuba, the band will also continue to be allocated to the fixed and mobile services." The point was left for decision by the Editorial Committee.

The Delegate of Malaysia requested that his country be included in footnote 281E.

Page B6-02, as amended, was approved.

Page B6-03 - Draft Recommendation

On the proposal of the Delegate of the U.S.A., the word "those" (stations) in paragraph 1 of the Preamble was replaced by "fixed and mobile".

The Delegate of the United Arab Republic, supported by the U.S.S.R. proposed the deletion of the last phrase in operative paragraph 1, since the wording was inconsistent with the presentation in the tables.

The Chairman of Committee 5 and the Delegates of the U.S.A. and New Zealand were strongly opposed to the suggested deletion.

The Chairman, noting the conflicting opinions, put the United Arab Republic's proposal to the vote.

The proposal was rejected by 40 votes to 14 with 5 abstentions.

The Delegate of Yugoslavia, supported by the Delegate of the Hungarian People's Republic, then proposed the insertion of the words "if possible" after "cease" in the last phrase of paragraph 1.

The proposal was rejected by 33 votes to 16 with 8 abstentions.

The Delegate of the United Kingdom Overseas Territories referring to footnote 275A, indicated that Gambia - in order to show willingness to clear the band 136-138 Mc/s for space services - was prepared to terminate fixed and mobile services on 1 January, 1969.

The Delegate of the United Arab Republic reserved his position with regard to the operation of bands 136-137 Mc/s.

The Draft Recommendation, as amended, was approved.

Document No. 177, as amended, was approved.

4. Eighth series of "blue" texts submitted by the Editorial Committee
(Document No. 181)

The Chairman of the Ad Hoc Group of Committee 4 introduced the document, adding that it was based on Article 45 of the existing Radio Regulations.

The Chairman took the document page by page.

Page B8-01 :

The Chairman invited comments on the date of implementation of the new provisions.

The Chairman of Committee 5 said that a number of delegates in Committee 5 had indicated 1 January, 1965, as an appropriate date.

The Delegate of Poland, supported by the Delegate of the U.S.S.R., suggested that the date might be set at September, 1965, to coincide with the Centenary of the I.T.U., thus marking a new era in space communications.

The Delegate of Austria, supported by the Delegate of the United Arab Republic, referred to the need to consider the practical implications and for sufficient time to be allowed for the adaptation of existing equipment.

The Delegate of Denmark, supported by the Delegates of the Federal Republic of Germany, the United Kingdom, U.S.A. and the Netherlands, did not believe that any of the modified regulations would involve immediate action. Early implementation was advisable in the interest of terrestrial services in order to provide for the coordinating procedure.

The Delegate of Morocco stressed that the date of implementation was an important matter in view of the sharing criteria in certain bands. If precise conditions for sharing criteria could be finalised and agreement reached on the coordinating procedure, the revised regulations could come into force on 1 January, 1969.

The Delegate of the United Arab Republic saw no need for hasty action. Nothing was yet known about how the space communication system could be used by Administrations nor with regard to financial and legal factors. He therefore supported the suggestion that the date for implementation should coincide with the convening of the Plenipotentiary Conference in 1965.

The Delegate of Cuba said that the original purpose of the Conference was to establish worldwide plans for all space services in which all countries could participate with equal rights.

One of the essential conditions for the establishment of such plans should have been the study of the advisability of establishing one single global satellite communication system or several systems operated by different countries or exploiting companies. Whatever the plan chosen, it should permit all countries to have access to it, particularly in the case of a single global system, including an equitable distribution of the permissible portion of the spectrum among all the different countries of the world in order to enable them to establish their own systems and services. The Conference should decide on the allocation of essential frequency bands to the different space services without affecting their actual status and should not allocate frequency bands, as has been done, nor to impose on different Administrations a coordinating procedure relating to space services, nor to fix time limits for notification to other Administrations or the I.F.R.B.

For those reasons, his Delegation could not agree to the fixing of dates nor with other decisions adopted by the Conference, and therefore reserved its position with regard to the Final Acts.

The Delegate of Sweden formally moved that the date for implementation should be set at 1 January, 1965.

The Chairman put the Swedish proposal to the vote.

The proposal was adopted by 41 votes to 11, with 6 abstentions, and the date of 1 January, 1965 inserted in the fourth paragraph, page 1, of Document No. 181, with a reservation by the Delegate of the United Arab Republic.

The Delegate of Morocco, supported by the Delegates of Cuba, U.S.S.R., and the United Arab Republic, then proposed the deletion of the final paragraph, and moved that a vote be taken on his proposal.

The proposal, put to the vote, was rejected by 43 votes to 12, with 5 abstentions.

The Delegate of the U.S.S.R., supported by the Delegates of the Czechoslovak Socialist Republic, and the Belorussian S.S.R., proposed that the fourth paragraph should be reworded to the effect that the revised provisions were complementary and not an integral part of the 1959 Radio Regulations.

The Delegate of Italy could not accept the U.S.S.R. proposal. The legal effect of decisions taken by the 1963 Extraordinary Administrative Radio Conference was similar to that of all conferences, the only difference being that the present Conference had been entrusted with the review of one part of the Radio Regulations, whereas the whole body of provisions was dealt with at ordinary conferences.

The Secretary-General said that the Delegate of Italy had rightly pointed out that not only had provisions been added but also reviewed and accordingly they must be considered as part of the Radio Regulations.

The Delegate of the U.S.S.R. maintained that the revised provisions were additional or supplementary to the 1959 Radio Regulations.

The Delegate of the United Arab Republic, while agreeing with the Delegate of Italy from the legal point of view, stressed that other factors should not be ignored. It was not yet clear whether the sharing criteria would be technically sound or not, and, for that reason, was purely of a provisional nature. Moreover, the operation of satellite-communication systems on a worldwide basis was experimental. In his view, the word "integral" was too precise and he shared the views expressed by the Delegate of the U.S.S.R.

The Delegate of Spain, in supporting the reasoning of the Delegate of Italy, proposed a drafting amendment to the fourth paragraph on the following lines: "the provisions of the Radio Regulations, Geneva 1959, as revised and complemented, form an integral part abrogated."

The Delegate of New Zealand suggested that the words "form an integral part" should be replaced by the words "be integral with".

The Delegate of the United Kingdom subscribed to the views expressed by the Delegate of Italy and the Secretary-General.

Further discussion was deferred to the next meeting.

The meeting rose at 1 p.m.

Rapporteur :

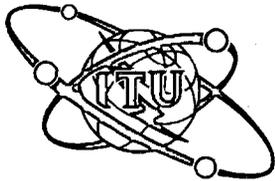
H. OTTEN

Secretary :

Clifford STEAD

Chairman :

Gunnar PEDERSEN



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 237-E
12 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

5th PLENARY MEETING

Wednesday, 6 November, 1963, at 3 p.m.

Chairman : Mr. Gunnar PEDERSEN. (Denmark)

Vice-Chairman : Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)

Secretary of the Conference : Mr. Clifford STEAD

Subjects discussed:

1. Eighth series of "blue" texts submitted by Committee 7
(Document No. 181)
2. Ninth series of "blue" texts submitted by Committee 7
(Document No. 183)
3. Draft Resolution relating to Space vehicles in distress
(Document No. 184)
4. Eleventh series of "blue" texts submitted by Committee 7
(Document No. 186)
5. Tenth series of "blue" texts submitted by Committee 7
(Document No. 185)
6. Final Report of Committee 2 (Credentials)
(Document No. 179)
7. Miscellaneous



The following countries were represented:

Algeria (Democratic and Popular Republic of), Argentine (Republic), Australia (Commonwealth of), Austria, Belgium, Bielorussian S.S.R., Bulgaria (People's Republic of), Canada, China, Cyprus (Republic of), Vatican City State, Colombia (Republic of), Korea (Republic of), Cuba, Denmark, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Spain, United States of America, Ethiopia, Finland, France, Ghana, Greece, Hungarian People's Republic, India (Republic of), Indonesia (Republic of), Iran, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Kuwait, Lebanon, Liberia, Liechtenstein (Principality of), Luxembourg, Malaysia, Morocco (Kingdom of) Mexico, Monaco, Norway, New Zealand, Uganda, Pakistan, Netherlands (Kingdom of the), Philippines (Republic of the), Poland (People's Republic of), Portugal, Spanish Provinces in Africa, United Arab Republic, Federal Republic of Germany, Federal Socialist Republic of Yugoslavia, Ukrainian Soviet Socialist Republic, Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, South Africa (Republic of) and Territory of South-West Africa, Sweden, Switzerland (Confederation of), Tanganyika, Czechoslovak Socialist Republic, Territories of the United States of America, Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Union of Soviet Socialist Republics, Kenya (Associate Member).

International Organizations

United Nations Organization, International Civil Aviation Organization, United Nations Educational, Scientific and Cultural Organization, Intergovernmental Maritime Consultative Organization, World Meteorological Organization, Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science, International Council of Scientific Unions, Fédération Internationale des Editeurs de Journaux et Publications, International Scientific Radio Union.

Permanent Organs of the International Telecommunication Union

General Secretariat, I.F.R.B., C.C.I.T.T. C.C.I.R.

1. Eighth series of "blue" texts submitted by Committee 7 (Document No. 181)

The Chairman recalled that the main issue for discussion concerned the fourth paragraph on page B8-01 for which, in the second line, the Delegate of the U.S.S.R. had proposed the wording "to form a complement to the Radio Regulations" instead of "form an integral part of . . .".

The Delegate of the U.S.S.R., before considering the substance of his proposal, wished to put two questions to the Secretary-General for clarification: First, the Radio Regulations of Geneva 1959 were signed by representatives of some 100 countries, whereas, at the present Conference, some 70 countries were attending. How could this smaller number of countries revise the provisions of the 1959 Regulations without having the opinions of the absent Members? Second, some governments had not approved the 1959 Regulations, but of these, apparently, some were willing to approve the Agreement of the present Conference. Did not this require clarification?

The Deputy Secretary-General pointed out that the agenda, time and place of the present Conference had all been approved by a majority of the Members of the Union and that, therefore, the convening of the Space Conference was in conformity with Nos. 60 and 61 of the Convention. All Administrations had been invited to attend, though not all had been able to come.

With reference to approval of the Regulations, he referred to 194 of Article 14 of the Convention, which would seem to clarify the situation.

The Delegate of the U.S.S.R. declared that he was not satisfied with this explanation. He was not arguing that the present Conference was fully empowered, under the terms of the Convention, to make decisions; his question was, how could the present Conference take a decision on a document adopted by a larger number of Members of the Union? It was for this reason that he considered it essential that decisions taken by the present Conference should be complementary to the 1959 Regulations. As to those countries which had not approved the 1959 Regulations, their possible approval of the present Agreement gave rise to a purely legal question.

The Secretary-General drew attention to the fact that the Convention contained no provision authorizing the Secretary-General to interpret it, or the Regulations. Secondly, he was not a lawyer by profession but had been educated as an electronics engineer. However, if the Delegate of the U.S.S.R. wished for the Secretary-General's personal views, based on his experience in the Union, he would endeavour to answer his questions.

How could the Conference revise decisions adopted by a larger number of Members of the Union? There was no provision of any kind specifying representation or determining the number of Members of the Union to be present. Each Conference comprised sovereign governments and, so far as he knew, was sovereign within the framework of its agenda.

How could the Conference deal with Regulations adopted by different countries in 1959? He thought the answer to that was quite clear and referred to Conference Document No. 46 - the agenda adopted by the Administrative Council, after long discussion, and which was then submitted to the full membership of the Union and approved with no dissenting voice. Amongst the items was paragraph 4, which he read out.

When the Administrative Council authorized the Space Conference to review the Regulations, obviously such a review implied a change. Also, if some countries, which attended the 1959 Conference were not present, it was a fact which might be deplored, but about which nothing could be done.

In conclusion, the Secretary-General once more stressed that it was his personal opinion that the present Conference was fully at liberty, within the framework of its agenda, to adopt such Regulations or amend them as it decided by its own free will.

The Delegate of the U.S.S.R. was grateful to the Secretary-General for his statement and fully agreed with it. In his view, it appeared to bear out his own opinion that the decisions of the Conference should be an addendum to the 1959 Regulations.

The Delegate of the U.A.R. referred to the statement he had made at the second Plenary Meeting, where he had raised a point of principle on the procedure concerning the first item on the Conference Agenda. This point should have been fully discussed at that time which would have avoided a lengthy debate at present.

His Administration did not yet possess experience on the operating of earth satellite systems and he did not believe that such systems for communications would be operated for three or four years. In item 3 of the Conference Agenda, it was stated that the Space Conference would revise only such provisions of the Geneva 1959 Regulations as might be essential for the effective implementation of the decisions of the Conference. He therefore did not think that the revised Regulations could be adopted as an integral part of the 1959 Regulations.

The Delegate of India wished to make a statement in accordance with No. 627 of the Convention, and spoke as follows :

"The presence of any provision in the Radio Regulations, which is against the spirit of the International Telecommunication Convention is regrettable. In the opinion of the Indian Delegation, the substance of the paragraph under discussion is not in consonance with the aims and objects of the Union. Nevertheless, it is equally regrettable that countries who have no reservations cannot unilaterally discharge the obligations of the Regulations in relation to countries who have reservations. Besides, the paragraph under discussion, for retention or otherwise, in the form it takes, cannot have force in relation to the successful operation of space services as this Conference envisages. With these considerations in view and being placed in the grey area of enlightenment on the subject, the Indian Delegation is constrained to abstain in the voting."

The Delegate of Italy took up the legal aspect of the question raised; the only difference between the Space Conference and any other Ordinary Administrative Radio Conference was that the latter was competent to revise all the provisions of the Regulations, whereas the Space Conference had the task of revising only one specific part of the Regulations. An entire new text could have been redrafted comprising the amendments, which would not have changed the legal question at all. The present procedure, whereby only the revised portions had been published, had been adopted as a simple, practical method to avoid unnecessary expense.

Summing up, he pointed out that countries signing part of the amended Regulations would be carrying out the same functions as those signing new Regulations, as at the 1947 and 1959 Radio Conferences.

The Delegate of the U.S.S.R. agreed also with the interpretation of the last speaker but still maintained his point.

The Chairman put to the vote, by show of hands, the proposal of the U.S.S.R. for the text to read "a complement to the Radio Regulations".

The results of the vote were as follows :

In favour	12
<u>Against</u>	43
Abstentions	8

The proposal was rejected, and the text remained as contained in Document No. 181.

The Delegate of the U.S.S.R. had a further proposal: to add a paragraph to the text, immediately preceding the signature, to the effect that the relevant authorities should notify their approval of the revision.

After a considerable discussion, in which the Delegates of Denmark, Italy, Spain, Morocco, the Secretary-General and the Chairman of Committee 7 took part, it was agreed to add a paragraph based on No. 194 of the Convention, slightly amended, as read out by the Secretary-General: "Members and Associate Members shall inform the Secretary-General of their approval of these Regulations". (The second sentence of No. 194 as it stands).

With this amendment, Document No. 181 was approved.

2. Ninth series of "blue" texts submitted by Committee 7 (Document No. 184)

The Chairman of Committee 7 stated that there were some slight drafting changes still to be made, particularly with reference to the French text, but these would be dealt with by his Committee.

The Chairman of Committee 4 said that the definitions contained in the document had been discussed at great length in Working Group 4A. Tentative definitions had been passed for comment to Committees 5 and 6, had been revised and amended accordingly and had been unanimously approved by Committee 4. However, it was possible that the Plenary Assembly might consider one or two of the definitions to be unnecessary.

Page 03

The Delegate of Australia asked whether the definition of "passive satellite" in 84AK included the case of "needles".

The Chairman of Committee 6 did not think that this point had been discussed in Committee, but referred the question to the Chairman of Working Group 4A, who recalled that the original definition of a passive satellite had been an earth satellite, intended to transmit radio communications by reflection or by scattering, but that upon request, in Committee 4, it had been decided to delete the reference to scattering.

Document No. 183 was then approved.

3. Draft Resolution relating to Space vehicles in distress (Document No. 184)

Approved without discussion.

4. Eleventh series of "blue" texts submitted by Committee 7 (Document No. 186)

Approved, it being understood that the appendix contained on the incorrectly numbered page B11-19 would be numbered page B11-13.

5. Tenth series of "blue" texts submitted by Committee 7 (Document No. 185)

Cover page. In the column headed "reference" the word "draft" to be added before Recommendation in the first line.

Page 02

The Chairman of Committee 7 indicated the relevant texts to which footnotes 1, 2, 3, 4 and 5 now referred.

Page 04

The Delegate of the United States of America proposed that the words "except in the case of the bands 4400 to 4700 Mc/s and 8100 to 8400 Mc/s" be added after "fixed or mobile services" in the last line of 470D. He further proposed that the words "these frequency bands are the following..." be deleted from that paragraph, and also where they occurred in paragraphs 470J, 470M, 470Q and 470U.

The Delegate of France, thought it would be helpful to mention the bands used for both earth and space stations.

The Delegate of Indonesia supported the last speaker and recalled that it had been decided in Committee 4 to specify the frequency bands in each case. His second point was a question of substance. It appeared to him preferable to have sufficient information available on the special frequency bands 4400 to 4700 Mc/s and 8100 to 8400 Mc/s, before excluding them from the coordination procedure of power limitation, as put forward in 470B. He therefore stated his objection to and reservation on this point.

The Delegate of Cuba said that if those bands were to be shared equally with the fixed and mobile services, he saw no reason why they should be treated differently from other stations and referred in particular to Document Bl, showing sharing criteria. He, too, objected to the inclusion of a special mention of these frequency bands in paragraph 470D.

The Delegate of the U.S.S.R. suggested that the present text of items 470D, J, M, Q and U be completed by the corresponding bands which were considered in Committee 5, excepting those bands in 470D, particularly referred to by the Delegate of the U.S.A.

The Chairman of Committee 7 supported the suggestion which would make the text extremely clear and which corresponded to the decisions taken in Committee 4. The Editorial Committee would endeavour to fill in the relevant frequencies at an early moment for consideration of the meeting.

It was also the view of the Delegates of India, the U.S.A. and Denmark that insertion of the relevant frequencies would make the text clear. It was so decided.

The Chairman of Committee 5 raised the query as to whether the same procedure was to be applied in the bands 7250 - 7300 Mc/s with respect to the countries indicated in footnote 392Y, which also used fixed and mobile services in those bands.

It was the view of the Delegate of the U.S.S.R. that all the frequency bands which were allocated to the communication satellite services should be shown in paragraph 470D.

On this understanding, page 04 was adopted, with the deletion of the footnote at the bottom of the page, following a suggestion by a Member of the I.F.R.B. as it was not in conformity with No. 115 of the Radio Regulations.

Page 07

The Delegate of the U.S.S.R. started a discussion as to the advisability of keeping the footnote, which, in his view, was useful, as it showed how the sharing criteria received, concerning the power density levels were applicable to meteorological satellite space stations.

The Delegate of Denmark thought this footnote might lead to confusion when Recommendations on the subject were available from the C.C.I.R., and was in favour of its deletion, as was the Delegate of France.

The Delegate of Indonesia suggested, as a compromise, the insertion of some date, such as "at the time of drawing up the definitions" which was also the thought of the Delegate of Belgium, who proposed adding "in 1963".

As explained by the Delegate of Denmark and borne out by the Chairman of Working Group 4C, the footnote had been inserted because the Working Group had been obliged to use the material applicable to the communication satellites, to enable it to come forward with a Recommendation with regard to the meteorological satellite service.

The Delegate of the United Kingdom was in favour of retaining the footnote and as this appeared to be the general opinion, this was agreed.

Page 14

The Chairman of Committee 7 proposed that a title be found for the Draft Recommendation, along the lines "relative to frequency bands shared between space services and earth services". It was agreed to leave this to his Committee.

Page 17

The Delegate of India pointed out an omission under "decides to" where a) should read "...sharing between space services and line of sight radio-relay systems".

Subject to approval of the frequency bands to be inserted, Document No. 185 was adopted.

6. Final Report of Committee 2 (Credentials) (Document No. 179)

The Chairman of Committee 2 informed the Meeting that, since the last meeting of his Committee on 2 November, the Delegate of Monaco had presented credentials, which he had personally examined and found to be in order. He therefore requested that the name of Monaco be added to the list of countries with acceptable credentials.

Moreover, with regard to the Republic of the Philippines, this country figured in the list of those, in the table on page 5, in Annex 1, as not having ratified the Convention, whereas, as stated in Document No. 198, the instrument of ratification had been received on 6 November.

The Delegate of Canada moved adoption of the Report of Committee 2 and was supported by the Delegate of Japan.

The Delegate of Indonesia wished the following statement to be included in the Final Acts of the Conference:

"In the opinion of the Delegation of the Republic of Indonesia to the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunications, a country must first accede to the I.T.U. Convention before it has the right to participate in the I.T.U. Conferences. The Indonesian Delegation refers to the representation of Malaysia in which case the Indonesian Delegation could not have any other opinion than that it should be considered as a new country which is assumed to comprise the country-Member Malaya (Federation of) and the Associate-Member Singapore-British North Borneo, and to which Article 18 of the Convention applies.

" As up to the Plenary Session of this Conference on 6 November 1963, a notification by the Secretary-General concerning the accession of the above-mentioned new country has not been received by the Indonesian Administration, the Delegation of the Republic of Indonesia would like to reserve the right of its Government not to recognize the representation of Malaysia in the Extraordinary Administrative Radio Conference to allocate frequency bands for Space Radiocommunications, as such recognition would be in contradiction with the said Article 18 of the Convention."

The Delegate of Malaysia made the following statement :

"Mr. Chairman,

" It is regrettable that in this Conference, which is technical in nature, our neighbours, the Indonesians, should have brought out some other points.

" It is my duty to describe for the records what the Malaysia Agreement is. The original constitution of the Federation of Malaya, which made provisions for amendments, was amended by an Act of the Malayan Parliament before Malaysia Day on 16 September, 1963. This Act took account of the incorporation of Singapore, Sarawak and Sabah (North Borneo) with the former Federation of Malaya and brought about a change of name to Malaysia. This arrangement has been possible following an agreement between Her Majesty's Government in the United Kingdom and the Government of the Federation of Malaya, and by giving the Royal assent to the Act, her Majesty relinquished sovereignty in Singapore, Sarawak and Sabah. In effect, Malaysia is Malaya as it was before 16 September but with the addition of new territories. This principle was publicly stated in a broadcast by the Malaysian Permanent Secretary for External Affairs on 16 September. There is thus complete legal continuity as a single entity between Malaya and Malaysia.

" It should therefore be clear, Mr. Chairman, that Malaya and Malaysia are one and the same State. Indeed, you may recall that, recently Malaysia was elected to the U.N. Security Council - to alternate with Czechoslovakia - without the identity of Malaysia being called into question.

" Mr. Chairman, I request that this statement be incorporated in the Minutes of this meeting."

The Delegate of the United Kingdom said :

"I wish on behalf of the United Kingdom to fully support the statement made by the Delegate of Malaysia, and I would remind members again that Malaysia was elected to the U.N. Security Council without the identity of Malaysia being called into question.

" With the Delegate of Malaysia, I must, however, deplore that a question of I.T.U. membership and representation has been raised at this Conference, which is not competent to discuss such questions. I would suggest, Mr. Chairman, that further discussion on this issue is out of order."

The Delegate of Austria supported the suggestion of the last speaker.

The Chairman informed the last speakers that their remarks would be recorded, and closed discussion on the subject.

Document No. 179, with the amendments proposed by the Chairman of the Credentials Committee, was then adopted.

7. Miscellaneous

The Secretary of the Conference wished to remind those delegates with visas for Switzerland, to check whether these were still valid. If not, they should hand their passports in to the Delegate Service, who would undertake to have the visas renewed.

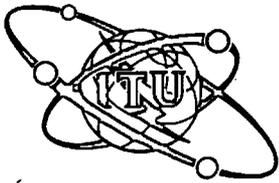
He further requested all delegates to make sure that they had informed the Secretariat of their official addresses so that a complete list could be distributed.

The Meeting rose at 6.05 p.m.

Rapporteur :
R. UMBERG

Secretary of the Conference :
Clifford STEAD

Chairman :
Gunnar PEDERSEN



SPACE
RADIOCOMMUNICATION
CONFERENCE

Document No. 238-E
13 November 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

M I N U T E S

OF THE

SIXTH PLENARY MEETING

Wednesday, 6 November 1963 at 21.00 hours

Chairman : Mr. Gunnar FEDERSEN (Denmark)

Vice Chairmen : Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)

Secretary of the Conference : Mr. Clifford STEAD

Subjects discussed :

1. Statements by the Observers from the United Nations, UNESCO and the International Federation of Newspaper Writers and Editors
2. Seventh series of "blue" texts submitted by the Editorial Committee (Document No. 187)
3. Outstanding item from consideration of the Tenth series of "blue" texts submitted by the Editorial Committee (Document No. 185)



The following countries were represented :

Algeria (Democratic and Popular Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Bulgaria (People's Republic of); Canada; China; Cyprus (Republic of); Vatican City State; Colombia (Republic of); Korea (Republic of); Cuba; Denmark; Group of Territories represented by the French Overseas Post and Telecommunication Agency; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungary (People's Republic of); India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Jamaica; Japan; Kuwait; Liechtenstein (Principality of); Luxembourg; Malaysia; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Uganda; Pakistan; Netherlands (Kingdom of the); Philippines (Republic of the); Poland (People's Republic of); Portugal; Spanish Provinces in Africa; United Arab Republic; Federal Republic of Germany; Federal Socialist Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; South Africa (Republic of) and Territory of South-West Africa; Sweden; Switzerland (Confederation of); Tanganyika; Czechoslovak Socialist Republic; Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Union of Soviet Socialist Republics; Kenya (Associate Member).

International Organizations :

United Nations Organization; United Nations Educational, Scientific and Cultural Organization; World Meteorological Organization; Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science; Committee on Space Research; International Council of Scientific Unions; Fédération Internationale des Editeurs de Journaux et Publications; International Broadcasting and Television Organization; European Broadcasting Union; International Amateur Radio Union; International Scientific Radio Union.

Permanent Organs of the International Telecommunication Union

General Secretariat, I.F.R.B., C.C.I.T.T., C.C.I.R.

1. Statements by the Observers from the United Nations, UNESCO and the International Federation of Newspaper Writers and Editors

The Representative of the United Nations drew attention to the statement that had been submitted by the United Nations to the Conference (Document No. 193). It consisted of two parts: 1) information from U Thant, Secretary-General of the United Nations on the interest taken in the I.T.U. Space Conference in relation to certain Resolutions of the General Assembly and ECOSOC and 2) United Nations requirements for space communications. In view of the time shortage, he did not go into further detail but referred the delegates to Document No. 193 which he hoped the Conference would note in the course of its proceedings. Since it was probably the last opportunity he would have of addressing the conference, he also took the opportunity of conveying his best wishes for its success and thanking the Union for allowing him to follow the discussions from the point of view of matters which were before ECOSOC and would be receiving increasing attention from them in connection with the Committee on the Peaceful Uses of Outer Space.

The Representative of UNESCO made the statement which appears in Annex 1 to these Minutes.

The Delegate of Argentina congratulated the UNESCO Representative on the clarity of his magnificent address.

The close collaboration existing between the I.T.U. and UNESCO was well-known. He had had an opportunity of appreciating it fully when he had had the honour of representing the I.T.U. at a meeting of UNESCO for the development of the mass media held in Santiago de Chile. The need for intensifying efforts to increase the flow of information through the press, radio and television to all the peoples of the world had been fully brought home to him on that occasion.

He had also seen the report entitled "Space Communication and the Mass Media" published in Document No. 188, which outlined the prospects of the use of space telecommunications for the promotion of UNESCO's aims.

On behalf of his delegation, he supported the statement made by the UNESCO Representative and expressed the hope that in future collaboration between the two specialised agencies would be broadened, so as to further enhance the development of mass media by means of space communications.

The Representative of the International Federation of Newspaper Writers and Editors then spoke as shown in Annex 2.

The Chairman expressed his thanks to the three observers for their excellent statements.

2. Seventh series of "blue" texts submitted by the Editorial Committee (Document No. 187)

The Chairman said that the document would be taken page by page.

The Chairman of the Editorial Committee drew attention to typographical errors in the French text which would be corrected before publication of the document in "pink" version. He also recalled that the last sentence of the footnote concerning radio astronomy should be deleted in all cases because the Plenary Assembly had decided that new Regulation 116A covered that point.

Page 02

Approved, subject to the deletion of Mexico from footnote 253B.

Page 04

The Delegate of Denmark raised the question of whether the conference was entitled to establish the definition of the African Broadcasting Area, referred to on page 04 and defined on page 05. The definition given was the outcome of the recent African Broadcasting Conference and it had been drawn up for that purpose. It now appeared as a footnote in the Regulations.

The Delegate of Morocco also felt that it was not for the present Conference to decide on such an issue and suggested that footnotes 330, 330A and 332 should specify the geographical limits of the area.

The Delegate of Luxembourg was of the opinion that the Conference was not competent to establish such definitions.

The Delegate of U.S.S.R., supported by the Delegates of the United Kingdom, Denmark and Uganda, proposed that, where applicable, the texts of the footnotes should begin: "In Region 1, except the European Broadcasting Area, the band".

The Chairman of the I.F.R.B. referred to Document No. 160, Appendix 4, page 11 (Rev.). It would be a simple matter to retain the words "African Broadcasting Area" clearly specifying that the term was used only for the purposes of the footnotes concerned.

The Delegate of Morocco suggested that it might be possible to solve the difficulty by referring to the various countries in the area individually.

The Delegate of France proposed that the wording of Appendix 4 to Document No. 160 (Rev.) be used and that the footnote specify that "for the purpose of these Regulations the term African Broadcasting Area designates ...".

The Delegate of Morocco supported that proposal but suggested that the geographical limits of the African Area be changed to the parallels 40 deg. South and 40 deg. North.

The Chairman of the I.F.R.B. pointed out that Region 1 comprised three sub-regions: the European Broadcasting Area, the African Broadcasting Area and the U.S.S.R. and Middle East. He suggested that it should be stated in footnote 133A that, for the purposes of the provisions of the Conference, the African Broadcasting Area be designated as comprising the three areas mentioned in footnote 133A and that that designation be considered operative for footnotes 330, 330A and 332. The difficulty had probably arisen from the reference on page 05 to "MOD": the insertion of 133A in Article 5. It was not a question of modifying Article 5, but purely of reference to the area concerned.

On that understanding, it was finally decided to amend footnotes 330, 330A and 332 in accordance with the proposal by the U.S.S.R.

Page 06 Approved, subject to various drafting and layout changes proposed by Committee 5, and the re-numbering of the footnotes.

Page 07 Approved, subject to the addition of Lebanon in footnote 285B and the amendment of "may continue" in the penultimate line of that footnote to read "will continue", on the proposal of the Delegate of Morocco, supported by the Delegates of Cuba and Pakistan.

Page 08 The Delegate of the United Kingdom recalled the new footnote 286A had been circulated as an addendum to Document No. 167.

On a point raised by the Delegate of France as to the additional protection afforded to the fixed and mobile services, the Delegate of the United Kingdom assured him that he took new Regulation 116A to apply to the case concerned as to all other cases.

The Delegate of Denmark said that his understanding was that new Regulation 116A referred only to protection from services in other bands and not to services in the same band.

The Delegate of the United Kingdom suggested the addition of the following sentence to footnote 286A : "For the purpose of resolving cases of harmful interference to the radio astronomy service in these bands, protection from fixed and mobile services in these bands shall be afforded to the radio astronomy service only to the extent that such services are afforded protection from each other".

The Delegate of France suggested that it would be sufficient if that understanding was reflected in the minutes of the meeting. It was so agreed.

Page 10 The Delegate of France said that the discussions in Committee 5 had appeared to indicate that tracking operations should be covered in a footnote rather than in the table itself.

The Delegate of the United States of America said that in his opinion the entry was correct as it stood; it was preferable to show telemetering and tracking in the table as two distinct functions.

The Delegate of France said that his Delegation would have preferred the wording: "Space Research (Telemetering)" in the table with a footnote to the effect that tracking was also possible in the band concerned. He would not, however, press the point.

Page 10 was approved, subject to the inclusion of Lebanon in the list of countries in footnote 311A, the replacement of "may continue" by "will continue" in the penultimate line and the insertion of "1st" before "January" in footnote 312A.

Page 12

For the sake of consistency with the action taken in deleting footnote 218, it was decided on the proposal of the Delegate of the United Kingdom, supported by the Delegate of France, that the reference to footnote 345B in Region 1, band 1690 to 1700 Mc/s, would be deleted and the reference to 354B for Regions 2 and 3 would be replaced by a new footnote omitting reference to the countries of Region 1.

Page 13

It was decided at the request of the countries concerned to include Spanish Provinces in Africa in footnote 354B and Algeria in footnote 354A.

It was also decided on the proposal of the Delegate of the United States of America to delete the last sentence of footnote 324A and the words "recent" and "two" from the first line of footnote 353A in view of the fact that that footnote would be in force for a considerable period of time.

In accordance with the suggestion from the Delegate of the United Kingdom approved in connection with page 12, it was decided to amend footnote 354B by replacing "the bands 1660 - 1670 Mc/s and 1690 - 1700 Mc/s are also allocated" by "the band 1660 - 1670 Mc/s is also allocated", and to insert a new footnote 354C for Regions 2 and 3 as follows: "In Australia, Indonesia and New Zealand the band 1690 - 1700 Mc/s is also allocated on a secondary basis, to the fixed service and the mobile, except aeronautical mobile service".

Page 14

It was decided to delete the contents of the square brackets in footnote 318A and, on the proposal of the Delegate of Ethiopia, supported by the Delegate of the F.S.R. of Yugoslavia, to insert after "operating" in the fourth line: "or contemplating to operate".

Page 16

Approved, subject to the addition of Poland in footnote 412A.

Page 17

Approved, subject to the addition of Bulgaria in footnote 215A.

Page 19

It was decided to delete the square brackets in footnote 401A.

Page 20

The Chairman of Committee 5 indicated that the text of footnote 339A had been agreed provisionally and now required confirmation from the U.S.S.R.

It was decided to delete the words "in the U.S.S.R. and specific" and replace them by "Specific" at the beginning of the footnote.

The Delegate of the United Kingdom, supported by the Delegates of France, Luxembourg and Belgium, said that he would have difficulty in accepting the last two lines of the footnote. He proposed that the last two lines thereof be replaced by "research, on a secondary basis".

The Delegate of the U.S.S.R., supported by the Delegates of the P.R. of Hungary and the Bielorussian S.S.R., proposed that the text of the footnote remain as it now stood.

A vote was taken and, by 27 in favour and 10 against, with 19 abstentions, it was decided to amend the footnote as proposed by the Delegate of the United Kingdom.

Pages 22 -
26 inc.

It was decided to include Bulgaria and Poland in footnote 389A, Lebanon, Algeria and Yugoslavia in footnote 409AA, Algeria in footnote 409A and the U.S.S.R. in footnote 356AA, at the request of the delegations concerned.

Page 27

Draft Recommendation

The Delegate of Argentina, supported by the Delegate of Colombia, deplored the mistakes in the Spanish text which persisted in spite of his attempts in Committee 5 and at various working groups to have them corrected. He referred to Documents Nos. 21, 45, 167 and 169 as well as to the draft Recommendation on page 27 of Document No. 187.

The Chairman said that he was sure all those concerned deeply regretted that those mistakes had not been corrected in the "blue" text and would ensure that the Spanish texts were correct in the "pink" version.

The Delegate of Argentina proposed that the second frequency band referred to in the second operative paragraph of the Draft Recommendation should be 399.9 - 400.05 Mc/s instead of 399.9 - 400 Mc/s, in accordance with the discussions which had taken place in Committee 5. Footnote 312 and 313 referred thereto.

Also, the wording of the title of the Draft Recommendation was more appropriate in Article 7 than in the title of that Recommendation. He quoted the title given in Appendix 3 to Document No. 169 and recalled that it had been decided at the Eighth Meeting of Committee 5, as would be seen from the Summary Record contained in Document No. 199, to change that title to read: "Draft Recommendation relating to the introduction and use of the Radionavigation-satellite Service". In conclusion, he formally moved that the title be amended to read: "Draft Recommendation relating to the need to cease operation of the fixed and mobile services in the bands 149.9 - 150.05 Mc/s and 399.9 - 400.05 Mc/s allocated to the radionavigation-satellite service".

The Delegate of the United States of America said that the upper band limit in the existing Frequency Allocation Table was 400 Mc/s and the figure given in the last paragraph of the draft Recommendation was therefore correct.

The Delegate of Denmark, supported by the Delegate of the United Kingdom, said that in view of the footnotes referring to the use of that band, it would not be an error to adopt the proposal by the Delegate of the Argentine on that point, and the Delegate of the United States of America said that he would not press his point.

It was therefore decided to amend the upper band limit in the penultimate line of the draft Recommendation to 400.05 Mc/s.

After an exchange of views between the Delegates of Cuba and Morocco and the Chairman of Committee 5, the amendment proposed by the Delegate of Argentina to the title of the draft Recommendation was approved.

The Delegate of the United Arab Republic reserved the position of his Delegation on the draft Recommendation.

Thus amended, the draft Recommendation was approved.

The Seventh series of "blue" texts contained in Document No. 187 was thus approved, as amended.

3. Outstanding item from consideration of the Tenth series of "blue" texts submitted by the Editorial Committee (Document No. 185)

The Chairman of the Editorial Committee announced that the list of frequency bands to be inserted in footnotes 470D, J, M, Q and U had now been circulated, in accordance with the discussion on item 5 of the Agenda of the Fifth Plenary Meeting.

There being no objection, their insertion in the footnotes was approved.

The meeting rose at 12.30 p.m.

Rapporteur
V. BOULADON

Secretary
Clifford STEAD

Chairman
Gunnar PEDERSEN

Annexes : 2

A N N E X 1

STATEMENT BY MR. JULIAN BEHRSTOCK, REPRESENTATIVE OF UNESCO

"Mr. Chairman, Distinguished Delegates, Ladies and Gentlemen:

" I should like to say how greatly we at UNESCO have appreciated the opportunity to follow the work of this Conference. The documents submitted to the Conference and the proceedings alike have held the highest interest for us.

" The significance which the present gathering has for UNESCO was anticipated by our General Conference, representing all Member States, when at its last session it adopted a resolution drawing attention to the vast implications which your Conference holds for any organisation, such as ours, concerned with the promotion of the free flow of information and ideas through all means of communication. As your Conference has unfolded, it has become even more apparent that its decisions and recommendations will have a profound influence on the future development of space communication.

" The approach taken by the delegations throughout the Conference, moreover, would seem to corroborate the observation made by the Secretary-General of the United Nations in his inaugural message that space communication is "clearly a field in which the interests of all nations can be served most efficiently and economically by international cooperative action". This was the keynote also of a resolution adopted by our General Conference at its last session urging that space communication should be governed by "fruitful cooperation between the nations".

" It seems reasonable to assume that the cooperation which governments are establishing with each other in the space communication field will be extended also to the intergovernmental organisations which they have created. Concerted action on the part of these international organisations would seem to offer for governments a ready means of achieving a coordinated and effective use of this new technological advance. UNESCO for its part has been authorised by its General Conference to give all possible aid to other international bodies concerned, particularly with a view to facilitating the long-term use of space communication to promote the free flow of ideas, the spread of education and greater cultural exchange.

" We hope that cooperation between the I.T.U. and UNESCO may, in particular, prove to be of practical help to governments in dealing with the complex and many-sided problems which space communication will pose as it becomes operational. Such cooperation, I might note, would be an extension of the close working relationships which already exist between our

two Organisations and which, I believe, have already produced tangible results. I might cite as a pertinent example the project to encourage production of low-cost radio receivers, initiated by the Administrative Radio Conference in 1959, in which, on the basis of technical specifications drawn up by the C.C.I.R., we are now pursuing the production possibilities with the United Nations Regional Economic Commissions.

" By its very nature, space communication is bound to offer opportunities for a joint approach of this kind on the part of the two sister Specialised Agencies of the United Nations. It would indeed seem difficult to separate completely aspects such as those dealt with in the International Telecommunication Union concerning the physical facilities for space communication from those considered in other forums, such as UNESCO, concerning the use to be made of the facilities thus provided. In any event, governments will no doubt wish, when taking crucial decisions at one or another international body, to bear in mind all the diverse interests involved in the effective development and use of space communication.

" That is why we in UNESCO have ventured, on the occasion of your Conference, to send to the Member States of our Organisation a first report attempting to assess in broad terms the issues posed by space communication in the light of UNESCO's basic aims. The report was prepared with the help of a number of telecommunication experts and in consultation with the international non-governmental organisations in the press, radio and television fields. I should like in passing to mention that in the whole of our work in space communication UNESCO counts on continuing to work closely with these mass media enterprises.

" The purpose of the UNESCO report was to assist our Member States, in their capacity as Members of the I.T.U., in bearing in mind at the present Conference the mutual aims of our two Organisations. In accordance with your decision, Mr. Chairman, for which I am most grateful, the UNESCO report has been distributed as an information document of the Conference. (Document No. 188).

" The UNESCO report attempts to assess the long-term prospects offered by space communication for enhancing the range and scope of the press, radio broadcasting and television. Although such an assessment at the present incipient phase of space communication is bound to be highly speculative, we trust that it may nevertheless be of interest in drawing up initial plans for the use of this new telecommunication technique.

" It seems evident even now that the application of space communication by the mass media will present operational problems no less complex than those which your Conference has had to tackle over the past month in providing the physical facilities. The initial question will be that of

determining what functions space communication can perform more effectively for the mass media than can conventional communication services, taking into account the relative cost, language and time factors. In the field of sound broadcasting and particularly television, programming for space communication transmissions to vast audiences in many countries will entail great opportunities and responsibilities for the promotion of international understanding. In the event of the development of direct broadcasting, moreover, new avenues would be opened up for the transmission of educational programmes to schools, homes and community centres.

" Problems of the diversity, complexity and importance which the use of space communication will pose for the mass media might usefully be studied by those concerned. UNESCO contemplates providing an opportunity for an examination of these issues by convening a meeting of experts drawn from different countries and the different media to take place probably in 1965. In this, as in all other expert meetings which UNESCO has convened to consider the development of the mass media, we shall look to the I.T.U. for the technical knowledge and advice needed on telecommunications and we shall also, of course, be prepared to have the meeting deal with any particular issue which your Organisation may wish it to consider.

" I would like to conclude on this note of cooperation between the I.T.U. and UNESCO - cooperation which dates back to the inception of our Organisation and which over the years has, I feel helped to promote our mutual aims. I believe that, in the field of space communication, we now have a striking opportunity to pursue this cooperation in ways which can be of great benefit to people everywhere."

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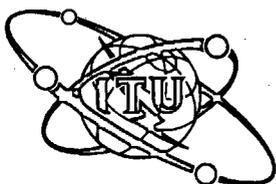
A N N E X 2

STATEMENT BY THE OBSERVER OF THE INTERNATIONAL
FEDERATION OF NEWSPAPER WRITERS AND EDITORS

"The International Federation of Newspaper Writers and Editors is grateful for this opportunity to draw the attention of the Conference to the scheduled radiocommunication service, which is covered by Article 85 of the Telegraph Regulations.

" This service to single and multiple destinations is used extensively by the Press for transmitting news ~~throughout~~ the world. Its scope and reliability would be greatly increased if satellite systems could be used.

" The Federation therefore expresses the hope that, to facilitate the flow of information and the progress of international understanding, technical studies may be put in hand to examine the feasibility of making use of satellite systems for the scheduled radiocommunications service."



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 239-E
13 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

SEVENTH PLENARY MEETING

Thursday, 7 November, at 14.30 hours

Chairman : Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen : Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)

Secretary : Mr. Clifford STEAD

Subjects discussed

1. First series of "pink" texts submitted by the Editorial Committee (Document No. 196)
2. Second series of "pink" texts submitted by the Editorial Committee (Document No. 206)
3. Draft Recommendation submitted by the Delegation of the State of Israel (Document No. 166)
4. International Technical Cooperation and Assistance in the field of Space Radiocommunication (Document No. 192)
5. Third series of "pink" texts submitted by the Editorial Committee (Document No. 207)
6. Date and time of signature of the Final Acts.



The following countries were represented :

Algeria (Democratic and Popular Republic of), Argentine (Republic), Australia (Commonwealth of), Austria, Belgium, Bielorussian S.S.R., Bulgaria (People's Republic of), Cambodia (Kingdom of), Canada, China, Cyprus (Republic of), Vatican City State, Colombia (Republic of), Congo (Republic of the) (Leopoldville), Korea (Republic of), Cuba, Denmark, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Spain, United States of America, Ethiopia, France, Greece, Hungarian People's Republic, India (Republic of), Indonesia (Republic of), Iran, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Kuwait, Lebanon, Liberia, Liechtenstein (Principality of), Luxembourg, Malaysia, Morocco (Kingdom of), Mexico, Monaco, Norway, New Zealand, Uganda, Pakistan, Netherlands (Kingdom of the), Philippines (Republic of the), Poland (People's Republic of), Portugal, Spanish Provinces in Africa, United Arab Republic, Federal Republic of Germany, Federal Socialist Republic of Yugoslavia, Ukrainian Soviet Socialist Republic, Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, South Africa (Republic of) and Territory of South-West Africa, Sweden, Switzerland (Confederation of), Tanganyika, Czechoslovak Socialist Republic, Territories of the United States of America, Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Union of Soviet Socialist Republics, Kenya (Associate Member).

International Organizations :

United Nations Educational, Scientific and Cultural Organization, World Meteorological Organization, International Air Transport Association, Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science, Committee on Space Research, Fédération Internationale des Editeurs de Journaux et Publications, International Broadcasting and Television Organization, European Broadcasting Union.

Permanent Organs of the I.T.U.

General Secretariat, I.F.R.B., C.C.I.T.T., C.C.I.R.

The Agenda (Document No. 209) was approved.

1. First series of "pink" texts submitted by the Editorial Committee
(Document No. 196)

The Chairman of the Editorial Committee, in introducing the Document explained that it had been drafted on the basis of "blue" text No. 191.

The Chairman invited comments on Document No. 196, page by page.

Pages R1-01
to R1-06

Approved.

Page R1-07

In reply to a query by the Delegate of Morocco, a member of the I.F.R.B. explained that footnote 570A1 was an exact reproduction of the existing Regulation.

Pages R1-07
to R1-43

Approved.

Document No. 196 was approved as a whole.

2. Second series of "pink" texts submitted by the Editorial Committee
(Document No. 206)

Pages R2-01
to R2-20

Approved.

Document No. 206 was approved as a whole.

3. Draft Recommendation submitted by the Delegation of the State of Israel
(Document No. 166)

The Delegate of Israel, introducing the Document, said that it was consequential on Document No. 39 which his Administration had submitted in the early days of the Conference. That Document was an expression of the concern felt, not only by Israel, regarding the problems as to how the results achieved in the present Conference would be used and exploited. His Delegation still believed that the answer to those problems must be based on United Nations Resolutions Nos. 1721 and 1802 which laid down two fundamental principles :

- a) that "outer space activities, including space communications, was a field belonging to mankind as a whole";
- b) that it should be "available for use of all countries on a global, non-discriminatory basis".

He fully subscribed to those principles and firmly believed that the problems of frequency assignments in the new bands to countries having no satellites must be solved by setting up a single global space administration based on international agreements which would guarantee the interests of all nations. Had such an administration been in existence before the Conference, the Table of Frequency Allocations for Space Radio communications might have been different from that now adopted.

His Delegation therefore invited all administrations of countries represented at the Conference, in particular those countries which for the time being would be the only active users of the spectrum space allocated to the new services, to join in the recommendation to the effect that the use and sharing of frequencies in the new bands of space communication would be based on the principle of justice and equity for the benefit of all nations.

The Delegate of the United States of America expressed support of the draft recommendation which was fully consistent with the statements of the United Kingdom and the U.S.A. spokesmen in the United Nations.

The Delegate of the United Kingdom, in supporting the draft recommendation, proposed the deletion in the second line of the operative paragraph of the words "to international law and" - a term which it was difficult to interpret.

The Delegate of Israel, having agreed to the proposed modification, the United Kingdom amendment was approved.

The Delegates of Liberia, Ethiopia and the Federal Republic of Germany spoke in favour of the draft recommendation.

The Delegate of Belgium, supporting the draft recommendation, proposed that the word "global" - at least in the French text - should be replaced by "world-wide" (mondial).

The Delegate of Italy asked for clarification of the word "agreements", in the first operative paragraph.

The Delegate of Israel said that "international agreements" covered an agreement signed on the same basis as the Final Acts by all Members and Associate Members of the Union. He had in mind the setting up of a single world-wide administration based on an international agreement in the same way as for all the specialized agencies of the United Nations.

The Delegate of the United States of America could not agree with the interpretation just given, adding that international agreements took many forms. He had assumed that the words were meant to be taken in their broad sense.

The Delegate of the United Kingdom shared the views expressed by the Delegate of the U.S.A. and hoped that the draft recommendation could be adopted as it stood, subject to his own amendment which had been accepted by the Delegate of Israel. In fact, the idea of a single global administration was outside the terms of reference of the Conference.

On the suggestion of the Delegate of Italy, further discussion was deferred pending informal consultations with the Delegate of Israel.

Later in the meeting, the Delegate of Israel said he had not wished to give any particular interpretation of the phrase "international agreements" which he had only intended to be taken in a broad sense.

The draft recommendation in Document No. 166, as amended, was adopted.

4. International Technical Cooperation and Assistance in the field of Space Radicommunication (Document No. 192)

The Delegate of the F.S.R. of Yugoslavia, introducing the document, said that it had been based on Resolutions of the General Assembly of the United Nations, UNESCO and ECOSOC recognizing the importance of space radio-communications. It would be noted that, inter alia, the Resolution invited the Administrative Council to formulate an appropriate programme of action with a view to evolving an efficient plan of cooperation which would permit the solving, in the interest of all countries, of the problems raised by the development and the common utilization of space radicommunication services.

The Delegate of Italy, supported by the Delegates of Portugal and Belgium, was firmly of the opinion that the document fell outside the competence of the Conference but might possibly be submitted to the next Plenipotentiary Conference.

The Delegates of Algeria, India, Pakistan and Uganda spoke in favour of the draft resolution, the Delegate of Pakistan stressing that the implementation of the revised Regulations was not possible unless technical know-how and assistance in education and training was made available, in particular to the developing countries.

The Delegate of the Argentine, while agreeing that the Yugoslav proposal was an interesting one, said that the problem was outside the tasks of the Union as laid down in the Convention, in particular under Article 9. Nor was the Conference competent to solicit special funds for the purposes in question. He therefore subscribed to the views of the Delegate of Italy in the sense that the proposal went beyond the agenda of the Conference.

The Secretary-General said he would prefer not to enter into such difficult questions as to whether or not the document fell or not within the agenda. There had been many arguments for and against. Quite apart from that, the matter was one for the Conference to decide and he proposed to speak on the substance of the matter. The operative part of the draft resolution (page 4) terminated in the words : "requests the Secretary-General of the I.T.U. ... to solicit from the competent agencies of the United Nations Organization, the special funds necessary for the realization of international technical cooperation and assistance in the field of space radicommunications." The I.T.U. already had a mandate from the Plenipotentiary Conference under Resolution No. 24 (Financing of Technical Development), and parts of Resolutions Nos. 25 and 26 dealing with participation by the Union in the United Nations Expanded Programme of Technical Assistance. He fully shared the anxiety felt by certain of the smaller nations about how they could participate in the problem as a whole. More than a year ago he had written an article for the Journal along those lines.

He wished to assure the Delegate of Yugoslavia and the Meeting that, regardless of whether or not the draft resolution was suitable for discussion at the present Conference, the Administration of the I.T.U. would continue to participate actively in the financial programmes of the United Nations, of the World Bank, of E.P.T.A. and of the Special Fund. At the present time three I.T.U. projects submitted by Member Governments were under study by the Managing Director of the Special Fund in New York in the field suggested by the Delegate of Yugoslavia, so whether the draft resolution was accepted or by-passed by the Conference, the Administration in Geneva would not sit idly by. There were two problems, the first of a financial nature, since there were no funds in the regular budget of the Union before 1965 to encourage that type of activity. He doubted whether the Administrative Council would vote to send a referendum to the Membership for an increase of the regular budget for the financing of the type of project described. Therefore, the Administration must depend entirely on funds available from other sources. Considerable strides had been made in making the authorities in the technical assistance field (including the Technical Assistance Board and the Technical Assistance Committee, and the Special Fund) aware of the fact that up to now the I.T.U. had not been given the proper attention it deserved. Actually each year in the last few years, I.T.U. had made substantial progress in the development of Special Fund projects of which there were now about 15, many in the field of instruction. The intention was to proceed actively in that direction. Indeed, a telegram had been received last week from a representative at a Special Fund meeting stating that additional funds totalling four-and-a-half million dollars (U.S.) had been allocated to telecommunications programmes. So whether the resolution was accepted or not, he would like to give his personal assurance that I.T.U. would move ahead. Therefore he endorsed the practical aspects of the need indicated in the paper without in any way attempting to discuss whether it was receivable or not. That was a matter for the Conference itself to decide.

The Delegate of Morocco said that the work of the Conference should not be obstructed by minor legal arguments, but a decision taken on whether the substance of the document should be referred to the next Administrative Council or not, the form to be decided later. He regretted that points of substance were treated as procedural matters, and wondered whether among the three Technical Assistance projects mentioned by the Secretary-General any funds could be used for the purposes outlined in the draft resolution.

The Chairman observed that responsible Heads of Delegations convened to consider specific items on the agenda could not accept the reference to "minor legal arguments".

The Delegate of the United Kingdom was unable to support the proposal in Document No. 192 for the reasons outlined by previous speakers. Noting the emphasis placed on the need for technical assistance to Administrations, he mentioned the role of the C.C.I.R. in the field of space communication. What was important was to organize a free and speedy exchange of

information, which could be accomplished through the C.C.I.R. and by the I.T.U. under its normal Technical Assistance programme.

The Delegate of the U.S.S.R. could not agree with those delegations which considered that the questions raised in the document fell outside the terms of reference of the Conference, the more so since Document No. 180 on similar lines had already been adopted.

The Chairman, noting a certain amount of agreement on the substance of the draft resolution, proposed a one-hour recess to enable a small ad hoc group, consisting of the Delegates of the United Kingdom, Israel, U.S.S.R., to be chaired by the Head of the Delegation of India, to study Document No. 192, together with Document No. 180 (on future developments in space radiocommunications) in order to try and find a solution.

The meeting adjourned at 4.45 p.m. and resumed at 5.30 p.m.

On resumption of the meeting, further consideration of the draft resolution submitted by Yugoslavia was deferred to enable the ad hoc group to meet again at 9 a.m. the following day.

5. Third series of "pink" texts submitted by the Editorial Committee
Document No. 207

The Chairman of the Editorial Committee, introducing the document, said that it had been drawn up on the basis of "blue" Document No. 186.

The Chairman invited comments, page by page.

Pages R3-01
to R3-08

Approved.

Page R3-08

The Delegate of the U.S.S.R. proposed a re-arrangement of the frequency bands in Regulation No. 470D, explaining that the changes did not affect the substance of the Regulation.

The U.S.S.R. amendment was approved for inclusion in the final version of the document, and page R3-09, as amended, approved.

Page R3-10

Approved.

Page R3-11

The Delegate of the U.S.S.R. proposed the following changes in the layout of frequency bands in Regulation 470J in order to simplify the presentation :

- 1) the first three lines to be retained as they stood;
- 2) delete frequency band 7250 - 7750 Mc/s;
- 3) the last three frequency bands to be written in one line, namely 7900 - 8400 Mc/s.

After discussion in which the Delegates of the United Kingdom, Sweden, Mexico and the Chairman of the Editorial Committee took part, the U.S.S.R. amendment was approved for inclusion in the final version of the document.

The Delegate of the U.S.S.R. then proposed the following changes to Regulation 470M :

- 1) insert between first and second line of the table of frequencies, the band 5800 - 5850 Mc/s, with a cross-reference to footnote 390;
- 2) delete the sentence in brackets after frequency band 7250 - 7750 Mc s;
- 3) the last three frequency bands to be written in one line, as for Regulation No. 470J.

The U.S.S.R. amendment was approved for inclusion in the final version of the document, and page 11, as amended, was approved.

Page R3-12

The Delegate of the U.S.S.R. proposed that the bands mentioned in Regulation No. 470Q should be re-arranged in two lines instead of five, i.e. 3400 - 4200 Mc/s and 7250 - 7750 Mc/s, omitting all references in brackets.

The Delegate of the Netherlands was opposed to the U.S.S.R. proposal to combine three bands in 470J, as the 7975 - 8025 Mc/s band was an exclusive one in the frequency allocation table, nor could he agree to the deletion of the clause in brackets. His objection also applied to the same bands in No. 470M.

He also objected to the deletion of the sentence in brackets referring to band 7250 - 7300 Mc/s for the same reasons.

After considerable discussion the U.S.S.R. amendment was put to the vote and adopted by 37 votes to 2, with 20 abstentions.

The amendment was therefore approved for inclusion in the final version of the document, and page R3-12 approved.

Page R3-13

The Delegate of the U.S.S.R. proposed the addition in Regulation No. 470U of three frequency bands : 1660 - 1670 Mc/s, 1690 - 1700 Mc/s, and 1770 - 1790 Mc/s, with the deletion of the sentence in brackets.

The Chairman of Committee 5 was opposed to the inclusion of band 1770 - 1790 Mc/s on the grounds that such an inclusion would not be in conformity with the text.

Speaking as the Delegate of Switzerland, he proposed the addition to Regulation No. 470U of the following sentence: "The limits given in 470S and 470T also apply to the frequency band 1770 - 1790 Mc/s although in this case the meteorological satellite service is a secondary service".

The Delegate of the U.S.S.R. having signified agreement to the deletion of the band 1770 - 1790 Mc/s, the amendment proposed by the Delegate of Switzerland was approved, together with the amendment of the U.S.S.R.

Page R3-13, as amended, was approved.

Pages R3-14, Approved.
15, 16

Page R3-17 The Delegate of Italy suggested that the word "proposals" in operative paragraph 1 of the recommendation should be replaced by a more appropriate term.

The Chairman explained that discussion of Document No. 180 had revealed the meaning of the word to be "projects" or "intentions".

The Delegate of Italy maintained that the use of the word "proposals" was a grave error.

Page R3-17 was approved.

Pages R3-18 Approved.
to R3-44

Page R3-45 On the proposal of the Delegate of Morocco, the word "recognized" was inserted before "private operating agencies" in operative paragraph a).

Page R3-45 was approved, as amended.

Pages R3-46 Approved.
to R3-51

Document No. 207, as amended, was approved.

6. Miscellaneous - Date and time of signature of the Final Acts

The Secretary-General said that the Secretary of the Conference and the Chairman of the Editorial Committee were making desperate efforts to give all delegates a smooth copy of the final texts to be signed on the following day, and urged that only vital changes should be proposed in the "pink" documents, the final series of which would be available by 8 a.m. on the next day. In order that the Final Acts could be signed in the evening of Friday, 8 November, he hoped it would be possible for the final "pink" texts to be examined in the morning instead of in the afternoon.

The Chairman of the Editorial Committee, in support of the Secretary-General's statement, urged that all non-essential amendments should be avoided in order to lighten the work of the Editorial Committee and allow time for the printing of the documents.

He asked the Secretary-General whether he envisaged signature of the Final Acts on the "pink" series or on the finalized white documents.

The Secretary-General said that in order to meet the time-limits set by the printers the Final Acts might have to be signed on a corrected "pink" series, but in any case he hoped to be able to furnish the white documents to all delegations by Saturday afternoon or Sunday.

The Delegate of Italy felt that a 10-hour delay in signing the Final Acts was not serious in the case of a conference which had lasted for five weeks. The question of signing the Final Acts in an irregular form should not even be discussed.

The Secretary-General agreed, adding that if the Conference wished to sign on the white copies of the documents, the earliest time at present predictable would be 2 p.m. on Saturday afternoon.

The Chairman of the Budget Committee said that in order not to exceed budgetary estimates by prolonging the Conference, he would like to suggest that the Final Acts should be signed on the "pink" series of documents so that the Ceremony of Signature could take place on Friday evening, 8 November, as originally planned. Each delegate could then be provided with a copy of the Final Acts in white documents on Saturday 9 November.

The Delegate of Italy said that the Conference should not be too concerned with budgetary difficulties which were not insurmountable. The problem must be considered from the point of view of enabling all delegations to sign the Final Acts on white documents, the more so because of the amendments introduced in the "pink" series. He repeated that too much concern should not be felt about budgetary details which were less important than other matters.

The Delegate of Australia suggested that the Steering Committee should meet at 9.30 a.m. on Friday, 8 November, to decide whether the Final Acts be signed on "pink" or "white" documents.

This was agreed.

The meeting rose at 7.30 p.m.

Rapporteur

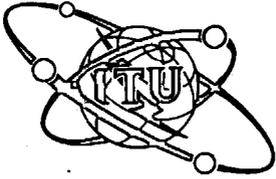
H. OTTEN

Secretary

Clifford STEAD

Chairman

Gunnar PEDERSEN



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 240-E
14 November, 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

EIGHTH PLENARY MEETING

Friday, 8th November, 1963, at 10 a.m.

Chairman: Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen: Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)

Secretary of the Conference: Mr. Clifford STEAD

Subjects discussed :

1. Announcement by the Secretary-General
2. Minutes of the 2nd Plenary Meeting (Document No. 213)
3. Fourth series of "pink" texts submitted by the Editorial Committee (Document No. 212)
4. Fifth and last series of "pink" texts submitted by the Editorial Committee (Document No. 229)
5. Statements for inclusion in the Final Protocol:
 - a) by the Delegation of the Republic of Indonesia (Document No. 208)
 - b) by the Delegations of Denmark, Norway, Sweden and Switzerland (Document No. 219)
 - c) by the Delegation of the Argentine Republic (Document No. 220)
 - d) by the Delegation of the United Kingdom (Document No. 232)
 - e) by the Delegation of the United States of America and Territories of the United States of America (Document No. 221)
 - f) by the Delegation of Cuba (Document No. 222)
 - g) by the Delegation of Canada (Document No. 233)
 - h) by the Delegation of the Republic of Pakistan (Document No. 223)
 - i) by the Delegations of the Democratic and Popular Republic of Algeria, the State of Kuwait and the United Arab Republic (Document No. 224)
 - j) by the Delegation of Malaysia (Document No. 228)
6. Proposal relating to Radio Astronomy (Document No. 211)
7. Report by the ad hoc group under the Chairmanship of Mr. Rao (Document No. 231)



The following countries were represented:

Algeria (Democratic and Popular Republic of); Argentine (Republic); Australia (Commonwealth of); Austria; Belgium; Bielorussian S.S.R.; Bulgaria (People's Republic of); Cambodia (Kingdom of); Canada; China; Vatican City State; Colombia (Republic of); Congo (Republic of the) (Leopoldville); Korea (Republic of); Cuba; Denmark; Group of Territories represented by the French Overseas Post and Telecommunication Agency; Spain; United States of America; Ethiopia; Finland; France; Ghana; Greece; Hungarian People's Republic; India (Republic of); Indonesia (Republic of); Iran; Ireland; Iceland; Israel (State of); Italy; Jamaica; Japan; Kuwait; Lebanon; Liechtenstein (Principality of); Luxembourg; Malaysia; Morocco (Kingdom of); Mexico; Monaco; Norway; New Zealand; Uganda; Pakistan; Netherlands (Kingdom of the); Philippines (Republic of the); Poland (People's Republic of); Portugal; Spanish Provinces in Africa; United Arab Republic; Federal Republic of Germany; Federal Socialist Republic of Yugoslavia; Ukrainian Soviet Socialist Republic; Roumanian People's Republic; United Kingdom of Great Britain and Northern Ireland; South Africa (Republic of) and Territory of South-West Africa; Sweden; Switzerland (Confederation of); Tanganyika; Czechoslovak Socialist Republic, Territories of the United States of America; Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible; Union of Soviet Socialist Republics; Kenya (Associate Member).

International Organizations:

United Nations Organization; United Nations Educational, Scientific and Cultural Organization; World Meteorological Organization; Inter-Union Committee for Frequency Allocations for Radio Astronomy and Space Science; Fédération Internationale des Editeurs de Journaux et Publications; International Broadcasting and Television Organization; European Broadcasting Union; International Amateur Radio Union; International Scientific Radio Union.

Permanent Organs of the International Telecommunication Union:

General Secretariat, I.F.R.B., C.C.I.T.T., C.C.I.R.

1. Announcement by the Secretary-General

The Secretary-General said he would like to start the morning off on a happy note by looking back on the past glories of the Union. He had checked the dates which had been questioned in a previous Meeting and had ascertained that the Paris Conference had opened on 1st March 1865. The Final Plenary, at which all the Agreements were adopted and signed was held, as he had previously indicated, on 17 May 1865, which was the day of the month upon which some governments were planning to issue special postage stamps in 1965. The Regulations went into effect the following year, namely on 1 January 1866.

2. Minutes of the 2nd Plenary Meeting (Document No. 213)

Approved with the addition, at the request of the Delegate of Switzerland, of Liechtenstein in the list of countries represented, as shown on page 2.

3. Fourth series of "pink" texts submitted by the Editorial Committee (Document No. 212)

The Chairman of Committee 7 introduced the document, which was a synthesis of all the results contained in the "blue" documents concerning the frequency allocation tables. These results were presented in a form similar to that in the 1959 Radio Regulations.

The Chairman took the document page by page and invited comments.

Page 03

A Member of the I.F.R.B. referred to paragraph 221A and wondered whether the wording was sufficiently clear, as when mentioning "emissions" it was not certain whether the bands required or the bandwidths occupied were concerned. The problem of interference might be of importance.

The Delegate of Switzerland said that the bandwidth of emissions was intended and the Delegates of the United Kingdom, Canada, France and India were of the opinion that the text, as it stood, was sufficiently clear, the last delegate adding that the wording appeared to conform entirely with Radio Regulation No. 674. It was agreed to leave the text unchanged.

Page 06

At the proposal of the Delegate of the United States, it was agreed to place footnote 281F in the box concerning 137-138 Mc/s, opposite "space research (telemetering and tracking)" to refer to that item alone.

Page 07

A request was made from the Delegate of the Congo (Leopoldville) to delete the name of his country in footnotes 275 and 275A.

Page 09

It was agreed to change the wording of footnote 284A, upon a proposal of the Chairman of Committee 5, to read "artificial satellites" instead of "space satellites" to bring the English text into line with the French and Spanish.

Page 21

The Delegate of the U.S.A. referred to a previous proposal made by the Delegate of the U.S.S.R., by which the second line of footnote 339A should read "...for experimental purposes in connection with space research" instead of "...and space research", as there were no allocations to experimental services, as such, anywhere in the Radio Regulations. This was agreed.

Page 22

It was agreed to add footnote 352D to the box concerning "aeronautical radionavigation".

Page 23

The Delegate of Kuwait requested that his country be added to the list given in 350C. Agreed.

Page 24

It was agreed to add footnotes 353, 354 and 354A in the box concerning 1670 - 1690 Mc/s.

The Chairman of Committee 7 pointed out that it should be understood that, throughout the document, whenever the boxes had been left blank, the band, as given in the Radio Regulations, remained unchanged. To insert the information each time a blank occurred would, of necessity, prolong the work of the Editorial Committee and postpone the printing of the white document.

To avoid ambiguity, it was agreed, upon the proposal of the Delegate of the United Kingdom to include a note in the document giving this information.

Page 25

Some discussion took place on footnote 354A, following a proposal by the Delegate of Morocco that the words "on a primary basis" should be added in the third line. However, following an explanation by the Delegate of the U.S.S.R., that a worldwide and not a regional allocation was involved, it was agreed to leave the text unchanged.

Page 43

The Delegate of Morocco requested that his country be added to the list in footnotes 409A and 409C. Agreed.

The Delegate of Japan requested that his country be deleted from footnote 409C. Agreed.

Page 46

It was agreed to add footnotes 407 and 412 to the box concerning 33.4 - 34.2 Gc/s.

Page 47

The Delegate of Morocco requested that his country be deleted from the list in footnote 412E and 412G. Agreed.

With the preceding amendments, Document No. 212 was adopted.

4. Fifth and last series of "pink" texts submitted by the Editorial Committee
(Document No. 229)

Approved without comment.

As all the "pink" texts had now been finally approved, the Chairman enquired when it was thought that the "white" texts would be available. In answer, the Chairman of the Editorial Committee said that the amended texts would be given to the printers by midday and should be available at approximately 10.00 p.m. He requested delegates to hand in any statement they wished to have included in the Final Protocol by 12.30 p.m.

It was agreed that the signing ceremony would take place at 10.00 p.m. that evening.

5. Statements for inclusion in the Final Protocol

The Secretary-General said: "To refresh the memory of delegations present, I would like to call attention to page 114 of the 1959 Convention which starts off with the following phrase: 'at the time of signing the International Telecommunication Convention (Geneva 1959) the undersigned plenipotentiaries take note of the following statements forming part of the Final Acts of the Plenipotentiary Conference, Geneva, 1959:'.

" I say this advisedly because I do not think these statements should give rise to extensive debates. They may evoke counterstatements and there may be some more presented for inclusion during the afternoon meeting, but there is no reason, so far as I can see, for long and extensive debates on the statements some of which may be highly controversial."

a) by the Delegation of the Republic of Indonesia (Document No. 208)

It was agreed to include the text of Document No. 208 in the Final Protocol.

b) By the Delegations of Denmark, Norway, Sweden and Switzerland
(Document No. 219)

It was agreed to include the text of Document No. 219 in the Final Protocol.

c) by the Delegation of the Argentine Republic (Document No. 220)

It was agreed to include the text of Document No. 220 in the Final Protocol.

- d) By the Delegation of the United Kingdom and Northern Ireland
(Document No. 232)

The Delegate of the United Kingdom made a statement, the text of which will be found in Annex to the present minutes. It was agreed to include the text of Document No. 232 in the Final Protocol.

- e) By the United States of America and Territories of the United States of America (Document No. 221).

It was agreed to include the text of Document No. 221 in the Final Protocol.

- f) By the Delegation of Cuba (Document No. 222)

It was agreed to include the text of Document No. 222 in the Final Protocol.

- g) By the Delegation of Canada (Document No. 233)

The Delegate of Canada said that he wished to associate himself with the statement which had been made by the Delegation of the United States of America, for inclusion in the Final Protocol, and explained his reasons for so doing. (See Document No. 233.)

- h) By the Delegation of the Republic of Pakistan (Document No. 223)

It was agreed to include the text of Document No. 223 in the Final Protocol.

- i) By the Delegations of the Democratic and Popular Republic of Algeria, the State of Kuwait and the United Arab Republic
(Document No. 224)

It was agreed to include the text of Document No. 224 in the Final Protocol.

- j) By the Delegation of Malaysia (Document No. 228)

It was agreed to include the text of Document No. 228 in the Final Protocol.

6. Proposal relating to radio astronomy (Document No. 211)

The Delegate of Sweden introduced the Recommendation contained in the document and said: "In presenting the Recommendation relating to radio astronomy, contained in Document No. 211, I shall be rather brief. Before the presentation I should like to say that I am not entitled to speak on behalf of the co-sponsors of this document. Thus I only express the views of the Swedish delegation. We consider that radio engineers and

administrators are greatly indebted to radioastronomers all over the world for what they have done in promoting the development of technical facilities for radiocommunications. Radioastronomers have inspired engineers to design and build big antenna structures and induced the development of very efficient amplifiers, such as parametric amplifiers and masers, culminating in lasers. All those devices have contributed to the development of radiocommunications and the improvement of our radio services in the interests of the public.

" Because of these factors the Swedish delegation as well as eight other delegations believe that the recommendation contained in Document No. 211 should be accepted by this Plenary Assembly, Recommendation No. 32 of the present Radio Regulations at the same time being deleted. The aim of the new Recommendation is twofold:

- 1) to keep the matter of the allocation of frequencies to the radio astronomy service and related questions alive in the various organs of the Union, and
- 2) to assist those officials of our Administrations who are responsible for the protection of radio frequencies allocated to the radio astronomy service in their task.

" Mr. Chairman, I have no more to add at the present moment. I only wish to express my hope that the Plenary Assembly will accept the Recommendation, contained in Document No. 211".

The Delegate of the Argentine Republic very much regretted that he had not been consulted by the signatories of this Recommendation, since he, too, would have been pleased to sign it also, on behalf of his country. However, he warmly supported the proposal contained in the document.

The Chairman had some doubts as to the advisability of deleting Recommendation 32 from the Radio Regulations, though urging that the new Recommendation be adopted. This was agreed.

His opinion was shared by the Delegate of the United Kingdom who, whilst he was very glad to see that the Recommendation had been unanimously adopted, felt it would be advisable to retain the still operative part of Recommendation 32, namely, "recommends 4". It would appear that the present Conference had cleared "recommends" 1, 2 and 3. He therefore suggested that the Recommendation in Document 211 be completed by the operative part of Recommendation No. 32.

The Delegate of France agreed that such an addition would make the text quite homogeneous.

The Delegate of India thought that the Secretary-General had already taken action on "recommends 4", by informing all Administrations, through the Radio Division circulars, of frequencies allocated to radio astronomy in various countries. He also recalled that at its Xth Plenary Assembly the C.C.I.R. had given a list of so-called Class B radio astronomy stations. For these reasons he did not see the necessity to include "recommends 4" in the new Recommendation.

The Delegate of Australia suggested that the new Recommendation be left without any addition, but that Recommendation No. 32 remain in the Radio Regulations for consultation, in as much as part of it might still prove of value.

The Secretary-General said that the last suggestion would seem to meet the practical points made by both the Delegate of the United Kingdom and the Delegate of Sweden, as in this manner any relevant part of Recommendation No. 32 would continue to be operative, and the new Recommendation could stand on its own feet.

The Delegates of the United States and Canada supported the proposal of the Delegate of Australia, the latter adding that "recommends 4" of Recommendation No. 32 could be consulted for what it was worth.

The Delegate of the United Kingdom was also prepared to accept this solution, but added taking up the words "for what it was worth" that, in his view, "recommends 4" was still worth a great deal, and he hoped that all concerned would not lose sight of all items in that paragraph, as some of the issues in it were very vital to the effective development of radio astronomy, and their importance should in no way be belittled.

The Representative of I.U.C.A.F. made the following statement:
"As I have the honour at this Conference, of being the spokesman of the Scientific Unions, in my capacity as President of the I.U.C.A.F., I would like to take the opportunity offered by the approval of this latest Recommendation relative to radio astronomy, to address a few words to the delegates here.

" I have listened to a great number of debates which have sometimes been very difficult ones, and I must confess that I was especially impressed by the great consideration, and the constructive and helpful attitude that you have shown towards the requests put forward by the scientific bodies.

" Despite the grave problems raised by these requests, you have nearly always found positive solutions to these problems. Only in certain rare cases have we had to be satisfied with statements of your good intentions - I have in mind, in particular, a certain television band in Regions 1 and 3 of particular concern to us - but I am confident that these good intentions will be followed by good actions.

" I do want you to be reassured that, for their part, the Scientific Unions are fully aware of the difficulty of the problems posed by their demands, which you have been required to solve, and that they will limit their requests to what they consider absolutely essential to the security of certain important fields of their research.

" As the representative of the Scientific Unions, I am deeply grateful to you for the positive decisions you have been able to take, and I would like to express to you, on their behalf, my very warm thanks".

The Recommendation contained in Document No. 211 was given the same title as that of Recommendation No. 32 of the Radio Regulations (Relating to the Radio Astronomy Service), and was unanimously adopted.

7. Report by the ad hoc group under the chairmanship of Mr. Rao (Document No.231)

The Delegate of India, Chairman of the ad hoc Group, was glad to report that the Group had completed its task, and that a Recommendation was being published.

At the request of the Chairman he read out the text, so that delegates present might already be aware of the wording of that Recommendation.

The Chairman thanked the Chairman of the ad hoc Group for having been able to complete the work in such a short time, and deferred discussion of the draft Recommendation to the afternoon session, when the published text would be available.

The meeting rose at 12.20 p.m.

Rapporteur
R. UMGERG

The Secretary of the Conference
C. STEAD

Chairman
G. PEDERSEN

Annex: 1

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A N N E X

STATEMENT BY THE DELEGATE OF THE UNITED KINGDOM
AND NORTHERN IRELAND

This Extraordinary Administrative Radio Conference is not competent to discuss political questions and I regret that the representative of Argentina should find it necessary to use an international technical forum for raising purely political arguments. The United Kingdom Government have no doubt as to their sovereignty over the Falkland Islands and the Falkland Island Dependencies.

The United Kingdom Government wishes formally to reserve their rights on this question.

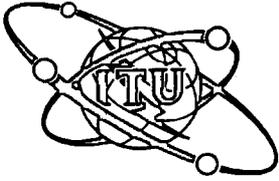
I note the statement of the Argentine Delegate that "non mention of other territories must not be taken to imply renunciation of the Argentine Republic's sovereignty over them".

In so far as this may be intended to refer to the British Antarctic Territory, Her Majesty's Government in the United Kingdom have no doubt as to their sovereignty over the British Antarctic Territory and wish to bring to the attention of the Argentine Government Article IV of the Antarctic Treaty to which both the Argentine Government and the United Kingdom Government are parties.

I request that my present statement be included in the minutes of this meeting and, since the statement of the Argentine delegate is to be included in the final Protocol of the Agreement, I will submit a formal statement for inclusion in the final Protocol of the E.A.R.C. (1963) Agreement.

Charles F. BOOTH
Head of the
United Kingdom Delegation

8 November 1963



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 241-E
14 November 1963
Original: English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES . . . GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

NINTH PLENARY MEETING

Friday, 8 November, 1963 at 14.30 hours

Chairman: Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen: Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)

Secretary of the Conference: Mr. Clifford STEAD

Subjects discussed

1. Report by the ad hoc group on the draft Resolution relating to international cooperation and technical assistance in the field of space-radiocommunication.
2. Final Report by Committee 3 - Budget Control Committee (Document No. 214)
3. Further statements for inclusion in the Final Protocol
4. Statements by Delegations
5. Miscellaneous



The following countries were represented:

Algeria (Democratic and Popular Republic of), Argentine (Republic), Australia (Commonwealth of), Austria, Belgium, Bielorussian S.S.R., Bulgaria (People's Republic of), Cambodia (Kingdom of), Canada, China, Vatican City State, Korea (Republic of), Cuba, Denmark, Group of Territories represented by the French Overseas Post and Telecommunication Agency, Spain, United States of America, Ethiopia, Finland, France, Ghana, Greece, Hungary (People's Republic of), India (Republic of), Indonesia (Republic of), Iran, Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Kuwait, Lebanon, Liberia, Liechtenstein (Principality of), Luxembourg, Malaysia, Morocco (Kingdom of), Mexico, Monaco, Norway, New Zealand, Uganda, Pakistan, Netherlands (Kingdom of the), Philippines (Republic of the), Poland (People's Republic of), Portugal, Spanish Provinces in Africa, United Arab Republic, Federal Republic of Germany, Federal Socialist Republic of Yugoslavia, Ukrainian Soviet Socialist Republic, Roumanian People's Republic, United Kingdom of Great Britain and Northern Ireland, South Africa (Republic of) and Territory of South-West Africa, Sweden, Switzerland (Confederation of), Tanganyika, Czechoslovak Socialist Republic, Territories of the United States of America, Overseas Territories for the international relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible, Union of Soviet Socialist Republics, Kenya (Associate Member).

International Organizations:

International Broadcasting and Television Organization, European Broadcasting Union.

Permanent Organs of the I.T.U.

General Secretariat, I.F.R.B., C.C.I.T.T., C.C.I.R.

1. Report by the ad hoc group on the draft Resolution relating to international cooperation and technical assistance in the field of space-radiocommunication

The Delegate of India, Chairman of the ad hoc group, introduced Document No. 231 containing the draft Resolution which he had read to the Eighth Plenary Meeting. He pointed out two minor drafting amendments which would clarify the meaning and, he was sure, meet with the approval of the other members of the group:

- a) insert "Communication" after "International Space" in the first line of paragraph a) under "recognising" and
- b) replace "the" by "its" in the second line of operative paragraph c).

There being no objection, those drafting amendments were approved.

The Delegates of the United States of America, Italy, Spain, Mexico and Poland wished to associate their delegations with the approval of the Resolution.

The Delegate of U.S.S.R. said that he had participated in the work of the ad hoc group; they had all made every endeavour to ensure that the draft Resolution clearly showed that the establishment and development of international space communication systems were within the framework of the International Telecommunication Union. The draft Resolution had been given thorough consideration and in his opinion the resulting text was quite satisfactory.

The Delegate of F.S.R. of Yugoslavia also associated his delegation with the approval of the draft Resolution which fully reflected the aims of the conference. He was happy to see that their hope of international cooperation and technical assistance in the field of space-radiocommunication had been realised.

The Delegates of Pakistan and India also associated their delegations with the approval of the Resolution, stressing the importance of technical assistance for a large number of countries.

The draft Resolution contained in Document No. 231 was thus approved, subject to drafting corrections to the French and Spanish texts pointed out by the Delegates of Morocco and Mexico.

The Chairman thanked the Delegate of India for the excellent work carried out by the ad hoc group.

2. Final Report by Committee 3 - Budget Control Committee (Document No. 214)

At the invitation of the Chairman, the Delegate of the Roumanian P.R. introduced the report contained in Document No. 214.

He explained that the first two pages summarized the work carried out by the Budget Control Committee. Annex 1 contained the report of the working group which had been set up to examine the budget of the Conference. Annex 2 was a statement of expenditure for the Conference as at 4 November 1963, including foreseen expenditure until the end of the Conference assuming that it completed its work on the evening of 8 November. Annex 3 listed the recognised private operating agencies, scientific or industrial organizations and international organizations taking part in the Conference, with an indication of their contributory units. As pointed out in Section 2 of the report, the total expenditure left a margin of Sw Fr 5,000 over the budget approved by the Administrative Council. Section 3 on page 2 of the report referred to Resolution 83 of the Administrative Council concerning the cost of publication of the Final Acts of the Conference. It was for the Plenary Meeting to decide on the percentage of the composition cost to be borne by the Conference but, to facilitate consideration of the matter, the Budget Control Committee proposed that these costs should be charged one-third to the Space Radiocommunication Conference and two-thirds to the sale of I.T.U. documents.

It was unanimously decided that the composition costs of the Final Acts should be charged one-third against the Conference and two-thirds against the sale of I.T.U. documents.

The report by the Budget Control Committee was unanimously approved.

The Chairman expressed his thanks to the Chairman of Committee 3 for his excellent report.

3. Further statements for inclusion in the Final Protocol

It was agreed to include the texts of Documents Nos. 230 (Mexico), 235 (Argentine Republic), and 234 (Colombia) in the Final Protocol.

4. Statements by Delegations

The Delegate of Jamaica made the following statement :

"The Jamaican Delegation declares that it reserves the right of the Jamaican Government to take any action it deems necessary to safeguard its interests, should Members or Associate Members in any way fail to comply with the requirements of the Radio Regulations of the Administrative

Radio Conference, Geneva, 1959, as added to and amended by the Extraordinary Administrative Radio Conference, Geneva, 1963, or should reservations by other countries jeopardize its telecommunication services."

The Delegate of Iran made the following statement :

"considering

" the rapid development of technical progress in space communications, particularly the problem of the progressive power increase of the various transmitters on board spacecraft;

" considering

" the fact that harmful interference may be caused by existing terrestrial services;

" noting

" that the power limitation of transmissions from space stations defined by the present Conference might not in future be respected by any given country, in view of the possible future increase in the power of transmissions from satellite stations;

" reserves its right

" first, to the exclusive use of all fixed and mobile radiocommunication services and to the necessary protection of its services;

" second, not to accept the frequency notification and registration procedures approved by this Conference."

The Delegate of the People's Republic of Poland made the following statement :

"Considering the agreements concluded at the Space Radiocommunication Conference and the views expressed during the debates in the Plenary Meetings concerning the interpretation of those agreements, the Delegation of the People's Republic of Poland wishes to submit its opinion on some of the main problems.

"1. This Conference which, within the framework of the I.T.U., has established the preliminary principles for the development of space radiocommunications, may accomplish its historic task if the provisions - frequently stated in general terms and in the nature of a compromise - are judiciously applied in practice in the interest of all countries.

"2. Bearing in mind the revision of the Radio Regulations and the resolution adopted, a planned development of space radiocommunications should be available to all countries without any discrimination whatsoever.

" The technical principles relating to such development must take account of the ideas in United Nations Resolution No. 1721/XVI concerning the peaceful uses of outer space.

"3. We consider that a fair development of space radiocommunications can be effected only under the indispensable condition that a world-wide frequency allocation plan and a plan for the choice of space radio-communication systems is prepared. We hope that the implementation of the Resolution adopted (Document No. 180) will lead to the convening of an I.T.U. conference dealing with such problems within a suitable time, not too far ahead.

"4. a) We feel that the frequency registration procedure for space services adopted in the revised Regulations, which is not yet based on sufficient experience and on the frequency allocation principle, should be regarded as a necessary, but provisional, solution.

" For this, all the Members of the I.T.U. should be approached in the hope that the temporary application of this procedure until the next Conference will not in future complicate the preparation and implementation of a genuine plan for the development of space radiocommunications in the interest of all countries, especially the little ones.

" b) Furthermore, in the choice of space radiocommunication systems, no technical experiments not covered by the I.T.U. Radio Regulations should be admitted.

" Such experiments might cause harmful interference to existing services and in the achievement of scientific studies, in radio-astronomy in particular.

" Taking into account our views mentioned above, the Delegation of the People's Republic of Poland is prepared to sign the Final Acts of the Space Radiocommunication Conference in the good faith that the implementation of the agreements reached will be of help to all the nations of the whole world without exception.

" The Delegation of the People's Republic of Poland would ask for this statement to be inserted in the minutes of this Plenary Meeting."

The Delegate of Cuba made the following statement :

"This Delegation greatly regrets having to intervene on this subject, but it has no alternative in view of the new documents issued by the delegations of Region 2.

" The first interpretation of the dismemberment of Region 2 was commented on by this delegation in one of the working groups at the beginning of this Conference, on observing the systematic allocation of the special services exclusive to that region, while in the other regions the criterion of division was maintained. And is not this, we ask ourselves, worse still? The fact that a small country such as Cuba disassociates itself, as Document No. 221 states, from the decisions of Region 2 signified merely that it is trying to protect its services in an area where, as is also stated in Document No. 221, there is a greater possibility of interference because distances over water are involved.

" Cuba, Mr. Chairman, is a free and sovereign country which desires to live in complete liberty without harming or being harmed by anyone. History shows, Mr. Chairman, that up to now it is always our country which has been the victim of aggression, and never the aggressor. The insinuation, Mr. Chairman, that Cuba may intentionally cause interference with space and radioastronomy services is without foundation.

" Cuba, Mr. Chairman, is a country which is rapidly shaking off the under-development imposed on it by monopolies and colonialism, and it would be childish to imagine that Cuba would use its radiocommunication facilities to interfere intentionally with other services, rather than to place them at the disposal of its people.

" Our Delegation, Mr. Chairman, has had the sad experience recently of realizing the unwillingness of some of the nations in Region 2 to protect its national interests. Region 2, Mr. Chairman, was, as Document No. 221 states, an orchestra which played to the baton of a single composer and conductor, who was always the same, and today the position is that one of the musicians in that orchestra has himself turned composer and prefers to play his own music - music with a national flavour, music of excellence, progress and complete independence.

" Cuba is not the only country which has made a footnote; many other countries have done the same. Why, therefore, Mr. Chairman, mention Cuba only?

" To use a well-known phrase, it would appear to be a sin to make a footnote. Not so, however, Mr. Chairman : what is wrong is to endeavour to become a composer and not to continue playing in the orchestra (minus one) of Region 2."

The Delegate of the United Arab Republic made the following statement :

"In Document No. 224 the Delegation of the United Arab Republic makes a reservation from which it is evident that it does not agree to a very great extent with the results of the work accomplished by Committees 4, 5 and 6, as has been outlined by my Delegation during sessions of these Committees..

" In making this statement, I wish to emphasize that I am only expressing the views of the Delegation of the United Arab Republic. In my opinion, it was not the fault of Committee 4 that they did not have complete criteria to produce final recommendations. It was also not the fault of Committee 5 that they had to work on such criteria, and in the opinion of my delegation it was too early to do this work.

" In order to avoid any misunderstanding, I wish to state that the Delegation of the United Arab Republic is fully satisfied with the way in which the meetings were conducted and thanks the Chairman and Vice-Chairman of Committees 4 and 5 and also the Chairman of Committee 6 for their excellent work."

The Delegate of Colombia referred to his statement at the Eighth Plenary Meeting that his Delegation has some misapprehension as to the sharing in the 3,600 Mc/s band. He now wished to state that his country was prepared to accept such sharing between the fixed and mobile services on the one hand and the space communication services on the other, provided sharing criteria were satisfactory. His Delegation had therefore submitted the reservation contained in Document No. 234.

5. Miscellaneous

The Delegate of the United Arab Republic asked how the Chairman intended to dispose of Document No. 201 submitted by his Delegation.

The Chairman replied that Document No. 201 would be brought to the attention of the Administrative Council through its Secretary, who was the Secretary-General.

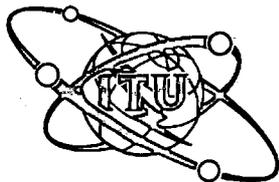
The Chairman announced that the signing ceremony of the Final Acts of the Conference would take place at 10 p.m. that evening.

The meeting rose at 3.35 p.m.

Rapporteur
V. BOULADON

Secretary
Clifford STEAD

Chairman
Gunnar PEDERSEN



**SPACE
RADIOCOMMUNICATION
CONFERENCE**

Document No. 242-E
14 November, 1963
Original : English

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

PLENARY MEETING

MINUTES

OF THE

TENTH AND LAST PLENARY MEETING

Friday 8 November, 1963 at 11.45 p.m.

Chairman : Mr. Gunnar PEDERSEN (Denmark)

Vice-Chairmen : Mr. Ashot BADALOV (U.S.S.R.)
Ambassador Joseph H. McCONNELL (U.S.A.)



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The Chairman said that he very much regretted the delay in distribution of the Final Acts, but hoped that all Delegates were now in possession of a copy in the language they required.

It had been brought to his notice that a number of delegations wished to see the Final Acts incorporated at a later date in the 1959 Radio Regulations and reissued as a complete text. If there was no objection, he would request the Secretary-General to take the necessary action in that connection.

It was so agreed.

He then announced that the time had come for the signature of the Final Acts of the Conference, and called upon the Secretary-General to explain the procedure to be followed.

The Secretary-General said that he would be happy to comply with the instructions he had just received and have a new volume of the Radio Regulations issued containing the amendments thereto approved by the Space Conference; the cost would be borne by the sale of the document in the normal way.

It was so agreed.

With regard to the signature of the Final Acts, Mr. Stead (who had been working around the clock for the past three days) had explained on a previous occasion the streamlined procedure which would be followed. In front of each Head of Delegation had been placed four sheets of paper each bearing the name of the country concerned. Delegates were requested to sign three of those copies, and to print their names in block letters on the fourth to ensure identification of the signatures.

After that had been done, Mr. Christinat would call the roll and delegates would approach the table and deposit their signatures; the Secretary-General would then announce that the delegation concerned had signed the Final Acts.

The Chairman pointed out that signature was not limited to one person, Head of the delegation; more than one delegate could sign in accordance with the credentials deposited with the Conference by his country.

Signatures were successively appended by the following delegations of sixty-six Members and one Associate :

Member :

Algeria (Democratic and Popular
Republic of)

Argentine (Republic)

Australia (Commonwealth of)

Austria

Belgium

Bielorussian Soviet Socialist Republic

Bulgaria (People's Republic of)

Cambodia (Kingdom of)

Member (cont.)

Canada	Morocco (Kingdom of)
China	Mexico
Cyprus	Monaco
Vatican City State	Norway
Colombia	New Zealand
Congo (Leopoldville)	Uganda
Korea	Pakistan
Cuba	Netherlands (Kingdom of the)
Denmark	Philippines (Republic of the)
Group of Territories represented by the French Overseas Post and Telecommunication Agency	Poland (People's Republic of)
Spain	Portugal
United States of America	Spanish Provinces in Africa
Ethiopia	United Arab Republic
Finland	Federal Republic of Germany
France	Federal Socialist Republic of Yugoslavia
Ghana	Ukrainian Soviet Socialist Republic
Greece	Roumanian People's Republic
Hungarian People's Republic	United Kingdom of Great Britain and Northern Ireland
India (Republic of)	South Africa (Republic of) and Territory of South-West Africa
Indonesia (Republic of)	Sweden
Ireland	Switzerland (Confederation of)
Iceland	Tanganyika
Israel (State of)	Czechoslovak Socialist Republic
Italy	Territories of the Unites States of America
Jamaica	Overseas Territories for the Inter- national Relations of which the Government of the United Kingdom of Great Britain and Northern Ireland are responsible
Japan	Union of Soviet Socialist Republics
Kuwait	<u>Associate Member</u>
Lebanon	Kenya
Liberia	
Leichtenstein (Principality of)	
Lumembourg	
Malaysia	

The Chairman made the following statement:

"We have now finished our task and may look back upon five weeks of hard work. But I feel that we may well be proud of the results achieved. We have in fact been writing a new chapter in the history of mankind by setting up internationally agreed rules for the allocation and use of radio frequencies for space services. To be exact, we have produced a document of 160 pages.

" It has been pointed out that, as human activity penetrates deeper into space, the need for close co-operation among the different countries of our globe will increase, and we have, in a most practical form, demonstrated how this co-operation may be carried out. We have created a new basis for future development in the fields of long-distance telecommunication, weather service, navigation, space research and for radio astronomy. I have no doubt that the results of this will be of great practical importance during the next decades.

" We should not, however, forget that we have only created a framework and "certain rules of the game" for the orderly development of space communication.

" This is only a result covering a rather narrow field. But we may have some reason to expect that our success here at this I.T.U. Conference may set a fine example for a broader international co-operation in space activities.

" The most important factor in achieving the good results at this Conference has been the excellent spirit of co-operation which has existed between the delegations. The Conference was faced with widely different proposals at the beginning, and the agreement reached shows that the various parties have made quite important concessions in order to obtain a solution which could be generally accepted. I have taken part in a number of I.T.U. Conferences, but I have never before seen such a widespread effort to come to a fair solution which would give the best overall results.

" It has been a great honour for me to preside over this Conference, but it has been a heavy responsibility which I could only face because I knew that I would get the best possible help and advice from my two Vice-Chairmen, Mr. Badalov of the U.S.S.R. and Mr. McConnell from the U.S.A. Through the two Vice-Chairmen, I had access to the very finest expert knowledge in the field of space communication, and the personal good-will and wisdom of Mr. Badalov and Mr. McConnell gave me valuable guidance when faced with difficult problems.

" The main part of the work, however, has been carried out in the committees and the working groups or smaller groups.

" A special tribute should be paid here to the Committee Chairmen.

" Dr. Nicotera has ably guided the Credentials Committee in his usual fine way.

" Mr. Ionita has taken good care of the Budget Control Committee and we have seen with satisfaction that the expenses will be within the budget.

" The Technical Committee, under the Chairmanship of Mr. Esping, solved some very difficult problems - not only of a technical nature but also the surprisingly tricky problems which arise in connection with definitions in the new field of space activity.

" Mr. Klein had the most important and difficult problem with the Allocation Committee, and his expert knowledge and patience played a decisive role for the good result obtained.

" Mr. Autelli worked hard on provisions of the radio regulations and it was a pleasure to see how well prepared the difficult texts were, when we had the "blue" papers here in the Plenary Meetings.

" Mr. Place had the hard work connected with the Drafting Committee. I admire the efficiency and quality of the work carried out by the Drafting Committee and I feel that Mr. Place deserves a special tribute for his achievement, which is a continuation of the fine tradition of the French Delegation at I.T.U. meetings.

" I have had the good fortune to receive the sound advice, both inside and outside meetings, of the Secretary-General, Mr. Gross, and the Deputy-Secretary General, Dr. Sarvato, as well as from the I.F.R.B. Chairman, Mr. Gayer, and from the I.F.R.B. members, and the I.F.R.B. secretariat. I must thank Mr. Hayes for the good assistance of the C.C.I.R., which has given some basic information most valuable for the Conference.

" I am very grateful for the excellent assistance given by Mr. Stead of the Conference Secretariat. The various departments of the Secretariat worked so well throughout all stages of the Conference that it was like a machine. The same applies to the interpretation service, which functioned so well that one nearly forgot the human effort, linking the different languages.

" We must also express our gratitude to the Swiss Government and the Swiss P.T.T. as well as the Geneva Authorities for their hospitality to our Conference.

" I sincerely hope that our achievement will be fruitful in the development of telecommunication in all regions of the world, and may the I.T.U. prosper in the new space era."

The Delegate of Spain, Dean of the Conference, made the following statement:

"I am quite certain that I am interpreting the wishes of all delegations to this Conference in thanking and congratulating our Chairman for the competence and wisdom with which he has directed our work.

" Now that I have taken the floor I should also like to point out that, in spite of the spirit of cooperation which was without a doubt shown by everybody, little would have been achieved without a skilful Chairman.

" You have, Mr. Chairman, with your combination of outstanding intelligence and sound technical knowledge, been able to make the best of those contributions which - although very valuable in themselves - would have lost much of their point without the wise mind which coordinated them. We are also thankful for those flashes of humour with which you enlivened the aridity of the discussions from time to time.

" I do not wish to abuse the great privilege afforded to me on this occasion nor have I forgotten the great value of time. I shall conclude therefore repeating our congratulations to you, Mr. Chairman, for your successful work.

" Once again, allow me to say in complete sincerity 'Thank you very much, Mr. Chairman'."

The Delegate of the United Kingdom also wished to pay tribute to his old friend, the Chairman of the Conference. All those who had known him for a long time had realised before coming to Geneva that he had the necessary attributes to carry out that most onerous task. He had wisdom, kindness, understanding and a remarkable sense of humour and, with all that, the necessary firmness in his character which he was prepared to use when necessary. Also, his aim over the years had been to ensure that the I.T.U. played its part in all new developments. All had been delighted when he had accepted the task of Chairmanship and the document which had been considered the previous day demonstrated his success in guiding and directing the efforts of those participating in the Conference over the past five weeks. He had indeed helped to build a most firm and sound foundation on which the development of space radiocommunications, including space research and radio astronomy aspects, could proceed with confidence. He prophesied that time would show that 8th November, 1963, was a momentous day in the history of the I.T.U. In conclusion, he expressed his thanks to the Chairman and all delegates with whom it had been a great privilege to work. Mr. Pedersen was now the famous son of a very famous father and they all joined in conveying to him their best wishes and thanks.

The Delegate of New Zealand made the following statement :

"It is New Zealand's pleasure and very great privilege, on behalf of all delegates present, to propose a vote of thanks to the most important person at this Conference. I am referring to you, Sir.

" Your reputation as an engineer, administrator and international delegate is such that when, some five weeks ago, this Conference was placed under your guidance as Chairman, a successful outcome to its deliberations was assured.

" As Director-General of the Danish P.T.T. Administration, you have achieved national eminence. On the international scale, your election as Chairman of this Conference was a natural outcome of the outstanding contributions you have made at numerous I.T.U. conferences including those at Atlantic City, Mexico City, Stockholm, Geneva (1959) and many others.

" My outstanding impression of this Conference will always be the example you have given of forceful but impartial Chairmanship often lightened in difficult moments by your delightful sense of humour, which has helped so much to promote agreement.

" I know you will be anxious to say that the success you have achieved is due to the able assistance you have received from many quarters. I would remind you, however, that assistance is most readily given to an inspiring leader.

" In bringing this Conference to a successful conclusion, you have enhanced your high reputation and have added lustre to the already illustrious name of your country.

" In thanking you for a task well done, I would ask all delegates present to endorse my remarks by acclamation."

The Delegate of Italy made the following statement :

"That magnificent institution, the I.T.U., which has done so much for mankind during 100 years of intense activity has had to face in these recent years since the Second World War scientific, technical and administrative tasks that have been constantly growing and becoming increasingly delicate and difficult.

" These tasks have been accomplished superbly and, thanks to the I.T.U., there are now high-quality fixed and mobile radio and telecommunication services covering the whole world.

" This achievement is largely due to the work of men who have devoted their intellectual abilities and time with a great spirit of sacrifice to the problems of the Union. They are men who have acquired vast experience in the affairs of our Organization throughout the years and who have made the most valuable contributions to it.

" It is with great regret and anxiety that we see some of these men leaving us for one reason or another. It is now the turn of that very popular man, Captain Booth. We have been fortunate enough to have him in our midst during this Conference, but we do not know whether he will be able to come back again. We sincerely hope he will be able to return, but if this is impossible, I am sure of interpreting the feelings of all those present, as well as those of his friends in the C.C.I.R. who are absent, and particularly the feelings of the older delegates here who have worked with him for many years, in assuring him how greatly we have appreciated his dynamism and wisdom during conferences and in the C.C.I.R. I need only add to this the gratitude of the Union and the admiration and friendship we feel, in wishing him a long and happy retirement, which has been so well deserved. Thank you."

The Delegate of France, Chairman of the Editorial Committee, associated his Delegation with the tribute paid to the Chairman by previous speakers and thanked him for the references he had made to the work of the Drafting Committee. Those composing that Committee had shown themselves to be an excellent team and they had worked together with understanding, zeal and good humour so that it had been possible to sign the Final Acts of the Conference at 22.45 hours GMT. Thanks were due to each member of that team, for they had spared no effort during the day or night and many delegates arriving at the Conference building at 9 a.m. had encountered the members of the Editorial Committee who were just leaving, having spent the whole night editing the documents. It was difficult for him to thank individually those concerned but he wished to mention the delegates of the English, Spanish and French languages who had participated as well as the officials of the Union, in particular Mr. Dellamula and Mr. Petit, members of the I.F.R.B., Mr. Petignat and Mr. Winter-Jensen of the General Secretariat and Mr. Matthey of the I.F.R.B. Finally, he thanked the Chairmen of Committees 4, 5 and 6 who had greatly facilitated the work of the Editorial Committee. Mr. Esping, who had handed in a set of definitions after four weeks of detailed and patient efforts, Mr. Klein for the particularly difficult work which had been accomplished in his Committee and Mr. Autelli who had been first to reach the finishing post, thus enabling the Editorial Committee to stagger its workload.

The Delegate of the United States of America, Vice-Chairman of the Conference, expressed his thanks to the Chairman for all he had done and particularly for having maintained good health throughout the Conference. It had been a pleasure to serve under him as Vice-Chairman. As a newcomer to I.T.U. conferences, it had been a revelation to him, and a very pleasant one at that, to see what devoted friends delegates had become through the years. On behalf of the Delegation of the United States of America, he stated his appreciation of the Chairman's service and thanked all delegates, without whose dedicated devotion and hard work so much would not have been accomplished.

The Delegate of the F.S.R. of Yugoslavia said that throughout the five weeks of the Conference and their discussions on space communications, they had always been realistic since they were technicians and engineers. A new technique had now been added to conventional radiocommunication techniques. It was with much pleasure that he had noted the presence at the Conference not only of senior experienced engineers and experts but also of members of the younger generation who would continue the work of international cooperation in the field of the International Telecommunication Union which the former had begun, and step forward into the new field of space communications. He therefore had great faith in the future work of the Union to be carried out by all the countries, Members of the I.T.U.

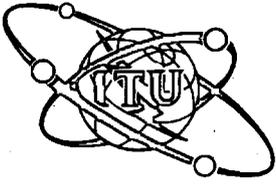
The Chairman expressed his thanks for all that had been said.

The Space Radiocommunication Conference of the International Telecommunication Union was formally declared closed at 12.30 a.m.

Rapporteur
V. BOULADON

Secretary-General
Gerald C.GROSS

Chairman
Gunnar PEDERSEN



SPACE RADIOCOMMUNICATION CONFERENCE

Document No. 243-E
13 November, 1963

E. A. R. C. TO ALLOCATE FREQUENCY BANDS FOR SPACE RADIOCOMMUNICATION PURPOSES - GENEVA - 1963

LIST OF DOCUMENTS FOR THE SPACE RADIOCOMMUNICATION CONFERENCE

(Documents No. 1 to 243)

No.	Title	Origin	Destination
1 Corr. 1, 2 and Add.	Recommendations, Resolutions and Reports	C.C.I.R.	P.M.
2	Frequency requirements for communication satellite services	U.K.	P.M.
3 Corr. 1 & 2	Proposals for the revision of Art.5 of the Radio Regulations	U.K.	P.M.
4	Proposals for the revision of Art. 7 of the Radio Regulations	U.K.	P.M.
5	Proposals for the revision of Art.9 and Appendix 1 to the Radio Regulations	U.K.	P.M.
6	Proposal concerning the form of the Final Acts of the Conference	U.K.	P.M.
7 and Corr.	Proposed amendments to the Radio Regulations	France	P.M.
8 Corr. 1, 2 and Add	Proposals for the revision of the Radio Regulations	U.S.A.	P.M.
9	Proposals for frequency allocations to space radio research and communications	Nigeria	P.M.
10	Proposals for the revision of the Radio Regulations	Canada	P.M.
11	Proposals for the revision of the Radio Regulations	Japan	P.M.
12	Telecommunication and the peaceful uses of outer space	G.S.	P.M.



No.	Title	Origin	Destination
13	Subscribers tolerance of propagation time and of echos	C.C.I.T.T.	P.M.
14	Radio Astronomy observations in the frequency band 606-614 Mc/s	Sweden	P.M.
15	Proposed recommendation concerning the calculation of co-ordination distances for communication-satellite earth stations	U.K.	P.M.
16	Note by the General Secretariat	G.S.	P.M.
17 and Corr.1,2	Proposals of administrations relating to Art.5 of the Radio Regulations	I.F.R.B. and G.S.	P.M.
18	Proposals concerning the Radio Regulations	G.S.	P.M.
19	Proposals for frequency allocations for the Radio Astronomy Service	Australia	P.M.
20 (Rev)	Proposals for the revision of Art.1 of the Radio Regulations	I.F.R.B. and G.S.	P.M.
21 (Rev)	Proposals for the revision of Art.7 of the Radio Regulations	I.F.R.B.	P.M.
22	Note of the General Secretariat	G.S.	P.M.
23	Note of the General Secretariat	G.S.	P.M.
24 (Rev)	Proposals for the revision of Art. 20 of the Radio Regulations and Appendices 9 and 10 thereto	I.F.R.B. and G.S.	P.M.
25	Proposals for the revision of Art.1 of the Radio Regulations terms and definitions	U.K.	P.M.
26	Proposals for the revision of Art.5 of the Radio Regulations (radio astronomy)	Netherlands	P.M.
27	Proposals for consideration by the extraordinary Administrative Radio Conference, Geneva, 1963	Australia	P.M.
28	Note by the French administration on the development of space telecommunications	France	P.M.

No.	Title	Origin	Destination
29	The activity of the Fucino earth station with the experimental satellites Relay, Telstar I, Telstar II	Italy	P.M.
30	Earth station of the Deutsche Bundespost for the transmission of communications via artificial earth satellites	F.R. of Germany	P.M.
31	Proposals for the revision of the Radio Regulations	Israel	P.M.
32 (Rev.2)	Proposals by the Union of Soviet Socialist Republics	U.S.S.R.	P.M.
33 Corr. 1	Progress in the development of space communication system	Japan	P.M.
34	Proposals for the revision of Art.1,4, 9 and 14 of the Radio Regulations	Australia	P.M.
35	Proposals for Art.5 of Radio Regulations	Mexico	P.M.
36	Proposals for Radio Regulations	Mexico	P.M.
37	Scientific and Technical progress in space exploration and radiocommunication by U.S.A.	U.S.A.	P.M.
38	Traffic Data assembled for the Plan Committee	C.C.I.T.T.	P.M.
39	Proposal to the Conference	Israel	P.M.
40	Report on studies relating to the possible addition of new Appendix (No. 26 A) to the Radio Regulations	I.F.R.B.	Com.4
41 and Add	Report on existing and planned frequency usage of certain frequency bands in which the existing categories of service to which the bands are allocated, will either be eliminated or their status will be down-graded under proposals submitted to the Conference by Administrations	I.F.R.B.	Com.5
42	Note by the chairman of the Conference	-	-

No.	Title	Origin	Destination
43	Report on studies relating to the possible revision of Art.9 of the Radio Regulations and Appendix 1 thereto	I.F.R.B.	Com. 6
44	Reserved		
45	Report on studies relating to the possible lay-out of the final Acts of the Space Radiocommunication Conference	I.F.R.B.	Com. 7
46	Convening of the Conference	S.G.	P.M.
47	Invitations to the Conference	S.G.	P.M.
48	Situation of certain countries with respect to the Convention	S.G.	P.M.
49	Secretariat of the Conference	S.G.	P.M.
50	Proposals for the work of the Conference	S.G.	P.M.
51	Agenda, 1st meeting of the Heads of delegations	S.G.	Heads of Delegations
52 and Add	Suggestions for the organisation of the work of the Conference	S.G.	P.M.
53	Budget of the Conference	S.G.	P.M.
54	List of documents for the Conference	S.G.	-
55	Proposals for the revision of Art.5 of the Radio Regulations	Japan	P.M.
56	Agenda for the 1st plenary meeting	S.G.	P.M.
57	Agenda of the 1st meeting of Committee 4	Com.4	Com.4
58	Agenda of the 1st meeting of Committee 5	Com 5	Com.5
59 and Corr	Committee structure	S.G.	P.M.
60	Report on the activities of the Scandinavian countries in the field of space communications	Denmark Norway Sweden	Com.4
61	Utilisation of telecommunication satellites for television	E.B.U.	Com.4
62	Basic achievements and trends in space Research in the Soviet Union	U.S.S.R.	Com.4

No.	Title	Origin	Destination
63	Agenda 1st meeting of Committee 6 (Regulations)	Com. 6	Com. 6
64 and Corr.	Structure of the working Groups of Committee 4 (technical)	Com. 4	Com. 4
65 and Corr.	Structure of the working groups of Committee 5	Com. 5	Com. 5
66	Summary record of the 1st meeting	Com. 4	Com. 4
67 and Corr.	Minutes of the 1st meeting of Heads of delegations	Rapporteurs	Heads of Delegation
68	Statement concerning Doc.32 Rev.	Bulgaria Hungary Poland Roumania Czechoslovakia	Com.4,5,6
69	Structure of the working groups of Committee 6 (Regulations)	Com.6	Com.6
70	Summary record of the 1st meeting	Com.5	Com.5
71	Agenda of the 1st meeting of Committee 2 (Credentials)	Com. 2	Com.2
72	Statement	U.S.S.R. Biellorussia Ukrania	P.M.
73	Minutes of the 1st meeting of Committee 6 (Regulations)	Com.6	Com.6
74	<u>Minutes of the opening plenary meeting</u>	Rapporteurs	P.M.
75 and Add	Radio Astronomy and space research services - IUCAF recommendations	W.G. 5B	W.G. 5B
76	Experimental earth station at Goonhilly Downs	U.K.	P.M.
77 (Rev.)	Special meeting of the space radio- communication Conference	S.G.	-
78	Agenda for the 1st meeting	Com.7	Com.7
79	Note by the Secretariat to the budget control committee of the Space Conference	S.G.	Com.3

No.	Title	Origine	Destination
80	Agenda 1st meeting of Committee 3 (Budget Control Committee)	Com.3	Com.3
81	Proposals for revision of Art.8	India	Com.6
82	Proposals for formulation of a new Art. 9 bis	India	Com.6
83 and Corr.	Summary record of the 1st meeting	Com. 2	Com. 2
84	Oscar space satellite program of the International Amateur Radio Union	W.G. 5C	W.G. 5C
85	Statement by the Delegation of the Republic of Cuba to the EARC on space communications	Cuba	P.M.
86	Statement	Cuba	Com. 4,5,6
87	Note by the Secretary-General	S.G.	P.M.
88	Limitation of horizontal effective radiated power,(E.R.P.) of earth stations and of terrestrial stations in bands shared with communications- satellites earth station receivers	U.K.	Com.4
89	Summary record of the 1st meeting	Com.3	Com.3
90	Statement	Rep. of China	P.M.
91 and Corr.	Report of working group 4B	W.G. 4B	Com.4
92 (Rev.)	Summary report of the 1st meeting	Com. 7	Com. 7
93	Situation of certain countries with respect to the Convention	S.G.	P.M.
94	Agenda 2nd meeting of Committee 4	Com. 4	Com. 4
95 (Rev.)	1st report of the W.G. 5C to Committee 5 - Amateur service	W.G. 5C	Com. 5
96	2nd report of W.G. 5C to Committee 5 - Satellite identification	W.G. 5C	Com. 5
97	Additional proposal for consideration by the extraordinary Administrative Radio Conference	Australia	Com. 5
98	1st report by the Working Party of Committee 2 (Credentials)	W.P.Com.2	Com. 2
99	Proposals for revision of Art. 1	Belgium France Portugal	Com. 4

No.	Title	Origin	Destination
100	List of documents	S.G.	-
101	Statement by the delegations of the People's Republic of Bulgaria, the Hungarian People's Republic, the Roumanian People's Republic, and the Czechoslovak Socialist Republic	Bulgaria Hungary Roumania Czechoslovakia	P.M.
102 and Corr.	First report of Working Group 6B to Committee 6	W.G. 6B	Com.6
103	Situation of certain countries with respect to the Convention	S.G.	P.M.
104	Summary report of the second meeting	Com.4	Com.4
105 (Rev.)	Agenda third meeting of Committee 4	Com.4	Com.4
106	Statement	China	P.M.
107 (Rev.2)	Memorandum on amateur experimental space satellite activity	I.A.R.U.	-
108	First report by working group 5A to Committee 5 (Allocations)	W.G. 5A	Com.5
109	Proposed Resolution to the Administrative Council concerning future management of frequency bands allocated for Space Radiocommunication purposes	U.S.A.	P.M.
110 and Corr.	Terms of reference of the C.C.I.T.T./C.C.I.R. plan committee	C.C.I.T.T. C.C.I.R.	-
111	First report by Working Group 5B to Committee 5 - Space research service	W.G. 5B	Com.5
112	Second report by Working Group 5B to Committee 5 (Radio Astronomy Service) - Telemetry	W.G. 5B	Com.5
113 and Add.	Second report by Working Group 5A to Committee 5 (Allocations)	W.G. 5A	Com.5
114	Third report by Working Group 5C to Committee 5 (Allocations) - Aeronautical Services	W.G. 5C	Com.5
115	Report of Working Group 4B (part 2)	W.G. 4B	W.G. 4B
116	Summary record of the third meeting	Com. 4	Com.4
117	Tentative proposals for terms and definitions	W.G. 4A	W.G. 4A
118	Agenda fifth meeting of Committee 4	Com. 4	Com. 4

No.	Title	Origin	Destination
119	Agenda Fourth meeting of Committee 4	Com.4	Com.4
120	Co-ordination procedure Explanatory memorandum	United Kingdom	Com.6
121	Draft Resolution - The interconnection of communication -satellite systems and other transmission systems	United Kingdom	Com.4
122 (Rev.)	First report of Working Group 4C - Co-ordination distance procedure in the 1-10 Gc/s band	W.G. 4C	Com.4
123	Third report by Working Group 5B - Radio- Astronomy Service	W.G. 5B	Com.5
124	Agenda second meeting of Committee 5 (Allocations)	Com.5	Com.5
125	Fourth report of Working Group 5B to Committee 5 Radio Astronomy Service	W.G. 5B	Com.5
126 (Rev.2) and Corr.	Second report of Working Group 4C - Sharing Criteria	W.G. 4C	Com.4
127	Third report by Working Group 5A to Committee 5 (Allocations) - Telemetering	W.G. 5A	Com.5
128 (Rev,)	Report of Working Group 4B (third part)	W.G. 4B	Com.4
129	Summary record of the fourth meeting	Com. 4	Com.4
130	Report of Working Group 5B to Committee 5 -	W.G. 5B	Com.5
131	Telecommunication and the peaceful uses of outer space	S.G.	-
132	Statement by the Delegation of the People's Republic of Poland	Poland	P.M.
133	Agenda fifth meeting of Committee 5 (Allocations)	Com. 5	Com.5
134	Second report by the Working Group of Committee 2, (Credentials)	W.G. . Com. 2	Com.2
135	Agenda second meeting of Committee 2 (Credentials)	Com.2	Com.2
136	Second and last report of Working Group 6B to Committee 6	W.G. 6B	Com.6
137	Agenda sixth meeting of Committee 5(Allocations)	Com.5	Com.5
138	Summary Record of the fifth meeting	Com.4	Com.4

No.	Title	Origin	Destination
139 and Add.	Fourth and last report by Working Group 5A to Committee 5 (Allocations)- Communication-satellite service	W.G. 5A	Com.5
140	Summary Record of the fourth meeting	Com. 5	Com.5
141	Statement by the Delegation of the Republic of China to the E.A.R.C. to allocate frequency bands for space radio communication purposes	China	P.M.
142	Summary Record of the third meeting	Com.5	Com.5
143	Report of Working Group 6A to Committee 6	W.G. 6A	Com.6
144	Draft - Article 9	Com.6	Com.6
145	Draft - Article 9A	Com.6	Com.6
146	Draft - Appendix 1 MOD	Com.6	Com.6
147	Appendix 1A - Notices relating to stations in the space and radio astronomy services	Com.6	Com.6
148	Draft - 114 MOD § 2	Com.6	Com.6
149	Draft Recommendation relating to the notification of frequency assignments for joint space telecommunication systems	Com.6	Com.6
150	List of documents	-	-
151	Agenda of the 2nd meeting of Committee 6 (Regulations)	Com.6	Com.6
152	Draft Resolution relating to the provision of information regarding International Satellite systems	Com.6	Com.6
153 (Rev.2)	Summary record of the 2nd meeting of Committee 5	Com.5	Com.5
154	Agenda of 7th meeting of Committee 5 (Allocations)	Com.5	Com.5
155	Chapter I-Terminology	Com.4	Com.4
156 (Rev.)	Agenda of 6th meeting of Committee 4	Com.4	Com.4
157	Draft recommendation (Calculation of Co-ordination distance for earth stations in the communication-satellite service)	Com.6	Com.6
158 (Rev.)	Summary record of the fifth meeting	Com.5	Com.5

No.	Title	Origin	Destination
159 and Rev.	Draft Recommendation	Com.4	Com.4
160, Corr.1 and Add	Fifth Report by Working Group 5B to Committee 5 (Radio Astronomy Service)	Com.5	Com.5
161	Agenda of the 3rd meeting of Committee 6 (Regulations)	Com.6	Com.6
162 (Rev.2)	Summary Record of the 6th meeting	Com.5	Com.5
163 (Rev.)	Draft recommendation (Study of modulation methods for radio relay systems)	Com.4	Com.4
164	Fourth report by Working Group 5C to Committee 5 (Allocations)	W.G.5C	Com.5
165	Sixth and last report by Working Group 5B to Committee 5	W.G.5B	Com.5
166	Recommendation	Delegation of Israel	P.M.
167 and Add.	B.1 (First Reading)	Edit.Com.	P.M.
168	Draft Recommendation	Com.4	Com.4
169	Fifth report by Working Group 5C to Committee 5	W.G.5C	Com.5
170	Agenda for the Second Plenary Meeting	P.M.	P.M.
171	B.2 (First Reading)	Edit.Com.	P.M.
172 and Add.	B.3 (First Reading)	Edit.Com.	P.M.
173	Sixth and last report of Working Group 5C to Committee 5	W.G.5C	Com.5
174	Agenda of the ninth meeting of Committee 5	Com.5	Com.5
175	B.4 (First Reading)	Edit.Com.	P.M.
176	B.5 (First Reading)	Edit.Com.	P.M.
177	B.6 (First Reading)	Edit.Com.	P.M.
178	Summary record of the second meeting of Committee 2 (Credentials)	Com.2	Com.2

No.	Title	Origin	Destination
179	Report by Committee 2 (Credentials)	Com.2	P.M.
180	Draft Recommendation	Chairman of the Conference	P.M.
181	B.8 (First Reading)	Edit.Com.	P.M.
182	Summary record of the 7th meeting of Committee 5	Com. 5	Com. 5
183	B.9 (First Reading)	Edit.Com.	P.M.
184	Draft Resolution relating to space vehicles in distress and emergency	W.G. 5 ad hoc	P.M.
185	B. 10 (First Reading)	Edit.Com.	P.M.
186	B. 11 (First Reading)	Edit.Com.	P.M.
187	B. 7 (First Reading)	Edit.Com.	P.M.
188	Note by the Secretariat	S.G.	-
189 & Corr.	Summary record of 2nd meeting of Committee 6 (Regulations)	Com. 6	Com. 6
190	Proposed amendment to document No. 171	Australia	P.M.
191	Agenda for the 3rd plenary meeting	P.M.	P.M.
192	International technical cooperation and assistance in the field of space radio- communications	Delegation of S.F.R. of Yugoslavia	P.M.
193	Declaration by the United Nations	United Nations	P.M.
194 194 and Rev.	Summary record of the third and last meeting of Committee 6 (Regulations)	Com.6	Com.6
195	Agenda for the 4th plenary meeting	P.M.	P.M.
196	R.1 (Second Reading)	Edit.Com.	P.M.
197	Agenda for the 5th plenary meeting	P.M.	P.M.
198 and Rev	Memorandum by the Secretary-General- Situation of certain countries with respect to the Convention	S.G.	P.M.
199	Summary record of the 8th Meeting of Committee 5	Com. 5	Com. 5
200	List of documents for the Conference	-	-

No.	Title	Origin	Destination
201	Note by the Chairman of the Conference	-	P.M.
202	Agenda for the 6th Plenary Meeting	P.M.	P.M.
203	Agenda for the Tenth Meeting of Committee 5 (Allocations)	Com. 5	Com. 5
204	Report by the Working Group of Committee 3	W.G. Com. 3	Com. 3
205	Agenda of the Second Meeting of Committee 3 (Budget Control)	Com. 3	Com. 3
206	R.2 (Second Reading)	Ed.Com.	P.M.
207	R.3 (Second Reading)	Ed.Com.	P.M.
208	Final Protocol	Rep. of Indonesia	P.M.
209	Agenda for the 7th Plenary Meeting	P.M.	P.M.
210 and Rev.	Statement by the U.S.S.R. Delegation	U.S.S.R.	P.M.
211	Proposal by the Delegations of Australia, Belgium; Canada, U.S.A., France, Luxembourg, Netherlands, United Kingdom, and Sweden relating to Radio Astronomy.	Australia, Belgium, Canada, U.S.A., France, Luxembourg, Netherlands, United Kingdom, Sweden.	P.M.
212	R.4 (Second Reading)	Ed.Com.	P.M.
213	<u>Minutes of the Second Plenary Meeting</u>	Rapporteurs	P.M.
214	Report by the Budget Control Committee	Com. 3	P.M.
215	<u>Minutes of the Third Plenary Meeting</u>	Rapporteurs	P.M.
216	Proposals by Belgium, Spain, France and Portugal for the amendment of Article 1 of the Radio Regulations.	Belgium, Spain, France, Portugal.	Com. 4
217 and Rev.	Agenda for the 8th Plenary Meeting	P.M.	P.M.

No.	Title	Origin	Destination
218 and Rev.	Agenda for the 9th Plenary Meeting	P.H.	P.M.
219	Final Protocol	Denmark, Norway, Sweden, Switzerland.	P.M.
220	Final Protocol	Argentine Rep.	P.M.
221	Final Protocol	U.S.A. and Territories of the U.S.A.	P.M.
222	Final Protocol	Cuba	P.M.
223	Final Protocol	Rep. of Pakistan	P.M.
224	Final Protocol	Dem. & Pop. Rep. of Algeria Kuwait U.A.R.	P.M.
225	Summary Record of the 9th and Last Meeting of Committee 5	Com. 5	Com. 5
226	Summary Record of the 6th and Last Meeting	Com. 4	Com. 4
227	Summary Record of the Second Meeting of Committee 3 (Budget Control)	Com. 3	Com. 3
228	Final Protocol	Malaysia	P.M.
229	R.5 (Second Reading)	Ed.Com.	P.M.
230	Final Protocol	Mexico	P.M.
231	Draft Resolution	Ad Hoc Group	P.M.
232	Final Protocol	United Kingdom	P.M.
233	Final Protocol	Canada	P.M.
234	Final Protocol	Colombia	P.M.
235	Final Protocol	Argentina	P.M.
236	<u>Minutes of the Fourth Plenary Meeting</u>	Rapporteurs	P.M.
237	<u>Minutes of the Fifth Plenary Meeting</u>	Rapporteurs	P.M.
238	<u>Minutes of the Sixth Plenary Meeting</u>	Rapporteurs	P.M.
239	<u>Minutes of the Seventh Plenary Meeting</u>	Rapporteurs	P.M.
240	<u>Minutes of the Eighth Plenary Meeting</u>	Rapporteurs	P.M.
241	<u>Minutes of the Ninth Plenary Meeting</u>	Rapporteurs	P.M.
242	<u>Minutes of the Tenth Plenary Meeting</u>	Rapporteurs	P.M.
243	List of Documents	-	-