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**Documents of the World Administrative Radio Conference for dealing with
frequency allocations in certain parts of the spectrum (WARC-92)
(Malaga-Torremolinos, 1992)**

To reduce download time, the ITU Library and Archives Service has divided the conference documents into sections.

- This PDF includes Document No. 101-200
- The complete set of conference documents includes Document No. 1-401,
DL No. 1-37, DT No. 1-120

COMMITTEE 4

Republic of Turkey

PROPOSAL FOR THE WORK OF THE CONFERENCE

ADDITIONAL ALLOCATION

TUR/101/12
MOD 658

Additional allocation: in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei, Burundi, Egypt, the United Arab Emirates, Ecuador, Ethiopia, Greece, Guinea, India, Indonesia, Iran, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, the Lebanon, Libya, Liechtenstein, Malaysia, Malta, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syria, Singapore, Somalia, Switzerland, Tanzania, Thailand, and Togo and Turkey, the band 430 - 440 MHz is also allocated to the fixed service on a primary basis and the bands 430 - 435 MHz and 438 - 440 MHz are also allocated to the mobile, except aeronautical mobile, service on a primary basis.

COMMITTEE 4

Republic of Turkey

PROPOSALS FOR THE WORK OF THE CONFERENCE

ADJUSTMENT TO A FOOTNOTE (No. 404) WHICH DEFINES
THE EUROPEAN BROADCASTING AREA

1. Several aspects of the broadcasting service and the broadcasting-satellite service are on the agenda of this present Conference. One small aspect relating to an historical anomaly in RR 404 could, if the Conference agreed, be corrected with minimum effort.

2. RR 404 divides the territory of the Republic of Turkey into two parts, that contained within the defined area known as the "European Broadcasting Area" and that other area east of 40° East. This makes it exceedingly difficult for planning purposes. This anomaly could be corrected as follows:

TUR/101/11

MOD 404

§ 4. The "European Broadcasting Area" is bounded on the west by the western boundary of Region 1, on the east by the meridian 40° East of Greenwich and on the south by the parallel 30° North so as to include the western part of the U.S.S.R., the northern part of Saudi Arabia and that part of those countries bordering the Mediterranean within these limits. In addition, Iraq and Jordan and that part of the territory of Turkey lying outside of above limits are included in the European Broadcasting Area.

Republic of Turkey

PROPOSALS FOR THE WORK OF THE CONFERENCE

I. Introduction

By recognizing the importance of the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum, Malaga-Torremolinos, 1992, the Turkish Administration would like to express its views regarding some agenda items which are of interest and concern to the Republic of Turkey in the light of the reports, information papers and proposals of CCIR, IFRB, IMO, ICAO and the other administrations.

In general, the Republic of Turkey has supported the European Common proposals (ECPs) which are explained in Document 20 of the Conference. However, for some agenda items the Republic of Turkey has concluded that it was necessary to submit its own view in order to be considered by the administrations taking part in the Conference.

The principles on which the proposals in this document were based, are as follows:

- The existing or planned fixed and mobile services will continue to play a major role in the development of the developing countries for a longer period of time.
- In this respect, safeguarding and protection of existing or planned radiocommunication services are essential.
- Bearing in mind the rapid changes in telecommunications technology, practical methods for implementation of new services should be found.

II. Outline of the proposals

Agenda item 2.2.2 - Possible extension of the frequency spectrum allocated exclusively to the HF broadcasting service

1. In Turkey, HF bands for fixed and mobile services are still widely utilized and are considered potential to support the communication for government and other requirements. Turkey can only consider to release a limited part of the HF spectrum for fixed and mobile services below 10 MHz. Thus, we shall propose the following modifications to the Table of Frequency Allocations for HF bands below 10 MHz.

kHz			
9 040 - 9 500			
Allocation to Services			
	Region 1	Region 2	Region 3
TUR/101/1 MOD	9 040 - 9 500 <u>400</u>	FIXED	
TUR/101/2 MOD	9 040 <u>400</u> - 9 500	FIXED <u>BROADCASTING</u>	

2. The allocation to the HF broadcasting:
- should be adjacent to the existing BC bands;
 - should be worldwide allocations;
 - should not be adjacent to the existing maritime-mobile, amateur and amateur-satellite services.

TUR/101/3

3. Taking into account the considerations above, the frequency bands indicated below shall be accepted by the Turkish Administration for the extension of HFBC above 10 MHz.

11 600 - 11 650 kHz

12 050 - 12 100 kHz

13 800 - 13 900 kHz

15 600 - 15 800 kHz

17 500 - 17 550 kHz

TUR/101/4

4. A timetable is necessary to protect the existing fixed and mobile services in these HF bands. Any station operating in these bands except for the BC service should be transferred to appropriate frequency bands until 1 January 2010.

TUR/101/5

5. The use of the SSB technique instead of DSB for the HFBC on existing bands is supported.

Agenda item 2.2.3 - The consideration of frequency allocations to the broadcasting-satellite service and the associated feeder links

1. Allocations for the broadcasting-satellite service (sound) in the range 500 - 3 000 MHz

Studies have taken place in the vicinity of 1.5 GHz and 2.5 GHz for BSS (Sound). From the technical point of view and taking into account the existing use of these bands, particularly in developing countries by fixed and mobile services, the 1.5 GHz band is more advantageous.

TUR/101/6

The Turkish Administration supports the proposal in the vicinity of 1.5 GHz. The implementation of new allocations should be in the long term in order to protect existing systems.

1.2 Allocations for wide RF band high-definition television (HDTV) on a worldwide basis

TUR/101/7

Broadly, the ECP submitted by some European countries on the matter (Part III of WARC-92, Document 20) has been supported by Turkey. However, for the feeder links, the band 18.1 - 18.6 GHz is preferred.

Also, the 1977 BSS frequency plan should be reviewed by reserving the allocated band for future use of HDTV, when it starts to use narrow-band (e.g. 27 MHz) techniques.

Agenda item 2.3 - To consider the provisions of Article 55(Rev.) and Article 56(Rev.) of the Radio Regulations which concern the mandatory carriage on board ships of personnel certificated for the on-board maintenance of shipborne radio and electronic equipment, as indicated in Resolution No. PLEN/8 (Plenipotentiary Conference, Nice 1989)

TUR/101/8

Turkey recognizes that Articles 55(Rev.) and 56(Rev.) should be reviewed and rearranged as it is proposed in Part IV of Document 20. Thus, we propose to make the minimum necessary changes on these two Articles. Proposals consisting of major changes to the articles cannot be agreed to.

Agenda item 2.4 - To consider minimum modifications to Article 12 of the Radio Regulations as a result of actions taken with regard to Appendix 26, as indicated in Resolution No. 9 (PL-B/2)

The 1959 plan relating to the HF aeronautical mobile (OR) service is now outdated. The IFRB has prepared a draft report on the subject (Document 5), and new channelling arrangements on the basis of the countries' needs shall be discussed during the work of the Conference. We have already submitted a report stating our needs for OR channels to the IFRB (published in Addendum 1 to Document 5).

TUR/101/9

In this respect we propose that Appendix 26, given in Addendum 1 to Document 5 should be adopted by the Conference.

Agenda item 2.6 - To make such consequential changes and amendments in the Radio Regulations as may be necessitated by the decisions of the Conference

Because of the new allocations which are possibly going to be made by the Conference for the mobile, mobile-satellite, and broadcasting-satellite (sound) services in the range 1 - 3 GHz, the fixed services in this range need special care for the future.

One of the ways of protecting existing fixed systems is delaying the implementation of new systems. This fact should be well defined in a possible Recommendation.

TUR/101/10

Therefore, Turkey supports the new Recommendation No. FFF in Document 46, provided that "considering b" reads:

"b) that the fixed service in this range is still extensively used and expected to be used for the foreseeable future to support essential services.

Agenda item 2.9.1 - To safeguard interests of services that may be affected by changes to the Table of Frequency Allocations

Turkey would like to draw the attention of the Conference to the fact that when making any change in the frequency allocations, "band sharing, developing or revising the sharing criteria and giving enough time to the changed services to adjust their operations" should be considered.

COMMITTEE 4

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATION)

Tuesday, 4 February 1992, at 0930 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Texts in paragraphs 1.18, 2.5 and 2.12 should be replaced by the following:

1.18 The delegate of the United States, referring to the footnote to Conference agenda item 2.2.1, which was not band specific, asked whether matters relating to communications with manned space vehicles, for which proposals around 400 MHz had been put forward, would be discussed by Working Group 4C or 4B.

2.5 Since the radio spectrum was a limited natural resource common to all people, his country had always endeavoured to use higher frequencies, and the Japanese Administration considered that new services such as the mobile-satellite service and the sound broadcasting-satellite service should be provided with frequencies that were as high as possible, taking into account technological developments in the present decade. Japan was therefore proposing an allocation for the sound broadcasting-satellite and mobile-satellite services in the frequency band around 2.6 GHz.

2.12 The delegate of the United States said that Document 12 and its addenda covered the main issues to be addressed by the Conference. He stressed the importance of the role to be played by new technology, in particular in bringing communications to those parts of the world which did not yet benefit from them. He indicated that his country had conducted extensive spectrum reviews in order to determine the most optimum frequency band choices for the United States proposals to meet new and changing needs. He outlined the major proposals presented by the United States, indicating that further details would be provided in the Working Groups. He indicated that the United States was prepared to assist the Chairman in so far as possible.

COMMITTEE 4

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATION)

Tuesday, 4 February 1992, at 0930 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subjects discussed

Documents

- | | | |
|----|---|---|
| 1. | Organization of the work of Committee 4 | DL/3, DL/4 |
| | - creation of Working Groups: Terms of reference | |
| | - draft timetable of work and deadlines for presentation of new proposals | |
| | - appointment of the Chairmen of the Working Groups | |
| | - allocation of documents to Working Groups | |
| 2. | General introduction of documents by delegations | 7 + Corr., 12 + Add.1-12
20, 22, 23, 27, 28,
29, 30, 34, 51 |
| 3. | Future work of Committee 4 | - |
| 4. | Agendas of Working Group meetings | - |

1. Organization of the work of Committee 4 (Documents DL/3, DL/4)

In opening the meeting, the Chairman presented a draft agenda, Document C4-1, which was then agreed to as the basis of the first meeting.

Creation of Working Groups: Terms of reference

1.1 The Chairman said that, in planning the work of Committee 4, it had been agreed that Working Groups were required but should be limited in number, to enable smaller delegations to participate. It was proposed to set up three Working Groups, 4A, 4B and 4C, to discuss the proposed frequency allocations set out in Document DL/3.

1.2 The delegate of Saudi Arabia considered that Working Groups should only be set up when vital and hoped that other Committees would follow the same principle.

1.3 The Chairman, replying to a request by the delegate of Morocco, assured the Committee that it was intended there would be no simultaneous meetings of main Committees, and that there would be full coordination between the Working Groups of Committees 4 and 5, especially concerning discussion of matters of common interest.

1.4 The delegate of Morocco, noting that the CCIR Report on the technical and operational basis for WARC-92 (Document 3) described systems using frequency bands below 1 GHz, suggested that the limit for frequency allocations for discussion in the Working Groups might be set at 1 GHz rather than 137 MHz.

1.5 The Chairman, replying to the delegate of Morocco, as well as to a request for further clarification by the delegate of the Russian Federation, said that the frequency limit of about 137 MHz had been selected on the basis of the proposals for the work of the Conference relating to low-Earth orbit satellites. Working Group 4A would deal mainly with the problem of spectrum allocation for high-frequency broadcasting. Working Group 4B would deal with the broad 0.5 - 3 GHz bands, covering agenda items relating to mobile-satellite services and broadcasting-satellite services (sound). The dividing line of about 137 MHz had been established so as to avoid a situation in which some proposals would not fall within either of the Working Groups' terms of reference, and that proposals for some systems, particularly low Earth-orbit satellites, would be within one Working Group.

1.6 The delegate of the Russian Federation said that with those clarifications he could support the proposed distribution of work between the Working Groups set out in Document DL/3.

1.7 The delegates of Mexico and Ecuador also supported the proposed distribution of work.

1.8 The Chairman, replying to a question by the delegate of Liechtenstein, confirmed that particular types of frequency allocation, e.g. for wind profiler radar, which might involve a frequency range covered by more than one Working Group, would if possible be dealt with by one Group or coordinated between Groups after receiving the relevant technical information from the Working Group of the Plenary.

1.9 The delegate of Japan said he had understood that wind profiler radar would be discussed mainly by the Working Group of the Plenary.

1.10 The delegate of Brazil, referring to item 2.2.3 of the Conference agenda concerning the allocation of frequency bands to the broadcasting-satellite service and the associated feeder links, pointed out that only the services mentioned under sub-items 2.2.3a and 2.2.3b had been included in the terms of reference, under Working Groups 4B and 4C respectively. He considered that the feeder-link aspect should also be included and combined with the discussion on feeder links under item 2.2.4.

1.11 The Chairman suggested that as feeder links might be on higher frequencies than the corresponding service, item 2.2.3a concerning broadcasting-satellite service (sound) feeder links might be dealt with by Working Group 4C instead of 4B.

1.12 The delegate of Canada supported that suggestion.

1.13 It was so agreed.

1.14 The Chairman, responding to a further request for clarification by the delegate of Brazil, said that while the feeder links were important both to the broadcasting-satellite service (sound) and to mobile-satellite services, they were of little value to potential service providers without the main service, which determined the extent of allocation requirements for the feeder links. In his view, the discussion on feeder links should therefore follow that on the main services. He suggested that the feeder-link aspects of items 2.2.3 and 2.2.4 respectively, should be discussed together by Working Group 4C.

1.15 It was so agreed.

1.16 The delegate of Mexico, referring to item 2.2.2 of the Conference agenda concerning the possible extension of the frequency spectrum allocated exclusively to high-frequency broadcasting, pointed out that no satisfactory solution had yet been found for the amateur and amateur-satellite services and proposed that the question of amateur use be included in the terms of reference of Working Group 4A.

1.17 The Chairman suggested that as a number of proposals had been made for changes to the high-frequency broadcasting spectrum around 7 MHz, the aspects referred to by the delegate of Mexico might be included in the discussion of item 2.2.2 or item 2.6 by Working Group 4A.

1.18 The delegate of the United States, referring to the footnote to item 2.2.1 of the Conference agenda, asked whether proposals relating to communications with manned space vehicles, which were not band-specific, but for which proposals around the frequency 400 MHz had been put forward, would be discussed by Working Group 4C or 4B.

1.19 The Chairman replied that such proposals should be examined by Working Group 4B as it was difficult to deal with a single use of the spectrum in isolation from the others.

Draft timetable of work and deadlines for presentation of new proposals

1.20 The Chairman read out the proposed timetable of meetings of the Working Groups of Committee 4 for 5-7 February.

1.21 The proposed timetable was approved.

1.22 The Chairman said that in order to be in accordance with Steering Committee discussions it would be appropriate if the Working Groups completed their work by Thursday, 20 February. He suggested that, in order to expedite matters, delegations should attempt to submit their proposals not later than the end of the present week.

1.23 It was so agreed.

Appointment of the Chairmen of the Working Groups

1.24 Mr. S. Hess (Denmark), Mr. G. Jenkinson (Australia) and Mr. H. Kimball (United States) were appointed Chairmen of Working Groups 4A, 4B and 4C respectively.

Allocation of documents to Working Groups

1.25 The Chairman invited delegations to comment on Document DL/4, which had been produced as a guide and set out the proposals relevant to Working Groups 4A, 4B and 4C, as well as those of a general nature to be considered by all Working Groups.

1.26 The delegate of Morocco, referring to Document DL/4, said that while the IFRB and CCIR Reports should be listed as formal documents to be included in the work of the Groups, the documents from other international organizations should be listed separately.

1.27 It was so agreed.

1.28 The delegates of the Russian Federation, India, Mali, Canada, Italy, China, Mexico, Spain, France, Bulgaria, Cuba and Nigeria requested that various additions, changes and deletions be made in the lists of documents allocated to the three Working Groups (Document DL/4).

1.29 In response to a comment by the delegate of Lichtenstein, the Chairman said that any further documents would be allocated in the usual manner, as they became available, and that rectifications would simply be announced as they were made.

**2. General introduction of documents by delegates
(Documents 7 + Corr., 12 + Add.1-12, 20, 22, 23, 27, 28, 29, 30, 34, 51)**

2.1 The Chairman said that he intended to invite those delegates who so wished to give a broad overview of their Administrations' proposals. First of all, however, he observed that the task of the Conference was to review and revise the Radio Regulations, but that there was another task currently under way within the ITU, namely, that of simplifying the Radio Regulations. It was important that neither of those two tasks, which were being carried out concurrently, was made more complicated by the other's work programme.

2.2 The delegate of Japan, referring to his Administration's proposals in Document 27, observed that the future public land mobile telecommunication systems (FPLMTS) would be one of the main issues to be discussed at WARC-92. In his view, the relevant portions of the frequency bands should be designated as early as possible, since failure to do so might delay both the study within the CCIR and the introduction of new systems.

2.3 Should the same allocations have to be considered again in the future, it would be more difficult to find frequency bands that were generally acceptable to all administrations. A specific allocation should therefore be made for FPLMTS on a global basis at WARC-92, and Japan was proposing the designation of a 60 MHz bandwidth for that purpose.

2.4 There was also a worldwide increase in the use of land mobile communications. Currently, possibilities in the frequency band around 800 MHz were almost exhausted, and the band around 1.5 GHz was already being used for mobile telephone systems. That trend would continue and the frequency band up to 2.5 GHz would soon have to be used for land mobile services. His Administration considered that the existing allocation to mobile services below 2.5 GHz should be maintained to the extent possible.

2.5 Since the radio spectrum was a limited natural resource common to all people, his country had always endeavoured to use higher frequencies, and the Japanese Administration considered that new services such as the mobile-satellite service and the sound broadcasting-satellite service should be provided with frequencies that were as high as possible. Taking into account technological developments in the present decade, Japan was therefore proposing an allocation for the sound broadcasting-satellite and mobile-satellite services in the frequency band around 2.6 GHz.

2.6 The Chairman of the Voluntary Group of Experts (VGE) set up to study allocation and improved use of the radio-frequency spectrum and simplification of the Radio Regulations referred the Committee to Document 22 containing information on progress of the Group's work, which had been divided into three major areas: frequency allocation matters related to frequency allocations (Rapporteur: Mr. I. Hutchings, New Zealand), procedures for coordination and notification (Rapporteur: Mr. M. Davies, United Kingdom) and operational and administrative matters (Rapporteur: Mr. R. Schramm, United States). The VGE, which would hold its next meeting in Torremolinos from 4 to 7 March 1992, had already held some discussions on the possibilities for making progress with the simplification of the Radio Regulations. It had produced no draft Recommendations as yet but the discussions had made it clear that no substantial simplification of the Table of Frequency Allocations would be possible unless both the number of footnotes and the differences in allocations between the three regions were reduced significantly, with the aim of making allocations more general. It was for that reason that he had been asked to draw the attention of WARC-92 to the work of the VGE, and to make a plea that the decisions taken by the Conference did not further complicate the existing provisions of the Radio Regulations. He expressed the hope that the conclusions of WARC-92 would make allocations more general and not add further footnotes to the Table of Frequency Allocations.

2.7 The delegate of Norway introduced Document 20 on behalf of the CEPT countries, and while, each of whose nine parts had been supported by a large number of European countries there were some differences in support for the various parts of the document. He drew particular attention to Part II on page 21 relating to frequency bands for the broadcasting-satellite (sound) service and the associated feeder links, which was certainly one of the most difficult and controversial issues before the Conference.

2.8 The delegate of the Russian Federation, speaking also on behalf of Belarus and Ukraine, introduced Document 7 and its corrigendum, outlining the considerations which had been taken into account when the proposals had been formulated.

2.9 The delegate of Morocco, referring to Document 20, said that he wished first to raise a matter of principle which might apply to other documents as well. His Administration was prepared to consider the extension of bands but did not agree with the principle of applying procedures similar to that implied in Resolution No. AAA on page 9 of Document 20, which involved the application of WARC-79 Resolution No. 8 on which the IFRB had issued a report. He called upon the Working Group concerned to find an alternative procedure which would safeguard the interests of the developing countries. Second, the implications of sub-paragraph c) of Resolution No. CCC as it appeared on page 26 of Document 20 were not acceptable to his Administration. He urged other administrations not to endorse a CCIR study on non-geostationary orbits for the broadcasting-satellite (sound) service within the context of Resolutions approved at WARC-92. Finally, he considered that documents which were introduced at meetings of the full Committee should not be introduced again in the Working Groups.

2.10 The Chairman agreed that it should not be necessary for documents to be introduced at both Working Group and Committee meetings.

2.11 The delegate of Finland said that although his country had co-signed much of Document 20, it wished to propose alternative approaches with regard to two issues. Those proposals were contained in Documents 28 and 29. He stressed that new approaches to frequency allocation required flexibility and should allow for future requirements and objectives which were as yet unknown.

2.12 The delegate of the United States said that Document 12 and its addenda covered the main issues to be addressed by the Conference. Giving a brief summary of the proposals, he stressed the importance of the role to be played by new technology, in particular in bringing communications to those parts of the world which did not yet benefit from them. Specifying that the term "deep space" referred to communications and travel as far as Mars, he said that further details regarding his Administration's proposals would be given in the Working Groups.

2.13 The delegate of Israel, introducing Document 51, said that his country's policy for the efficient use of the spectrum was to allocate frequencies in bands as high as possible, even though most technical designers preferred lower frequencies.

2.14 The delegate of Brazil provided an overview of his country's proposals as contained in Document 30, observing that his Administration considered the broadcasting-satellite service (sound) and mobile-satellite services as perhaps the two most important issues to be debated at the Conference. All aspects of both services were similar. Any additional allocations to the mobile-satellite service should be generic in all respects. His Administration had clear proposals for most of the areas covered in Document 30, with the exception of HF broadcasting. With regard to HDTV, Brazil's viewpoint was based on the fact that special allowances had to be made for tropical areas. As for feeder links, the use of the 3.4 - 3.6 GHz band had until then been hindered by the application of Footnote No. 784 whose validity had, in his Administration's opinion, already expired.

2.15 The delegate of Canada, introducing Document 23, said that the Conference provided a unique opportunity to allocate suitable spectrum to a number of new radio services and applications, and to increase the spectrum allocation for existing services. He outlined the key proposals contained in the document, adding that other proposals concerning spectrum allocation would be presented in detail in the Working Groups.

2.16 The delegate of India, introducing Document 34, said that the corrigendum which had been issued was in fact a supplementary document, in other words, an addendum. He outlined the guiding principles which the Indian Administration had taken into consideration when preparing the proposals and referred briefly to the proposals themselves.

3. Future work of Committee 4

3.1 In reply to a question by the delegate of Ecuador, the Chairman said that delegates who had not yet done so would have an opportunity to introduce their proposals either in Working Group meetings or at subsequent full Committee meetings.

3.2 The delegate of Ecuador, supported by a number of other delegations, said that it was important for delegates to be able to introduce their documents and express their views in the Committee prior to the Working Group meetings. The delegate of Argentina added that, although time would be lost thereon in the Committee, it would be gained in the Working Groups.

3.3 The delegate of Mexico said that his Administration had submitted a contribution to the Conference Secretariat which it wished to introduce in the Committee in the same manner as other proposals. As the number of documents remaining to be introduced was not very large, a time-limit might perhaps be placed on each delegation when it made its introduction.

3.4 The Chairman of Working Group 4B suggested that the full Committee 4 should meet again the next morning for a 40-minute session to allow completion overview presentations of documents, followed by Working Group 4B.

3.5 It was so agreed.

4. Agendas of Working Group meetings

4.1 In response to comments by the delegate of France, the Chairman agreed that it would be useful to know in what order the Working Groups would be dealing with their respective documents. He requested the Chairmen of the Working Groups to make their agendas available as soon as possible.

The meeting rose at 1245 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

COMMITTEE 5

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 5
(REGULATORY MATTERS)

Tuesday, 4 February 1992, at 1510 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

Documents

- | | | |
|----|--|---|
| 1. | Organization of the work of Committee 5 | - |
| - | Setting up of Working Groups: Terms of reference | DL/6 |
| - | Appointment of Working Group Chairmen | - |
| - | Allocation of documents | DL/7, 69 |
| - | Coordination and schedule of work | - |
| 2. | General introduction of documents by delegations | 3, 4+Add.1, 5+Add.1,
6, 7+Corr.1, 8, 9, 10+Add.1,
11, 12+Add.2-5, 20, 21, 22, 23,
24, 26, 27, 30, 31, 32, 33, 34, 39, 40, 46 |

1. Organization of the work of Committee 5 (Documents DL/6, DL/7, 69)

Setting up of Working Groups: Terms of reference (Document DL/6)

1.1 The Chairman, after thanking participants for the confidence they had displayed in him and assuring them that with the assistance of his Vice-Chairmen, the Secretariat and in particular the IFRB, he would do his utmost to conclude the Committee's work successfully, proposed that three Working Groups be set up.

1.2 After introducing the terms of reference outlined in Document DL/6, he observed that the subject matter to be dealt with by Working Group 5A was self-contained, enabling it to work independently. Under its terms of reference, Working Group 5B would examine all the proposals pertaining to Articles 11, 12, 13, 27, 28, 29 and 30 as well as Appendices 26, 30 and 30A. Working Group 5C would examine all proposals pertaining to Articles 1, 61 and 69 as well as any appropriate action consequent to decisions of the Conference relating to definitions in accordance with Resolution No. 11 of the Nice Plenipotentiary Conference. Each Working Group would consider Recommendations and Resolutions relevant to its particular field of interest; however, Working Group 5C would also have the task of considering all the remaining Resolutions and Recommendations which fell within the general scope of Committee 5.

1.3 The delegate of Morocco recalled his statement in Committee 4 to the effect that his Administration could accept the allocations to HFBC on condition that there was a procedure permitting the transfer from present bands to other bands. That was also the position of some other administrations. He therefore requested that Working Group 5B be instructed to take up the question as a matter of priority.

1.4 After some discussion, it was agreed that the question of the transfer procedure would be taken up by Working Group 5C, whose terms of reference would include a new subparagraph reading as follows: "to develop procedures for the replacement of frequency assignments as a consequence of changes in the allocation of HF bands in favourable conditions", and that the reference to item 2.2.2 would be deleted from subparagraph 1 of the terms of reference of Working Group 5B.

1.5 The terms of reference of the three Working Groups, as amended, were approved.

Appointment of Working Group Chairmen

1.6 Having consulted the delegations concerned, and taking into account their knowledge of the subject matter, the Chairman proposed that Mr. McIntyre (United States), Mr. Luciani (France) and Mr. Broere (Netherlands) be appointed as Chairmen of Working Groups 5A, 5B and 5C respectively.

1.7 It was so agreed.

Allocation of documents (Documents DL/7, 69)

1.8 The Chairman drew attention to the conference room document updating the list of documents allocated to the three Working Groups, as set out in Document DL/7. He also referred participants to Document 69 listing the documents allocated by the first Plenary Meeting to Committee 5, some of which he did not consider to be relevant to its work. Given that the documents in question would certainly be dealt with by Committee 4, he suggested that they need not be discussed in Committee 5.

1.9 After consulting the delegates concerned, it was agreed that Documents 13, 48, 51 and 54, submitted by Kenya, Vanuatu, Israel and France respectively, should be deleted from the list of documents allocated to Committee 5.

1.10 The delegates of Spain and Papua New Guinea also noted that their Documents, Nos. 25 and 16 respectively, need not be dealt with in the Working Groups of Committee 5 and should therefore be deleted from the list.

1.11 The delegates of Côte d'Ivoire and Pakistan observed that their Documents, Nos. 57 and 44 respectively, should be added to the list for Working Group 5A.

1.12 The delegate of Mali remarked that Document 39, a revised version of which was currently under preparation, had already been allocated to Working Group 5C, but should also be discussed by Working Group 5B.

1.13 The delegate of the Russian Federation drew attention to Corrigendum 1 to its Document 7 and then requested that the latter be allocated also to Working Group 5B.

1.14 The Chairman assured participants that the Working Groups would examine the latest version of all documents allocated, including relevant corrigenda and addenda. As for the submission of subsequent contributions, he recalled that under the provisions of the Convention, delegations were entitled to submit proposals even in the later stages of the Conference although, for practical reasons, it was not advisable to do so. Moreover, it might not be possible for late contributions to be handled by a committee meeting, in which case delegates should ensure that they were forwarded to the relevant Working Group for discussion.

1.15 The delegates of Argentina and Mexico said, in that connection, that they had drafted contributions pertaining to the work of Committee 5 (Documents 79 and 63 respectively) which would be submitted to the Committee in due course.

1.16 The delegate of Cuba announced that his country intended to submit a document relating to the work of Working Groups 5A and 5B. Similarly, the representative of the International Chamber of Shipping announced that a contribution pertaining to Articles 55 and 56 would be available shortly.

1.17 The representative of the International Transport Workers' Federation said that its contribution, Document 64, which came under the terms of reference of Working Group 5A, would be ready shortly.

1.18 In reply to a question by the delegate of Senegal, the Chairman said that most of the reference documents, including the CCIR report and IFRB documents, had already been allocated to the relevant Working Groups. Unless otherwise indicated, however, the contributions from ICAO and IATA should be discussed by the Committee, since they were not of relevance to any one particular Working Group.

1.19 A consolidated document would be drafted, taking into account all the modifications proposed during the meeting regarding the allocation of documents. Furthermore, a detailed breakdown of proposals pertaining to each Working Group, as contained in the different contributions, was being prepared by the Committee Secretary and would be available shortly for participants' information.

Coordination and schedule of work

1.20 Replying to a question by the delegate of Senegal, the Chairman said that effective coordination between the Working Groups would be ensured by means of regular Steering Group meetings of the Committee Chairman and Vice-Chairmen and the Working Group Chairmen. Working Group Chairmen could certainly liaise with each other to deal with particular issues as required, but no formal interface structure should be necessary for that purpose. He himself, together with the Vice-Chairmen, would be responsible for coordination with the other committees.

1.21 As for the work schedule, many of the issues to be handled by Committee 5 would depend on the outcome of work in Committee 4. However, he recommended that work should commence without delay on the more crucial issues such as definitions and procedures for coordinating non-geostationary-satellite systems, account being taken of Committee 4 decisions at the appropriate time.

1.22 In reply to a question by the delegate of France concerning the timetable of meetings, he said that the Working Groups would begin as soon as the general introduction of documents had been completed. Every effort would be made to ensure that meetings of the Working Groups of Committees 4 and 5 that had a common interest were not held in parallel.

1.23 In reply to comments by the delegate of Senegal about the problems of small delegations interested in the work of both Committees 4 and 5, he said he would do his utmost to harmonize the timetables of the two Committees, but pointed out that the best possible use had to be made of all the time available.

2. General introduction of documents by delegations (Documents 3, 4+Add.1, 5+Add.1, 6, 7+Corr.1, 8, 9, 10+Add.1, 11, 12+Add.2-5, 20, 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 34, 39, 40, 46)

2.1 The Chairman invited participants to introduce their documents, concentrating on the main issues, in the numerical order followed in Document 69.

2.2 The Director of the CCIR, introducing the CCIR Report (Document 3), pointed out that all administrations belonging to the Union had been invited to take part in its preparation. There had been extensive participation and the Report had been finalized in March 1991 and despatched to administrations in May. Many references to it could be found in the contributions to the Conference. The subjects addressed included allocations, frequency-sharing conditions and the technical and operational characteristics of services.

2.3 The member of the IFRB, introducing the IFRB Report in Document 4 and Addendum 1, said that Section 2.1 referred to a problem that had recently arisen concerning slightly inclined geosynchronous orbits. After study, the Board had decided to suppress its former interpretation and set no limits for the inclination. However, it had felt that the Conference should review the matter. In Section 5, some of the factors that would have to be taken into consideration if the 14.5 - 14.8 GHz band were allocated to the fixed-satellite service were identified. Finally, Section 7 related to the implementation of Resolution No. 9 of the Plenipotentiary Conference (Nice, 1989). No resources had been provided for that purpose - indeed the Board's finances had been reduced - so a way had been sought of meeting the major objectives of the Resolution economically and effectively. A simplified approach had been adopted and communicated to administrations, the majority of which had approved it.

2.4 The IFRB Report in Document 5 and Addendum 1 indicated the consequent changes needed in administrative procedures together with proposed modifications to Appendix 26 and the necessary resolutions.

2.5 The delegate of Côte d'Ivoire asked why his country had been given no allotment in the draft plan proposed by the Board in Addendum 1 to Document 5, despite the fact that it had previously had an allotment under Appendix 26.

2.6 The member of the IFRB, after pointing out that the new approach was based on existing assignments in the Master Register and not on existing allotments, said he would look into the matter and report to the delegate of Côte d'Ivoire at a later stage.

2.7 The delegate of Morocco stated that the new approach was not in conformity with the decision taken by the Nice Plenipotentiary Conference and that his Administration could not accept it. In Morocco's view, allotments under former Appendix 26 should be transferred to the new draft plan whether or not assignments appeared in the Master Register.

2.8 The member of the IFRB recalled that the proposal had been communicated to administrations, only one of which had not endorsed it, and to the Administrative Council, which had noted it. Naturally, the Conference was at liberty to approve or reject the new approach.

2.9 The delegate of Morocco said that the Administrative Council had no authority to adopt a procedure to be developed by the IFRB. The main principles governing the development of Appendix 26 should be discussed in a Plenary Meeting of Committee 5, and the details considered later in the appropriate Working Group once the question of principle had been settled.

2.10 The delegate of Iran said that his Administration had some difficulties with the transfer procedure and agreed that the question of principle should be settled in Committee 5 before the details were taken up at the Working Group level.

2.11 The Chairman suggested that further consideration of the matter should be deferred to a later meeting of the Committee and that meanwhile, Working Group 5B should not take up the subject.

2.12 It was so agreed.

2.13 The delegate of Argentina commended the IFRB on the valuable work it had performed.

2.14 The delegate of Zimbabwe, introducing his country's proposals (Document 6), said that under agenda item 2.2.8, Zimbabwe wished to be added to Footnote No. 635.

2.15 The Chairman observed that the proposal was also relevant to the work of Committee 4.

2.16 The delegate of the Russian Federation, after pointing out that Document 7 and Corrigendum 1 were jointly presented by Belarus, the Russian Federation and Ukraine, drew attention to the proposal in Section 2.1 to include the collection and transmission of data relating to the environment in the definition of the earth exploration-satellite service. The proposal in Section 2.2.3a), although mainly relevant to the work of Committee 4, was of indirect concern to Committee 5. Other proposals relating to the work of Committee 5 would be brought up in the Working Groups.

2.17 The delegate of Korea outlined his country's proposals in paragraphs 1, 2 and 3 of Document 8.

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2.20 With the agreement of the representative of ICAO, the Chairman said that the ICAO paper would be dealt with by the Committee itself and not allocated to a Working Group.

2.21 The delegate of the United States, introducing Document 11 on behalf of the International Maritime Organization, said that the aim was to promote the alignment of Articles 55 and 56 with the SOLAS Convention in order to avoid problems of incompatibility.

2.22 The delegate of the United States, introducing Document 12 and its Addenda 2-5, said that the proposals included, inter alia, modifications to Articles 55 and 56, likewise with the aim of alignment with the SOLAS Convention. In that connection, several proposals had been made to add primary allocations to space services in bands which would continue to have other primary allocations; consequential coordination proposals appeared in Resolution No. ZZZ in Addendum 3. The heading of Section D and paragraph 5.1 of the proposed Resolution should be amended to include the band 2 483.5 - 2 500 MHz. His Administration advocated no change to definitions in the annexes to the Nice Constitution or Convention but it would propose, in Working Group 5C, a number of modifications to Article 1 of the Radio Regulations.

2.23 The delegate of the United Kingdom, introducing Document 20, briefly summarized the regulatory **contents of the European common proposals** contained therein. Part I of the Document was an extensive **proposal, embodied in Resolution No. AAA** relating to the selection and approval of replacement assignments **for those displaced** by any HFBC band extensions; the approach was based on that adopted at WARC-79, which, it would be recalled, in Resolution No. 8 had taken particular note of the developing countries' needs. With regard to **Part II**, relating to frequency bands for the broadcasting-satellite (sound) service, it was assumed that the Conference would wish to adopt a text of the sort contained in Resolution No. BBB; in order not to delay matters, Committee 5 would have to make some working assumptions about decisions to be taken by Committee 4. Part III, which related to agenda item 2.2.3b, contained, inter alia, draft Resolution No. ABC relating to the introduction of HDTV systems of the broadcasting-satellite service (BSS) in the band 21.4 - 22 GHz. Part IV, relating to agenda item 2.3 of Articles 55 and 56, reflected the aim to align, as simply as possible, the Radio Regulations with the revised SOLAS Convention. Part V contained provisions to upgrade the status of the 2 GHz space services; since these services would thereby be taken beyond the scope of Article 14, a small regulatory proposal was submitted in order to bring them within the scope of another procedure. Further European common proposals would shortly be published in Document 46, Part I of which contained proposals for the procedures required to regulate non-geostationary satellite networks. Part V

referred to the special set of terms and definitions which were listed in Article 1 of the Radio Regulations and in Annex 2 to the Convention, Nairobi 1982. In conclusion mention was made of the fact that most of the proposals listed in Documents 20 and 46 had been submitted in the names of between 20 and 30 European countries.

2.24 The delegate of Germany, introducing Document 21, said that the proposed Resolution No. D/1 contained therein reflected his Administration's great interest in implementing a terrestrial digital sound broadcasting system in the band 87.5 - 108 MHz. It was proposed that a two-session planning conference for Region 1 and certain countries in Region 3 should be convened before 31 December 1996 and that the CCIR should be requested to study, as a matter of urgency, the necessary technical basis. To that end, the Secretary-General was invited to bring the Resolution to the attention of the Administrative Council or the next full Plenipotentiary Conference with a view to fixing the relevant dates and agenda.

2.25 The Chairman of the VGE, referring to Document 22, said that the text had already been introduced at the first meeting of Committee 4. With regard to paragraph 5, relating to the procedures of the Radio Regulations, it seemed advisable to aim to use existing sub-sets as much as possible.

2.26 The delegate of Canada, introducing Document 23, briefly summarized the proposals it contained, pointing out that the numbering in the current text differed somewhat from that used in earlier drafts which some delegations already possessed.

2.27 The member of the IFRB, introducing Document 24, said that the Board had always deemed the interpretation of provision RR 2613 of the Radio Regulations to be a matter for administrations themselves; however, having received a request for interpretation from one administration, it recognized that difficulties could arise in that regard, and thought it opportune to invite the current Conference to decide whether two separate conditions were implied or whether one was consequent upon the other.

2.28 The Chairman said that, in that connection, he would revise his original understanding that Document 24 should also be allocated to Working Group 5A.

2.29 The delegate of New Zealand, introducing Document 26, said that, with regard to Agenda item 2.3, the proposals contained in Annex 7 of the Document were aimed at making the relevant Radio Regulations more compatible with the SOLAS Convention. With regard to the task of Working Group 5C, his delegation made no specific reference to footnotes; but, as a member of the VGE, it agreed that a proliferation of footnotes should be avoided.

2.30 The delegate of Japan, introducing Document 27, briefly summarized the four proposals it contained. The proposed Resolution No. J1, relating to changes in allocations in the bands between 4 000 and 20 000 kHz, was aimed at simplifying procedures. Since the IFRB Report submitted in Document 33 contained important suggestions in that regard, his delegation invited the Board to participate in the discussions. His delegation would also introduce other proposals during the Working Groups' discussions if necessary.

2.31 The delegate of Brazil, introducing Document 30, said that the proposals related, inter alia, to modifications to Appendix 30A as well as to Articles 55 and 56, in order to align them with IMO provisions.

2.32 The delegate of Australia, introducing Document 31, said that the proposals it contained generally reflected the desire to simplify the Radio Regulations. Those proposals which concerned Working Group 5A related to Article 56 and likewise aimed at simplification and the **avoidance of conflict** between the texts of the ITU and SOLAS Conventions.

2.33 The delegate of Spain, introducing Document 32, said that the **proposals it contained** were along the same lines as those in Document 21 submitted by Germany, and **advocated the allocation** of a frequency band to the terrestrial digital sound broadcasting service. His delegation **proposed the convening** of a conference to determine a relevant frequency band; it would subsequently be necessary to plan the frequencies in that band.

2.34 The member of the IFRB, introducing Document 33, said the Board had already noted that a number of submitted proposals dealt with accommodation procedures similar to Resolution Nos. 8 and 9 of WARC-79. Some difficulty having been experienced in applying those Resolutions, the Board thought it might be useful to detail, in the Working Groups, the various types of problem and outline a number of simple approaches to solutions. He assured the Japanese delegation that the Board would participate actively in the discussions.

2.35 The delegate of India, introduced Document 34 and briefly summarized the proposals contained in its four parts. In reply to a question by the delegate of Spain, he said that the subject of Corrigendum 1 to Document 34 was a matter for Committee 4.

2.36 The Chairman agreed, and suggested that the delegate of Spain should raise his question in that Committee.

2.37 The delegate of Mali, introducing Document 39, said that his Administration's proposals related, inter alia, to the inclusion of a glossary of technical terms in Article 1 of the Radio Regulations and the possible extension of the frequency spectrum allocated exclusively to HF broadcasting - an extension which had begun at WARC-79 with a bandwidth of 780 kHz, basically in the range above 10 MHz. With regard to agenda item 2.2.3, his delegation hoped, in respect of Resolution No. 521 (Orb-88), that the CCIR would continue its studies on HDTV with a view to establishing frequency allocation on a worldwide basis in the range 12.7 - 23 GHz. With regard to agenda item 2.9.2 relating to approval of Recommendations between two Plenary Assemblies, his delegation had voiced concern, during the XVIIth Plenary Assembly of the CCIR, about approval by correspondence; it advocated the convening of information meetings by the CCIR, which could take place at the same time as IFRB meetings.

2.38 The delegate of Algeria, introducing Document 40, briefly summarized the proposals it contained, whose aims included the need to take full account of current and future concerns of services, to simplify procedures and to protect existing services, which for many countries represented substantial investment made in the face of limited resources. In that connection, the extension of HF bands must be subject to adequate planning based on technical and other criteria acceptable to all members. Likewise, in the cases of satellites (sound) broadcasting and satellite HDTV, the relevant planning of allocations must ensure equitable access for all Member countries. The proposals also sought to deal with shortcomings in the Table of Frequency Allocations. Algeria supported the alignment of Articles 55 and 56 with the SOLAS Convention; it endorsed the IFRB's recommendations in regard to the minimum modification of Article 12 and the amendment of Article 26, and in general advocated flexible procedures and reasonable deadlines for the transfer of services currently using the bands concerned.

The meeting rose at 1805 hours.

The Secretary:

J. LEWIS

The Chairman:

E. GEORGE

COMMITTEE 5

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 5
(REGULATORY MATTERS)

Tuesday, 4 February 1992, at 1510 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

Documents

- | | | |
|----|--|---|
| 1. | Organization of the work of Committee 5 | - |
| - | Setting up of Working Groups: Terms of reference | DL/6 |
| - | Appointment of Working Group Chairmen | - |
| - | Allocation of documents | DL/7, 69 |
| - | Coordination and schedule of work | - |
| 2. | General introduction of documents by delegations | 3, 4+Add.1, 5+Add.1,
6, 7+Corr.1, 8, 9, 10+Add.1,
11, 12+Add.2-5, 20, 21, 22, 23,
24, 26, 27, 30, 31, 32, 33, 34, 39, 40, 46 |

1. Organization of the work of Committee 5 (Documents DL/6, DL/7, 69)

Setting up of Working Groups: Terms of reference (Document DL/6)

1.1 The Chairman, after thanking participants for the confidence they had displayed in him and assuring them that with the assistance of his Vice-Chairmen, the Secretariat and in particular the IFRB, he would do his utmost to conclude the Committee's work successfully, proposed that three Working Groups be set up.

1.2 After introducing the terms of reference outlined in Document DL/6, he observed that the subject matter to be dealt with by Working Group 5A was self-contained, enabling it to work independently. Under its terms of reference, Working Group 5B would examine all the proposals pertaining to Articles 11, 12, 13, 27, 28, 29 and 30 as well as Appendices 26, 30 and 30A. Working Group 5C would examine all proposals pertaining to Articles 1, 61 and 69 as well as any appropriate action consequent to decisions of the Conference relating to definitions in accordance with Resolution No. 11 of the Nice Plenipotentiary Conference. Each Working Group would consider Recommendations and Resolutions relevant to its particular field of interest; however, Working Group 5C would also have the task of considering all the remaining Resolutions and Recommendations which fell within the general scope of Committee 5.

1.3 The delegate of Morocco recalled his statement in Committee 4 to the effect that his Administration could accept the allocations to HFBC on condition that there was a procedure permitting the transfer from present bands to other bands. That was also the position of some other administrations. He therefore requested that Working Group 5B be instructed to take up the question as a matter of priority.

1.4 After some discussion, it was agreed that the question of the transfer procedure would be taken up by Working Group 5C, whose terms of reference would include a new subparagraph reading as follows: "to develop procedures for the replacement of frequency assignments as a consequence of changes in the allocation of HF bands", and that the reference to item 2.2.2 would be deleted from subparagraph 1 of the terms of reference of Working Group 5B.

1.5 The terms of reference of the three Working Groups, as amended, were approved.

Appointment of Working Group Chairmen

1.6 Having consulted the delegations concerned, and taking into account their knowledge of the subject matter, the Chairman proposed that Mr. McIntyre (United States), Mr. Luciani (France) and Mr. Broere (Netherlands) be appointed as Chairmen of Working Groups 5A, 5B and 5C respectively.

1.7 It was so agreed.

Allocation of documents (Documents DL/6, 69)

1.8 The Chairman drew attention to the conference room document updating the list of documents allocated to the three Working Groups, as set out in Document DL/7. He also referred participants to Document 69 listing the documents allocated by the first Plenary Meeting to Committee 5, some of which he did not consider to be relevant to its work. Given that the documents in question would certainly be dealt with by Committee 4, he suggested that they need not be discussed in Committee 5.

1.9 After consulting the delegates concerned, it was agreed that Documents 13, 48, 51 and 54, submitted by Kenya, Vanuatu, Israel and France respectively, should be deleted from the list of documents allocated to Committee 5.

1.10 The delegates of Spain and Papua New Guinea also noted that their Documents, Nos. 25 and 16 respectively, need not be dealt with in the Working Groups of Committee 5 and should therefore be deleted from the list.

1.11 The delegates of Côte d'Ivoire and Pakistan observed that their Documents, Nos. 57 and 44 respectively, should be added to the list for Working Group 5A.

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1.14 The Chairman assured participants that the Working Groups would examine the latest version of all documents allocated, including relevant corrigenda and addenda. As for the submission of subsequent contributions, he recalled that under the provisions of the Convention, delegations were entitled to submit proposals even in the later stages of the Conference although, for practical reasons, it was not advisable to do so. Moreover, it might not be possible for late contributions to be handled by a committee meeting, in which case delegates should ensure that they were forwarded to the relevant Working Group for discussion.

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1.19 A consolidated document would be drafted, taking into account all the modifications proposed during the meeting regarding the allocation of documents. Furthermore, a detailed breakdown of proposals pertaining to each Working Group, as contained in the different contributions, was being prepared by the Committee Secretary and would be available shortly for participants' information.

Coordination and schedule of work

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1.21 As for the work schedule, many of the issues to be handled by Committee 5 would depend on the outcome of work in Committee 4. However, he recommended that work should commence without delay on the more crucial issues such as definitions and procedures for coordinating non-geostationary-satellite systems, account being taken of Committee 4 decisions at the appropriate time.

1.22 In reply to a question by the delegate of France concerning the timetable of meetings, he said that the Working Groups would begin as soon as the general introduction of documents had been completed. Every effort would be made to ensure that meetings of the Working Groups of Committees 4 and 5 that had a common interest were not held in parallel.

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2. General introduction of documents by delegations (Documents 3, 4+Add.1, 5+Add.1, 6, 7+Corr.1, 8, 9, 10+Add.1, 11, 12+Add.2-5, 20, 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 34, 39, 40)

2.1 The Chairman invited participants to introduce their documents, concentrating on the main issues, in the numerical order followed in Document 69.

2.2 The Director of the CCIR, introducing the CCIR Report (Document 3), pointed out that all administrations belonging to the Union had been invited to take part in its preparation. There had been extensive participation and the Report had been finalized in March 1991 and despatched to administrations in May. Many references to it could be found in the contributions to the Conference. The subjects addressed included allocations, frequency-sharing conditions and the technical and operational characteristics of services.

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2.23 The delegate of the United Kingdom, introducing Document 20, briefly summarized the regulatory contents of the European common proposals contained therein. Part I of the Document was an extensive proposal, embodied in Resolution No. AAA relating to the selection and approval of replacement assignments for those displaced by any HFBC band extensions; the approach was based on that adopted at WARC-79, which, it would be recalled, in Resolution No. 8 had taken particular note of the developing countries' needs. With regard to Part II, relating to frequency bands for the broadcasting-satellite (sound) service, it was assumed that the Conference would wish to adopt a text of the sort contained in Resolution No. BBB; in order not to delay matters, Committee 5 would have to make some working assumptions about decisions to be taken by Committee 4. Part III, which related to agenda item 2.2.3b, contained, inter alia, draft Resolution No. ABC relating to the introduction of HDTV systems of the broadcasting-satellite service (BSS) in the band 21.4 - 22 GHz. Part IV, relating to agenda item 2.3 of Articles 55 and 56, reflected the aim to align, as simply as possible, the Radio Regulations with the revised SOLAS Convention. Part V contained provisions to upgrade the status of the 2 GHz space services; since these services would thereby be taken beyond the scope of Article 14, a small regulatory proposal was submitted in order to bring them within the scope of another procedure. Further European common proposals would shortly be published in Document 46, Part I of which contained proposals for the procedures required to regulate non-geostationary satellite networks. Part V

referred to the special set of terms and definitions which were listed in Article 1 of the Radio Regulations and in Annex 2 to the Convention, Nairobi 1982. In conclusion mention was made of the fact that most of the proposals listed in Documents 20 and 46 had been submitted in the names of between 20 and 30 European countries.

2.24 The delegate of Germany, introducing Document 21, said that the proposed Resolution No. D/1 contained therein reflected his Administration's great interest in implementing a terrestrial digital sound broadcasting system in the band 87.5 - 108 MHz. It was proposed that a two-session planning conference for Region 1 and certain countries in Region 3 should be convened before 31 December 1996 and that the CCIR should be requested to study, as a matter of urgency, the necessary technical basis. To that end, the Secretary-General was invited to bring the Resolution to the attention of the Administrative Council or the next full Plenipotentiary Conference with a view to fixing the relevant dates and agenda.

2.25 The Chairman of the VGE, referring to Document 22, said that the text had already been introduced at the first meeting of Committee 4. With regard to paragraph 5, relating to the procedures of the Radio Regulations, it seemed advisable to aim to use existing sub-sets as much as possible.

2.26 The delegate of Canada, introducing Document 23, briefly summarized the proposals it contained, pointing out that the numbering in the current text differed somewhat from that used in earlier drafts which some delegations already possessed.

2.27 The member of the IFRB, introducing Document 24, said that the Board had always deemed the interpretation of provision RR 2613 of the Radio Regulations to be a matter for administrations themselves; however, having received a request for interpretation from one administration, it recognized that difficulties could arise in that regard, and thought it opportune to invite the current Conference to decide whether two separate conditions were implied or whether one was consequent upon the other.

2.28 The Chairman said that, in that connection, he would revise his original understanding that Document 24 should also be allocated to Working Group 5A.

2.29 The delegate of New Zealand, introducing Document 26, said that, with regard to Agenda item 2.3, the proposals contained in Annex 7 of the Document were aimed at making the relevant Radio Regulations more compatible with the SOLAS Convention. With regard to the task of Working Group 5C, his delegation made no specific reference to footnotes; but, as a member of the VGE, it agreed that a proliferation of footnotes should be avoided.

2.30 The delegate of Japan, introducing Document 27, briefly summarized the four proposals it contained. The proposed Resolution No. J1, relating to changes in allocations in the bands between 4 000 and 20 000 kHz, was aimed at simplifying procedures. Since the IFRB Report submitted in Document 33 contained important suggestions in that regard, his delegation invited the Board to participate in the discussions. His delegation would also introduce other proposals during the Working Groups' discussions if necessary.

2.31 The delegate of Brazil, introducing Document 30, said that the proposals related, *inter alia*, to modifications to Appendix 30A as well as to Articles 55 and 56, in order to align them with IMO provisions.

2.32 The delegate of Australia, introducing Document 31, said that the proposals it contained generally reflected the desire to simplify the Radio Regulations. Those proposals which concerned Working Group 5A related to Article 56 and likewise aimed at simplification and the avoidance of conflict between the texts of the ITU and SOLAS Conventions.

2.33 The delegate of Spain, introducing Document 32, said that the proposals it contained were along the same lines as those in Document 21 submitted by Germany, and advocated the allocation of a frequency band to the terrestrial digital sound broadcasting service. His delegation proposed the convening of a conference to determine a relevant frequency band; it would subsequently be necessary to plan the frequencies in that band.

2.34 The member of the IFRB, introducing Document 33, said the Board had already noted that a number of submitted proposals dealt with accommodation procedures similar to Resolution Nos. 8 and 9 of WARC-79. Some difficulty having been experienced in applying those Resolutions, the Board thought it might be useful to detail, in the Working Groups, the various types of problem and outline a number of simple approaches to solutions. He assured the Japanese delegation that the Board would participate actively in the discussions.

2.35 The delegate of India, introduced Document 34 and briefly summarized the proposals contained in its four parts. In reply to a question by the delegate of Spain, he said that the subject of Corrigendum 1 to Document 34 was a matter for Committee 4.

2.36 The Chairman agreed, and suggested that the delegate of Spain should raise his question in that Committee.

2.37 The delegate of Mali, introducing Document 39, said that his Administration's proposals related, inter alia, to the inclusion of a glossary of technical terms in Article 1 of the Radio Regulations and the possible extension of the frequency spectrum allocated exclusively to HF broadcasting - an extension which had begun at WARC-79 with a bandwidth of 780 kHz, basically in the range above 10 MHz. With regard to agenda item 2.2.3, his delegation hoped, in respect of Resolution No. 521 (Orb-88), that the CCIR would continue its studies on HDTV with a view to establishing frequency allocation on a worldwide basis in the range 12.7 - 23 GHz. With regard to agenda item 2.9.2 relating to approval of Recommendations between two Plenary Assemblies, his delegation had voiced concern, during the XVIIth Plenary Assembly of the CCIR, about approval by correspondence; it advocated the convening of information meetings by the CCIR, which could take place at the same time as IFRB meetings. Resolution No. XX1 had been drafted accordingly.

2.38 The delegate of Algeria, introducing Document 40, briefly summarized the proposals it contained, whose aims included the need to take full account of current and future concerns of services, to simplify procedures and to protect existing services, which for many countries represented substantial investment made in the face of limited resources. In that connection, the extension of HF bands must be subject to adequate planning based on technical and other criteria acceptable to all members. Likewise, in the cases of satellites (sound) broadcasting and satellite HDTV, the relevant planning of allocations must ensure equitable access for all Member countries. The proposals also sought to deal with shortcomings in the Table of Frequency Allocations. Algeria supported the alignment of Articles 55 and 56 with the SOLAS Convention; it endorsed the IFRB's recommendations in regard to the minimum modification of Article 12 and the amendment of Article 26, and in general advocated flexible procedures and reasonable deadlines for the transfer of services currently using the bands concerned.

The meeting rose at 1805 hours.

The Secretary:

J. LEWIS

The Chairman:

E. GEORGE

COMMITTEE 4

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATIONS)

Wednesday, 5 February 1992, at 0930 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subject discussed

1. General introduction of documents by delegations (continued)

Documents

6, 8, 10, 16, 39(Rev.1),
40, 44, 45, 49, 57, 61,
63, 65, 74, 75, 91

1. General introduction of documents by delegations (continued) (Documents 6, 8, 10, 16, 39(Rev.1), 40, 44, 45, 49, 57, 61, 63, 65, 74, 75, 91)

1.1 The Chairman invited delegations which had not yet done so to introduce their proposals for the work of the Conference.

1.2 The delegate of Zimbabwe said that his country's proposals were contained in Document 6. The Conference should not lose sight of the needs of the developing countries. While his delegation accepted the principle of changes to the Table of Frequency Allocations, it nonetheless considered that allowance should be made for existing and planned services. As to the definition of certain new space applications (Agenda item 2.1), the present situation should not be further complicated. Under Agenda items 2.2.3 and 2.2.4, Zimbabwe considered the allocation of frequencies and band sharing acceptable provided that adequate protection was given to existing services. Under Agenda item 2.2.8, Zimbabwe would like its name added to Footnote 635.

1.3 Introducing Document 8, the delegate of the Republic of Korea laid special emphasis on his country's proposals under Agenda items 2.2.4c and 2.2.5 relating, respectively, to the development of the international use of the mobile service for future public land mobile telecommunication systems and the allocation of the frequency band 14.5 - 14.8 GHz to the fixed-satellite service.

1.4 The delegate of Ecuador said that his country's proposals in Document 45 reflected the fact that Ecuador was a developing country which had no telecommunication equipment manufacturing industries of its own but was both a radiocommunication equipment purchaser and a satellite service user, and laid emphasis on the protection of services relating to the safety of life. His country had a very low telephone density of only about 5%, whence the need to protect the existing fixed services, especially in the bands around 1.5 GHz and 2 GHz, which were and would be used for public and rural telephony services. The fixed services in the HF broadcasting frequency bands were of great use to the population, so Ecuador was therefore not in favour of extending the HF broadcasting spectrum towards frequencies below 14 MHz. In conclusion, he drew attention to his country's position concerning Agenda items 2.2.3a and 2.2.4d.

1.5 Introducing Document 57, the delegate of Côte d'Ivoire stressed the importance of the fixed and land mobile services for his country and said that Côte d'Ivoire could not agree to a reduction of the spectrum allocated to those services below 10 MHz. As to Agenda item 2.2.4, Côte d'Ivoire was in favour of allocating additional frequency bands to meet the needs of the mobile-satellite services.

1.6 The delegate of Mexico said that Document 63 containing his country's proposals had not yet been distributed. His delegation was not in favour of extension of the frequency bands allocated to the HF broadcasting service because Mexico had a large number of fixed and mobile services operating in those bands. However, it appreciated the needs of certain countries and could accept some extensions to the spectrum above 10 MHz. Mexico favoured greater flexibility in the use of the terrestrial mobile services. It agreed on the basis of the work of the CCIR that the 230 MHz band could suffice, but any change should be accompanied by safeguards to protect the fixed and mobile services. The future generation of Mexico's satellites was known as "Solidaridad". In view of the need to extend the spectrum, his country was in favour of modifying certain bands already allocated to the mobile-satellite services and of adding other bands. With respect to sound broadcasting, decisions would have to be based on the most appropriate technologies available in the band around 1.5 GHz. For HDTV, the Conference should decide on the most appropriate band having regard to the best propagation possibilities in the different countries, considering the effects of attenuation at low and high frequencies.

1.7 The delegate of Argentina said that although his country had not yet submitted a document, it wished to express concern with regard to several of the Committee's agenda items. In particular, it shared the views of Ecuador, Mexico and other Latin American countries concerning the extension of the spectrum allocated to the HF broadcasting service.

1.8 The delegate of Australia said that he would introduce his Administration's proposals in the Working Groups.

1.9 The delegate of Burkina Faso introduced Document 49 setting out his country's proposals on the extension of the spectrum allocated exclusively to the HF broadcasting service and the allocation of frequency bands to the broadcasting-satellite service, the mobile and mobile-satellite services and the fixed-satellite service.

1.10 Introducing Document 40, the delegate of Algeria recalled the principles underlying his country's proposals, namely to preserve and protect existing or planned radiocommunication services, facilitate the future planning of broadcasting services with a view to ensuring equitable access for everyone, make allowance for technological developments and take account of the results and conclusions in the IFRB and CCIR reports. Only by planning frequency bands could equitable access to the frequency spectrum be guaranteed. His country had also made important proposals concerning the satellite sound broadcasting service and high-definition television, as well as the mobile and mobile-satellite services and the fixed-satellite service.

1.11 The delegate of Mali, introducing Document 39(Rev.1), said that he was prepared to review his proposal concerning item 2.2.1. As to the possibility of extending the spectrum allocated exclusively to the HF broadcasting service, his country favoured the extension which had begun since WARC-79 in the band above 10 MHz.

1.12 Under Agenda item 2.2.3, sharing criteria should be specified in detail because his country made extensive use of the frequency range 500 - 3 000 MHz. Although his country was in favour of further CCIR study into the two bands 11.6 - 12.7 MHz and 12.75 - 23 GHz, the present CCIR studies revealed that the band 21.4 - 22 GHz was the most appropriate for the service. Then again, Resolution 521 (Orb-88) recognized the need for a frequency allocation in the band 12.7 - 23 GHz to accommodate wideband HDTV. As to item 2.2.4, his Administration considered that the required extension in the band 1 - 3 GHz should enable the requirements of the mobile and mobile-satellite services to be met, and invited the CCIR to review the sharing criteria. In connection with item 2.2.5, it fully supported the additional allocation provided that proper protection was given to the assignments in Appendix 30A to the Radio Regulations. It should be noted that the future RASCOM would be using the 14.5 - 14.8 GHz frequency band.

1.13 Under item 2.2.7, his Administration wanted Footnotes 733B (up link) and 753C (down link) maintained as they appeared in the Radio Regulations. It also considered that Footnote 797B should be maintained in connection with Agenda item 2.2.8.

1.14 The delegate of Tanzania said that he would confine himself to outlining the principles which had guided his Administration in drafting Document 74. He specified the principals as:

- 1) the need for equitable distribution of the frequency spectrum;
- 2) the need for addressing the special conditions and requirements of developing countries;
- 3) the need to accommodate and encourage technological developments and new services requirements; and, lastly
- 4) the need to simplify the Radio Regulations.

The delegate cited as an example the question of the HF broadcasting extension in which he stressed that any such consideration must address the issue of existing fixed and mobile services which are particularly vital to developing countries. He concluded by expressing his wish that the principles he underlined above would prevail in all the decisions of the Committees and Working Groups.

1.15 The delegate of Zambia, whose Administration had submitted Document 91, said he, too, was concerned about the extension of the spectrum allocated to the HF broadcasting service. The band was widely used in the developing countries and should not be extended in the range below 10 MHz. He was in favour of an approximate range of 2.5 - 2.6 GHz for the broadcasting-satellite (sound) service. For HDTV, particularly for propagation in tropical regions, his Administration could also accept a band at around 17 GHz. Under Agenda item 2.2.5, his country supported the proposals to allocate the band 14.5 - 14.8 GHz to the FSS.

1.16 Introducing Document 75, the delegate of Senegal said that his Administration could agree to the allocation of new bands of the order of 1 MHz to the HF broadcasting service, in order to protect existing services during the transition period. In view of certain socio-economic considerations it was in favour of a gradual and cautious introduction of SSB technology and did not wish to amend Footnote 503 concerning the Tropical Zone bands. His country favoured the allocation of frequency bands to HDTV and the broadcasting-satellite service and hoped that a perfect balance could be achieved between the up links and down links of certain satellite services. It also hoped that a start could be made on revising the Geneva 1977 Plan, and approved any decision in favour of the new services.

1.17 Introducing Document 65, the delegate of Cuba said that while account should be taken of technological advances it was essential to guarantee the right of existing services to continue operating. The decisions of the Conference should not jeopardize or restrict the development of telecommunication networks and systems in the developing countries. His Administration had submitted a draft Resolution which would permit harmonious access to the frequency spectrum. Under Agenda item 2.2.2, it should be possible to extend the frequency spectrum allocated to the HF broadcasting service in the range above 10 MHz, but not at lower frequencies, which were of particular interest to the developing countries. His Administration had no specific proposals to make with regard to the date of application of SSB, an issue which should be for the competence of a future conference.

1.18 Regarding item 2.2.3a, his country had been unable to identify an appropriate band for the service in question. The only means of allocating a band to that service would be based on the application of Article 14. As to the mobile-satellite service, his Administration was in favour of balancing the allocations to the maritime-mobile service, increasing them by 5 MHz; for existing allocations, it advocated maintaining the status quo and emphasized the need to protect existing services. Lastly, he drew attention to his country's position on item 2.2.4d.

1.19 The delegate of Pakistan agreed that existing services should be protected and that the Table of Frequency Allocations should be amended as little as possible. In particular, broadcasting services in the Tropical Zone should be protected. His Administration's proposals were all set out in Document 44.

1.20 Introducing Document 61, the delegate of China stressed that technological developments meant that certain services were bound to increase their demand for frequency allocations. In dealing with such frequency allocations, imbalance in technological and economic development of different countries should be taken into full account. In particular, adequate attention should be paid to the actual use of frequency bands by the existing radio services in developing countries. In the event of a necessary change-over in frequency allocations, appropriate arrangements should be made for the affected radio services.

1.21 The delegate of Papua New Guinea introduced Document 16, stressing that his Administration would oppose any proposal to amend the current provisions governing use of the HF bands in the Tropical Zone. However, it had no objection to extending allocations to the fixed-satellite service in the band 14.5 - 14.8 GHz.

1.22 The delegate of Tunisia spoke in favour of protecting the existing services, encouraging the introduction of new services and introducing modern technologies in all countries. It was important to extend the spectrum allocated to the HF broadcasting service, since the band in question was very narrow and the developing countries in particular needed it to be extended. In every other respect he fully supported what had been said by the delegate of Algeria.

1.23 The delegate of Cameroon said that the meeting should confine itself to the Conference agenda, which reflected the concerns of earlier WARC's. The HF broadcasting service was widely used in some countries and requirements far exceeded the bandwidth used; it was thus necessary to extend the allocated spectrum in the range above 10 MHz. Moreover, that would permit the gradual introduction of SSB while maintaining the 2015 deadline for abandoning DSB technology. The establishment of an appropriate timetable would be a matter for the next HFBC Conference.

1.24 In his country's opinion, the CCIR's conclusion that a band of 21.4 - 22 GHz should be allocated to HDTV reflected a compromise. The band 14.5 - 14.8 GHz should be used in the best interests of all concerned; it was a windfall for developing countries in rural areas, and the CCIR should pursue its studies in that connection.

1.25 The representative of the International Civil Aviation Organization (ICAO) introduced Document 10, drawing particular attention to Attachment 1 concerning Agenda item 2.2.4. Attachments 2 - 7 dealt with the different agenda items of interest to his organization.

The meeting rose at 1100 hours.

The Secretary:

T. GAVRILOV

The Chairman:

I.R. HUTCHINGS

COMMITTEE 4

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATIONS)

Wednesday, 5 February 1992, at 0930 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subject discussed

1. General introduction of documents by delegations (continued)

Documents

6, 8, 10, 16, 39(Rev.1),
40, 44, 45, 49, 57, 61,
63, 65, 74, 75, 91

1. General introduction of documents by delegations (continued) (Documents 6, 8, 10, 16, 39(Rev.1), 40, 44, 45, 49, 57, 61, 63, 65, 74, 75, 91)

1.1 The Chairman invited delegations which had not yet done so to introduce their proposals for the work of the Conference.

1.2 The delegate of Zimbabwe said that his country's proposals were contained in Document 6. The Conference should not lose sight of the needs of the developing countries. While his delegation accepted the principle of changes to the Table of Frequency Allocations, it nonetheless considered that allowance should be made for existing and planned services. As to the definition of certain new space applications (Agenda item 2.1), the present situation should not be further complicated. Under Agenda items 2.2.3 and 2.2.4, Zimbabwe considered the allocation of frequencies and band sharing acceptable provided that adequate protection was given to existing services. Under Agenda item 2.2.8, Zimbabwe would like its name added to Footnote 635.

1.3 Introducing Document 8, the delegate of the Republic of Korea laid special emphasis on his country's proposals under Agenda items 2.2.4c and 2.2.5 relating, respectively, to the development of the international use of the mobile service for future public land mobile telecommunication systems and the allocation of the frequency band 14.5 - 14.8 GHz to the fixed-satellite service.

1.4 The delegate of Ecuador said that his country's proposals in Document 45 reflected the fact that Ecuador was a developing country which had no telecommunication industries of its own but was both an equipment purchaser and a service user, and laid emphasis on the protection of services relating to the safety of life. His country had a very low telephone density of only about 5%, and the fixed services in the HF broadcasting frequency bands were of great use to the population. Ecuador was therefore not in favour of extending the HF broadcasting spectrum towards frequencies below 14 MHz. In conclusion, he drew attention to his country's position concerning Agenda items 2.2.3a and 2.2.4d.

1.5 Introducing Document 57, the delegate of Côte d'Ivoire stressed the importance of the fixed and land mobile services for his country and said that Côte d'Ivoire could not agree to a reduction of the spectrum allocated to those services below 10 MHz. As to Agenda item 2.2.4, Côte d'Ivoire was in favour of allocating additional frequency bands to meet the needs of the mobile-satellite services.

1.6 The delegate of Mexico said that Document 63 containing his country's proposals had not yet been distributed. His delegation was not in favour of extension of the frequency bands allocated to the HF broadcasting service because Mexico had a large number of fixed and mobile services operating in those bands. However, it appreciated the needs of certain countries and could accept some extensions to the spectrum above 10 MHz. Mexico favoured greater flexibility in the use of the terrestrial mobile services. It agreed on the basis of the work of the CCIR that the 230 MHz band could suffice, but any change should be accompanied by safeguards to protect the fixed and mobile services. The future generation of Mexico's satellites was known as "Solidaridad". In view of the need to extend the spectrum, his country was in favour of modifying certain bands already allocated to the mobile-satellite services and of adding other bands. With respect to sound broadcasting, decisions would have to be based on the most appropriate technologies available. For HDTV, the Conference should decide on the most appropriate band having regard to propagation possibilities in the different countries.

1.7 The delegate of Argentina said that although his country had not yet submitted a document, it wished to express concern with regard to several of the Committee's agenda items. In particular, it shared the views of Ecuador, Mexico and other Latin American countries concerning the extension of the spectrum allocated to the HF broadcasting service.

1.8 The delegate of Australia said that he would introduce his Administration's proposals in the Working Groups.

1.9 The delegate of Burkina Faso introduced Document 49 setting out his country's proposals on the extension of the spectrum allocated exclusively to the HF broadcasting service and the allocation of frequency bands to the broadcasting-satellite service, the mobile and mobile-satellite services and the fixed-satellite service.

1.10 Introducing Document 40, the delegate of Algeria recalled the principles underlying his country's proposals, namely to preserve and protect existing or planned radiocommunication services, facilitate the future planning of broadcasting services with a view to ensuring equitable access for everyone, make allowance for technological developments and take account of the results and conclusions in the IFRB and CCIR reports. Only by planning frequency bands could equitable access to the frequency spectrum be guaranteed. His country had also made important proposals concerning the satellite sound broadcasting service and high-definition television, as well as the mobile and mobile-satellite services and the fixed-satellite service.

1.11 The delegate of Mali, introducing Document 39(Rev.1), said that he was prepared to review his proposal concerning item 2.2.1. As to the possibility of extending the spectrum allocated exclusively to the HF broadcasting service, his country favoured the extension which had begun since WARC-79 in the band above 10 MHz.

1.12 Under Agenda item 2.2.3, sharing criteria should be specified in detail because his country made extensive use of the frequency range 500 - 3 000 MHz. Although his country was in favour of further CCIR study into the two bands 11.6 - 12.7 MHz and 12.75 - 23 GHz, the present CCIR studies revealed that the band 21.4 - 22 GHz was the most appropriate for the service. Then again, Resolution 521 (Orb-88) recognized the need for a frequency allocation in the band 12.7 - 23 GHz to accommodate wideband HDTV. As to item 2.2.4, his Administration considered that the required extension in the band 1 - 3 GHz should enable the requirements of the mobile and mobile-satellite services to be met, and invited the CCIR to review the sharing criteria. In connection with item 2.2.5, it fully supported the additional allocation provided that proper protection was given to the assignments in Appendix 30A to the Radio Regulations. It should be noted that the future RASCOM would be using the 14.5 - 14.8 GHz frequency band.

1.13 Under item 2.2.7, his Administration wanted Footnotes 733B (up link) and 753C (down link) maintained as they appeared in the Radio Regulations. It also considered that Footnote 797B should be maintained in connection with Agenda item 2.2.8.

1.14 The delegate of Tanzania said that he would confine himself to outlining the principles which had guided his Administration in drafting Document 74. The developing countries, which had very limited resources, aspired to an equitable distribution of the frequency spectrum. His country therefore had some objections to the extension of the allocations to the broadcasting service in the HF frequency band. It appreciated the need for introducing new services but was anxious that existing services should enjoy adequate protection. Focusing on the HF broadcasting service, and in particular the tropical bands which afforded a priority means of coverage to the developing countries, which had to be taken into account if the broadcasting service was to function properly, he said that he trusted that the Conference would reach a consensus.

1.15 The delegate of Zambia, whose Administration had submitted Document 91, said he, too, was concerned about the extension of the spectrum allocated to the HF broadcasting service. The band was widely used in the developing countries and should not be extended in the range below 10 MHz. He was in favour of an approximate range of 2.5 - 2.6 GHz for the broadcasting-satellite (sound) service. For HDTV, particularly for propagation in tropical regions, his Administration could also accept a band at around 17 GHz. Under Agenda item 2.2.5, his country supported the proposals to allocate the band 14.5 - 14.8 GHz to the FSS.

1.16 Introducing Document 75, the delegate of Senegal said that his Administration could agree to the allocation of new bands of the order of 1 MHz to the HF broadcasting service, in order to protect existing services during the transition period. In view of certain socio-economic considerations it was in favour of a gradual and cautious introduction of SSB technology and did not wish to amend Footnote 503 concerning the Tropical Zone bands. His country favoured the allocation of frequency bands to HDTV and the broadcasting-satellite service and hoped that a perfect balance could be achieved between the up links and down links of certain satellite services. It also hoped that a start could be made on revising the Geneva 1977 Plan, and approved any decision in favour of the new services.

1.17 Introducing Document 65, the delegate of Cuba said that account should be taken of technological advances and the need to guarantee the right of existing services to continue operating. The decisions of the Conference should not jeopardise or restrict the development of telecommunication networks and systems. His Administration had submitted a draft Resolution which would permit harmonious access to the frequency spectrum. Under Agenda item 2.2.2, it should be possible to extend the frequency spectrum allocated to the HF broadcasting service in the range above 10 MHz, which was of particular interest to the developing countries. His Administration had no specific proposals to make with regard to the date of application of SSB, an issue which should be for the competence of a future conference.

1.18 Regarding item 2.2.3a, his country had been unable to identify an appropriate band for the service in question. The only means of allocating a band to that service would be based on the application of Article 14. As to the mobile-satellite service, his Administration was in favour of maintaining the status quo and emphasized the need to protect existing services. Lastly, he drew attention to his country's position on item 2.2.4d.

1.19 The delegate of Pakistan agreed that existing services should be protected and that the Table of Frequency Allocations should be amended as little as possible. In particular, broadcasting services in the Tropical Zone should be protected. His Administration's proposals were all set out in Document 44.

1.20 Introducing Document 61, the delegate of China stressed that technological developments meant that certain services were bound to increase their demand for frequency allocations and that every situation involving the use of the spectrum by existing services should be taken into account. Equitable sharing could obviously reduce adverse effects. A provisional procedure should be arranged for the services in question.

1.21 The delegate of Papua New Guinea introduced Document 16, stressing that his Administration would oppose any proposal to amend the current provisions governing use of the HF bands in the Tropical Zone. However, it had no objection to extending allocations to the fixed-satellite service in the band 14.5 - 14.8 GHz.

1.22 The delegate of Tunisia spoke in favour of protecting services, encouraging the introduction of new services and introducing modern technologies in all countries. It was important to extend the spectrum allocated to the HF broadcasting service, since the band in question was very narrow and the developing countries in particular needed it to be extended. In every other respect he fully supported what had been said by the delegate of Algeria.

1.23 The delegate of Cameroon said that the meeting should confine itself to the Conference agenda, which reflected the concerns of earlier WARC. The HF broadcasting service was widely used in some countries and requirements far exceeded the bandwidth used; it was thus necessary to extend the allocated spectrum in the range above 10 MHz. Moreover, that would permit the gradual introduction of SSB while maintaining the 2015 deadline for abandoning DSB technology. The establishment of an appropriate timetable would be a matter for the next HFBC Conference.

1.24 The CCIR's conclusion that a band of 21.4 - 22 GHz should be allocated to HDTV reflected a compromise. The band 14.5 - 14.8 GHz should be used in the best interests of all concerned; it was a windfall for developing countries in rural areas, and the CCIR should pursue its studies in that connection.

1.25 The representative of the International Civil Aviation Organization (ICAO) introduced Document 10, drawing particular attention to Attachment 1 concerning Agenda item 2.2.4. Attachments 2 - 7 dealt with the different agenda items of interest to his organization.

The meeting rose at 1100 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

COMMITTEE 5

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 5
(REGULATORY)

Wednesday, 5 February 1992, at 1100 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

1. General introduction of documents by delegations (continued)
2. Organization of the work of Working Groups

Documents

44, 45, 52, 57, 63,
64, 75, 79

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1. General introduction of documents by delegations (continued)
(Documents 44, 45, 52, 57, 63, 64, 75, 79)

1.1 Introducing Document 44, the delegate of Pakistan drew attention to the proposal under item 2.2.1 that services having similar characteristics which could share frequency bands should be combined to define a new space communications service. Under item 2.2.2, Pakistan supported the proposal that all DSB emissions be replaced by SSB emissions. Under item 2.2.4a, a period of ten years was proposed before the new allocation to the generic MSS came into effect. For item 2.2.6, it was proposed that the existing status of allocations to the space research, space operation and earth exploration-satellite services in Footnotes 747 and 750 should be retained. WARC-92 might consider a Resolution to prevent future assignments in the bands 2 025 - 2 110 MHz and 2 220 - 2 290 MHz to those space services which could use the bands above 20 GHz.

1.2 With regard to item 2.3, administrations should be free to choose either of the two combinations for maintenance on board ships, in accordance with the SOLAS Convention.

1.3 On item 2.4, the Administration of Pakistan generally agreed with draft Appendix 26 and draft Resolution No. Aer1, but proposed that the dates for operating on replacement frequencies and ceasing all DSB emissions should be 31 December 1996 and 31 December 1999, respectively.

1.4 Under items 2.7 and 2.8, it was proposed that the CCIR should continue its studies on the meteorological aids service and that a Resolution should be adopted by WARC-92 calling upon a future conference to study interference problems in the bands 401 - 403 MHz.

1.5 Introducing Document 45, the delegate of Ecuador said that under item 2.2.3b it was proposed that use of the band 12.2 - 12.7 GHz in Region 2 for HDTV should be embodied in Article 8 and that a footnote be added to the corresponding table. Under item 2.2.5, it was proposed that Footnote 863 should be amended for worldwide use of the fixed-satellite service (Earth-to-space). Document 45 also mentioned the protection which would have to be granted to terrestrial services which might be affected.

1.6 With regard to Document 52, the delegate of Indonesia said that the technical terms relating to geostationary satellites should be retained and a number of amendments should be made to Articles 55 and 56 in order to harmonize the two Conventions.

1.7 With regard to Document 57, the delegate of Côte d'Ivoire said that his country would be making a more detailed contribution in the Working Groups.

1.8 Introducing Document 64, the delegate of Luxembourg said that the main issue was the need to review the regulatory procedure governing use of the 12 GHz band. His Administration considered that, in view of the proposals which had been put forward concerning the possible use of that band or of the bands above 20 GHz in future by HDTV, the manner in which that band was used should be re-examined. His Administration also supported the European proposal concerning the convening of another WARC to consider use of the 12 GHz band. The Resolution put forward in the document was designed to deal with the issue in more depth and provide greater flexibility in transmission systems, powers and coverage areas. The many similarities between broadcasting satellites and certain fixed-satellite services tended to suggest that there might be some benefit in merging them to some extent.

1.9 The delegate of Mexico said that the basic points of his country's proposal in Document 63 concerned the need to specify certain definitions and propose new ones, as in the case of multi-purpose satellites; with regard to shortwave broadcasting, it had proposed to bring forward the introduction of SSB; it had submitted a draft Resolution advocating the immediate experimental development of digital audio broadcasting, with due protection for existing services; in connection with low-Earth orbit satellites (LEOs), it had agreed with the allocation of certain bands subject to guaranteed operation of and protection for the fixed and mobile services; it had proposed amendments to Articles 27 and 28 of the Radio Regulations in order to include services which involved changes in the band 2 GHz and amendments to Article 8 of the Radio Regulations, having regard to the power flux-density limits of space stations; and with regard to Articles 55 and 56 of the Radio Regulations, it had proposed merging first- and second-class operator certificates and their mandatory use on the part of administrations wishing to guarantee the availability of the system.

1.10 The delegate of Senegal, introducing Document 75, said with reference to item 2.1 that the issue should be submitted for consideration by the Voluntary Group of Experts. His country urged adequate safeguards for transfer procedures and protection criteria and that sufficient periods be allowed for the developing countries to implement the transfer procedures, without any economic constraints. Under item 2.3, Senegal hoped that the Conference would align the texts of the Radio Regulations and the SOLAS Convention.

1.11 The delegate of Argentina announced that in Document 79 his Administration would be proposing a timetable for application of the new provisions of Appendix 26; it would also be putting forward a document setting out Argentina's opinion regarding the small number of IMO Member States which had notified application of the global distress system in coastal areas.

1.12 The delegate of Israel stated that, with regard to Addendum 1 to Document 5 containing the IFRB's report, his Administration requested three more frequencies for OR in the 13, 15 and 18 MHz bands. The exact frequencies were indicated in the proposal in Addendum 1 to Document 51 submitted by his Administration.

1.13 The delegate of China said that the detailed content of her Administration's proposals (Document 61) would be submitted to the Working Group.

2. Organization of the work of the Working Groups

2.1 The Chairman first of all informed the meeting that following a discussion with the Chairmen of Committee 4 and the Working Group of the Plenary, the Resolutions and Recommendations had been distributed in such a way that some of them no longer were the responsibility of Committee 5. Secondly, on the question of parallel meetings, meetings of Working Groups 5A, 4A and 4C were scheduled in parallel in the morning of 6 February. In the afternoon, Working Groups 5B and 5C would be meeting in parallel. Delegations were invited to express their views on the subject.

2.2 The delegate of the Islamic Republic of Iran said he would prefer not to have simultaneous meetings of Working Groups 5A and 5B.

2.3 The delegate of Australia requested that, as far as possible, meetings be organized in such a way as to enable each delegate to attend every other meeting.

2.4 In the opinion of the delegate of Mali, it would be useful for as many delegates as possible to participate in the different meetings. Parallel meetings of Working Groups 5B and 5C posed a problem; he therefore urged that the arrangements be reviewed.

2.5 The delegate of Canada said he would also prefer Working Groups 5B and 5C not to meet in parallel. As a compromise solution, he asked that when simultaneous meetings were inevitable, they should not discuss the same issues at the same time.

2.6 The Chairman took note of the compromise proposal and stated that in general every effort should be made to avoid having parallel meetings on the same subject.

The meeting rose at 1155 hours.

The Secretary:
J. LEWIS

The Chairman:
E. GEORGE

COMMITTEE 5

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 5
(REGULATORY)
Wednesday, 5 February 1992, at 1100 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

1. General introduction of documents by delegations (continued)
2. Organization of the work of Working Groups

Documents

44, 45, 52, 57, 63,
64, 75, 79

1. General introduction of documents by delegations (continued)
(Documents 44, 45, 52, 57, 63, 64, 75, 79)

1.1 Introducing Document 44, the delegate of Pakistan drew attention to the proposal under item 2.2.1 that services having similar characteristics which could share frequency bands should be combined to define a new space communications service. Under item 2.2.2, Pakistan supported the proposal that all DSB emissions be replaced by SSB emissions. Under item 2.2.4a, a period of ten years was proposed before the new allocation to the generic MSS came into effect. For item 2.2.6, it was proposed that the existing status of allocations to the space research, space operation and Earth exploration-satellite services in Footnotes 747 and 750 should be retained. WARC-92 might consider a Resolution to prevent future assignments in the bands 2 025 - 2 110 MHz and 2 220 - 2 290 MHz to those space services which could use the bands above 20 GHz.

1.2 With regard to item 2.3, administrations should be free to choose either of the two combinations for maintenance on board ships, in accordance with the SOLAS Convention.

1.3 On item 2.4, the Administration of Pakistan generally agreed with draft Appendix 26 and draft Resolution No. Aer1, but proposed that the dates for operating on replacement frequencies and ceasing all DSB emissions should be 31 December 1996 and 31 December 1999, respectively.

1.4 Under items 2.7 and 2.8, it was proposed that the CCIR should continue its studies on the meteorological aids service and that a Resolution should be adopted by WARC-92 calling upon a future conference to study interference problems in the bands 401 - 403 MHz.

1.5 Introducing Document 45, the delegate of Ecuador said that under item 2.2.3b it was proposed that use of the band 12.2 - 12.7 GHz in Region 2 for HDTV should be embodied in Article 8 and that a footnote be added to the corresponding table. Under item 2.2.5, it was proposed that Footnote 863 should be amended for worldwide use of the fixed-satellite service (Earth-to-space). Document 45 also mentioned the protection which would have to be granted to terrestrial services which might be affected.

1.6 With regard to Document 52, the delegate of Indonesia said that the technical terms relating to geostationary satellites should be retained and a number of amendments should be made to Articles 55 and 56 in order to harmonize the two Conventions.

1.7 With regard to Document 57, the delegate of Côte d'Ivoire said that his country would be making a more detailed contribution in the Working Groups.

1.8 Introducing Document 64, the delegate of Luxembourg said that the main issue was the need to review the regulatory procedure governing use of the 12 GHz band. His Administration considered that, in view of the proposals which had been put forward concerning the possible use of that band or of the bands above 20 GHz in future by HDTV, the manner in which that band was used should be re-examined. His Administration also supported the European proposal concerning the convening of another WARC to consider use of the 12 GHz band. The Resolution put forward in the document was designed to deal with the issue in more depth and provide greater flexibility in transmission systems, powers and coverage areas. The many similarities between broadcasting satellites and certain fixed-satellite services tended to suggest that there might be some benefit in merging them to some extent.

1.9 The delegate of Mexico said that in Document 63 his Administration would be proposing several amendments to definitions, in particular regarding the satellite service and space communication. Other amendments, inter alia relating to Articles 55 and 56, would be discussed at meetings of the Working Groups.

1.10 The delegate of Senegal, introducing Document 75, said with reference to item 2.1 that the issue should be submitted for consideration by the Voluntary Group of Experts. His country urged adequate safeguards for transfer procedures and protection criteria and that sufficient periods be allowed for the developing countries to implement the transfer procedures, without any economic constraints. Under item 2.3, Senegal hoped that the Conference would align the texts of the Radio Regulations and the SOLAS Convention.

1.11 The delegate of Argentina announced that in Document 79 his Administration would be proposing a timetable for application of the new provisions of Appendix 26; it would also be putting forward a document setting out Argentina's opinion regarding the small number of IMO Member states which had notified application of the global distress system in coastal areas.

1.12 The delegate of Israel stated that, with regard to Addendum 1 to Document 5 containing the IFRB's report, his Administration requested three more frequencies for OR in the 13, 15 and 18 MHz bands. The exact frequencies were indicated in the proposal in Addendum 1 to Document 51 submitted by his Administration.

1.13 The delegate of China said that the detailed content of her Administration's proposals (Document 61) would be submitted to the Working Group.

2. Organization of the work of the Working Groups

2.1 The Chairman first of all informed the meeting that following a discussion with the Chairmen of Committee 4 and the Working Group of the Plenary, the Resolutions and Recommendations had been distributed in such a way that some of them no longer were the responsibility of Committee 5. Secondly, on the question of parallel meetings, meetings of Working Groups 5A, 4A and 4C were scheduled in parallel in the morning of 6 February. In the afternoon, Working Groups 5B and 5C would be meeting in parallel. Delegations were invited to express their views on the subject.

2.2 The delegate of the Islamic Republic of Iran said he would prefer, at least on 6 February, not to have simultaneous meetings of Working Groups 5A and 5B.

2.3 The delegate of Australia requested that, as far as possible, meetings be organized in such a way as to enable each delegate to attend every other meeting.

2.4 In the opinion of the delegate of Mali, it would be useful for as many delegates as possible to participate in the different meetings. Parallel meetings of Working Groups 5B and 5C posed a problem; he therefore urged that the arrangements be reviewed.

2.5 The delegate of Canada said he would also prefer Working Groups 5B and 5C not to meet in parallel. As a compromise solution, he asked that when simultaneous meetings were inevitable, they should not discuss the same issues at the same time.

2.6 The Chairman took note of the compromise proposal and stated that in general every effort should be made to avoid having parallel meetings on the same subject.

The meeting rose at 1155 hours.

The Secretary:
J. LEWIS

The Chairman:
E. GEORGE

MALAGA-TORREMOLINOS, FEBRERO/MARZO 1992

COMMITTEE 3
COMMISSION 3
COMISION 3

SUMMARY RECORD OF THE FIRST MEETING OF COMMITTEE 3
(BUDGET CONTROL)

On page 4, paragraph 8.3, the second sentence should read:

Additional expenditure was the responsibility of the host Government, and the actual difference to be paid by Spain was 1,815,000 Swiss francs.

COMPTE RENDU DE LA PREMIERE SEANCE DE LA COMMISSION 3
(CONTROLE BUDGETAIRE)

A la page 4, paragraphe 8.3, lire la deuxième phrase comme suit:

Les dépenses supplémentaires sont à la charge du gouvernement hôte et la différence réelle à la charge de l'Espagne est de 1.815.000 francs suisses.

RESUMEN DE LOS DEBATES DE LA PRIMERA SESION DE LA COMISION 3
(CONTROL DEL PRESUPUESTO)

En la página 4, párrafo 8.3, en la segunda frase debe leerse:

Los gastos adicionales incumben al Gobierno invitante, y la diferencia real a pagar por España es de 1.815.000 francos suizos.

COMMITTEE 3

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 3
(BUDGET CONTROL)

Thursday, 6 February 1992, at 0940 hours

Chairman Mr. S. AL-BASHEER (Saudi Arabia)

Subjects discussed

Documents

1.	Organization of the work of Committee 3	-
2.	Terms of reference of Committee 3	66
3.	Financial responsibilities of administrative conferences	42
4.	Budget of the Conference	18
5.	Limits on expenditure for WARC-92	47
6.	Contributions of recognized private operating agencies and non-exempt international organizations	19
7.	Agreement between the Government of Spain and the Secretary-General of the ITU	71
8.	Material arrangements for the Conference	-

1. Organization of the work of Committee 3

1.1 The Chairman, in opening the first meeting of Committee 3, explained that there would be further meetings, held as necessary, possibly in the third and fourth weeks depending upon developments in the Conference, but that there would definitely be a final meeting in the fourth week. Agendas would be distributed well in advance.

2. Terms of reference of Committee 3 (Document 66)

2.1 The Committee took note of its terms of reference as set out on pages 1 and 2 of Document 66.

3. Financial responsibilities of administrative conferences (Document 42)

3.1 The Committee took note of its financial responsibilities as set out in Annex 1 to Document 42.

4. Budget of the Conference (Document 18)

4.1 The Chief of the Finance Department introduced Document 18, explaining that the Conference budget had been approved by the 46th session of the Administrative Council in June 1991. It had been based on the common system salary scales as at 1 January 1991. It did not cover the common services' supernumerary staff costs, which were shown in a separate section of the ordinary budget of the Union. Finally, the sum of 100,000 Swiss francs for post-conference work by the IFRB had to be approved by Committee 3 in order to become definite.

4.2 The representative of the IFRB, referring to item d) on page 4 of Document 18, recalled that the original amount proposed by the IFRB for post-conference work had been 200,000 Swiss francs. In 1991, the Council had reduced the amount to 100,000 Swiss francs, on the understanding that, once the decisions of the Conference were known and costs had been estimated with more precision, any excess would be presented in a document to the 47th session of the Council in 1992.

4.3 It was agreed that should estimated expenditure on post-conference work exceed 100,000 Swiss francs, a separate document setting out the reasons and the costs would be submitted for consideration by the Committee.

5. Limits on expenditure for WARC-92 (Document 47)

5.1 The Chief of the Finance Department, introducing Document 47, said that it set out the as yet unallocated credits which were available for possible post-conference work that might arise from the decisions of the different Committees. The Plenipotentiary Conference (Nice, 1989) had established a ceiling of 5,100,000 Swiss francs for the total costs of WARC-92, of which 443,000 Swiss francs had been budgeted in 1991 and 3,557,000 Swiss francs were entered in the budget for 1992. Of the total ceiling, there remained 1,100,000 Swiss francs.

5.2 The delegate of Lebanon asked whether any real savings could be expected or whether there might be unforeseen expenses to be deducted from the 1,100,000 Swiss francs.

5.3 In reply, the Secretary-General said that the figures put forward could not be described as showing real savings. Also the 1991 accounts had not been finalized and the year 1992 had only just begun. The general impression was that WARC-92 would be facing problems rather than finding savings. At Nice, severe cuts had been made in the budgets for the entire period up to the next Plenipotentiary Conference. The ITU had been able to survive in 1990 and 1991, and the 1992 budget was such that no serious cuts would have to be made in respect of activities vital to the Union. However, the budget cuts for 1993 and 1994 were more serious and those years would be the most difficult for the ITU. No encouraging statements could therefore be made that the economic situation was improving. On the contrary, the ITU was in the throes of a recession and would continue to be so in 1993 and 1994.

5.4 The Chairman, summing up, said that the amount of 1,100,000 Swiss francs could not be considered as a real saving.

5.5 The delegate of Lebanon recalled that, in his capacity as Chairman of the Finance Committee of the Nice Plenipotentiary Conference, he had given the Secretary-General his full support concerning the financing of WARC-92; however, the Plenipotentiary Conference had been quite merciless and had slashed the total budgets for 1991-1994 by fifteen to twenty million Swiss francs. He commended the Secretary-General for his management of ITU affairs and expressed the hope that appropriate financial resources would be forthcoming to assist him in his work.

5.6 The Committee took note of Document 47.

6. Contributions of recognized private operating agencies and non-exempt international organizations (Document 19)

6.1 The Chief of the Finance Department introduced Document 19, which set out the contributory unit for recognized private operating agencies and non-exempt international organizations participating in the work of the Conference. The amount had been determined in accordance with No. 383 of the Nice Convention. At a future meeting of the Committee, a list would be submitted of participating agencies and organizations with, to the extent possible, the corresponding contributory units announced.

6.2 The Committee took note of Document 19 and agreed that a further document should be drawn up listing participating agencies and organizations together with the contributory units announced.

7. Agreement between the Government of Spain and the Secretary-General of the ITU (Document 71)

7.1 The Chief of the Finance Department, introducing Document 71, said that Annex C would have to be updated for the 1992 budget to reflect additional costs resulting from conditions prevailing in the common system at 1 February 1992.

7.2 In reply to a question by the delegate of Indonesia concerning the figures shown in Annex C under Subhead I, he explained that the first column gave the 1992 budget figures as approved by the 46th session of the Council. Under "Staff expenses", direct salary and related expenses basically covering the cost of interpretation were shown, calculated according to the rates established at 1 January 1991. In the column headed "Additional expenditure", the difference in cost was shown for the Conference being held in Torremolinos instead of Geneva.

7.3 Replying to a further request for clarification by the delegate of Indonesia, he said that the column headed "1992 budget" showed, under Subhead I, the standard cost of recruiting non-local interpreters for a conference in Geneva. Under Subhead V, in the second column, travel expenses amounting to 491,000 Swiss francs, to be met by the host Administration, were shown for non-local staff including interpreters.

7.4 The Chairman said he wished to take the opportunity of thanking the Spanish Government for making available the conference facilities, which he believed were appreciated by all delegates.

7.5 The Committee took note of Document 47.

8. Material arrangements for the Conference

8.1 The delegate of the Russian Federation asked if the material arrangements at the Congress Palace, which had been the subject of a question by the delegate of Morocco in a different Committee, would have an effect on the budget of the Conference.

8.2 The Chairman explained that the host Administration had supplied the equipment required for the work of the Conference and that everything was running satisfactorily. Due to the very large number of delegates attending the Conference, the space and security factors had become particularly important. All requests were being taken into account and he extended thanks to the Spanish Government for the facilities provided.

8.3 Responding to a question by the delegate of Lebanon, the delegate of Spain said that, as indicated in Annex C, the budget had been prepared as if the Conference were to be held in Geneva. Additional expenditure was the responsibility of the host Government, and the actual difference being paid by Spain was 1,815,000 Swiss francs. The delegate of Morocco had asked about some facilities usually provided in Geneva which were not fully available in Torremolinos, where emphasis had been placed first and foremost on security. Transport had been provided free of charge to and from the hotels to facilitate the transport of briefcases and documents. Every effort was being made to provide suitable facilities and his Administration would attend to any reasonable request. He expressed the hope that the arrangements at the Congress Palace were acceptable.

8.4 The delegate of the United States, noting the comments of the Secretary-General and the Representative of the IFRB on budget difficulties, recalled that, as in other committees, where frequency allocations were being discussed, the Conference should meet them with available resources.

8.5 The Chairman thanked the delegate of Spain for his explanations and assured him that the situation was entirely satisfactory. No further costs would need to be added to the budget in respect of material arrangements.

The meeting rose at 1040 hours.

The Secretary:
A. TAZI-RIFFI

The Chairman:
S. AL-BASHEER

COMMITTEE 2

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 2
(CREDENTIALS)

Thursday, 6 February 1992, at 1055 hours

Chairman: Mr. J.A. PADILLA LONGORIA (Mexico)

Subjects discussed

Documents

1.	Terms of reference of the Committee	66
2.	Organization of work	-
3.	Transfer of powers	-
4.	Submission of credentials	-

1. Terms of reference of the Committee (Document 66)

1.1 The Chairman read out the terms of reference of the Committee approved at the first Plenary Meeting and set out in Document 66.

2. Organization of work

2.1 The Committee approved the setting up of a Working Group consisting of the Chairman and the delegates of Mexico, Egypt, Italy, Poland and the Philippines.

2.2 The Chairman indicated that the Working Group would be open-ended and requested those countries wishing to be represented on it to inform the Secretary or himself that day.

3. Transfer of powers

3.1 The Secretary of the Committee stated that, under No. 391 of the International Telecommunication Convention (Nairobi, 1982), a Member of the Union which was unable to send its own delegation to a conference might give the delegation of another Member powers to vote and sign on its behalf.

3.2 He read out documents relating to the transfer of powers from Liechtenstein to Switzerland.

3.3 The transfer of powers was approved.

4. Submission of credentials

4.1 The Secretary of the Committee announced that the Secretariat had so far received credentials from 62 of the 113 Members of the Union present that day at the Conference. He invited other Member States to submit their credentials as soon as possible so that the Chairman could report to the Plenary Meeting within the specified time.

4.2 Replying to a question by the delegate of Senegal as to whether a deadline could be set for submission of credentials, he said that it was only possible to urge Member States to submit credentials. It had been decided by the Plenary Meeting that Committee 2 should submit its report by 28 February 1992. Member States whose credentials had been submitted and approved by that date would have the right to vote. Nevertheless, if credentials were submitted and approved after 28 February, the right to vote would be recovered as soon as the Plenary had been informed.

4.3 It was agreed that individual reminders would be issued to those delegations which were not yet accredited.

The meeting rose at 1115 hours.

The Secretary:

X. ESCOFET

The Chairman:

J.A. PADILLA LONGORIA

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 108(Rev.1)-E

14 February 1992

Original: English

COMMITTEE 6

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 6
(EDITORIAL)

Thursday, 6 February 1992, at 1130 hours

Chairman: Mr. P. ABOUDARHAM (France)

Subjects discussed

1. Terms of reference of the Editorial Committee
2. Constitution of the Committee
3. Date of the next meeting

Documents

-
-
-

1. Terms of reference of the Editorial Committee

1.1 The Chairman read out Nos. 473 and 474 of the International Telecommunication Convention (Nairobi, 1982) and reminded delegates that their task required them not to alter the meaning of texts.

1.2 The Committee took note of its terms of reference.

2. Constitution of the Committee

2.1 The Chairman said that his intention was to establish one team in the first place although, in the Conference's final week, a second team would probably be required along with replacements for team members owing to the Committee's extremely long working hours. Initially, therefore, in addition to the three translators made available by the ITU Secretariat, two or three delegates would be required for each working language. A questionnaire was being distributed for participation purposes, and those present should follow the matter up and encourage delegates with knowledge of as many of the working languages as possible to participate.

2.2 The delegate of Spain assured the Chairman of his cooperation and appealed for delegates from other Spanish-speaking countries to participate, since Spanish was the official language of many other countries apart from Spain. The Chairman agreed, saying that the same was true of different English- or French-speaking countries.

2.3 The delegate of the United Kingdom also assured the Chairman of his cooperation. He would, in particular, seek the participation of members of his delegation who were specialists in the subjects being discussed by the Editorial Committee at any given time. The same might appropriately be done for the other languages.

2.4 The delegate of France said that his delegation too would endeavour to arrange for those who had participated in the discussions to be present when the relevant texts were considered. To the extent possible, it would be helpful to know in advance what documents were to be discussed at each Editorial Committee meeting.

2.5 The Chairman said that it would be useful to establish a procedure to keep the Editorial Committee informed of the language in which amendments had been made. The cooperation of delegates would be necessary in that respect.

2.6 The delegate of Spain said that no mention of that idea had been made at the first meetings of Committees 4 and 5. Perhaps the Steering Committee's attention should be drawn to the matter.

2.7 The Chairman said that he would raise the matter with the Chairman of the Conference and that the cooperation of the Committee Secretaries would be sought.

3. Date of the next meeting

3.1 The Chairman said that the pigeon-holes would be used to inform the delegates concerned of the date and time of the next meeting.

The meeting rose at 1150 hours.

The Secretary:

P.A. TRAUB

The Chairman:

P. ABOUDARHAM

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 108-E
10 February 1992
Original: English

COMMITTEE 6

SUMMARY RECORD
OF THE
FIRST MEETING OF COMMITTEE 6
(EDITORIAL)

Thursday, 6 February 1992, at 1130 hours

Chairman: Mr. P. ABOUDARHAM (France)

Subjects discussed

1. Terms of reference of the Editorial Committee
2. Constitution of the Committee
3. Date of the next meeting

Documents

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1. Terms of reference of the Editorial Committee

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The meeting rose at 1150 hours.

The Secretary:
P.A. TRAUB

The Chairman:
P. ABOUDARHAM

COMMITTEE 4

Algeria, Brazil, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Colombia, Congo, Côte d'Ivoire, Ecuador, Ethiopia, Gabon, Gambia, Kenya, Lebanon, Malawi, Malaysia, Mali, Mauritania, Mexico, Morocco, Niger, Nigeria, Senegal, Tanzania, Togo

USE OF TROPICAL ZONE BANDS FOR EXTENDING THE HF BANDS
EXCLUSIVELY ALLOCATED TO THE HFBC

In most countries situated in the Tropical Zone and in particular in Africa, broadcasting coverage of national territory is partly made through bands allocated to broadcasting services in the Tropical Zone and partly through decametric wave bands allocated exclusively to decametric waves broadcasting service.

Item 2.2.2 on the agenda of WARC-92 is self-explanatory and refers to the possibility of extending the frequency spectrum exclusively allocated to decametric waves broadcasting service, as indicated in Recommendation No. 511 of HFBC-87.

Consequently, we draw the attention of the Conference to its competence and call on it to strictly observe the provisions of item 2.2.2 of the agenda as well as Recommendation No. 513 of HFBC-87, in particular its sub-item f) which stipulates that:

- "the needs of national broadcasting in countries in the Tropical Zone are covered partially in the bands allocated to the broadcasting service for use in the Tropical Zone and partially in the HF bands allocated exclusively to the broadcasting service;"

As a result, we consider that the Conference is not competent to consider the possible extension of HFBC bands, by using the frequency bands allocated to broadcasting in the Tropical Zone.

COMMITTEE 4

Algeria, Brazil, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Colombia, Congo, Côte d'Ivoire, Ecuador, Ethiopia, Gabon, Gambia, Lebanon, Malawi, Malaysia, Mali, Mauritania, Mexico, Morocco, Niger, Nigeria, Senegal, Tanzania, Togo

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Item 2.2.2 on the agenda of WARC-92 is self-explanatory and refers to the possibility of extending the frequency spectrum exclusively allocated to decametric waves broadcasting service, as indicated in Recommendation No. 511 of HFBC-87.

Consequently, we draw the attention of the Conference to its competence and call on it to strictly observe the provisions of item 2.2.2 of the agenda as well as Recommendation No. 513 of HFBC-87, in particular its sub-item f) which stipulates that:

- "the needs of national broadcasting in countries in the Tropical Zone are covered partially in the bands allocated to the broadcasting service for use in the Tropical Zone and partially in the HF bands allocated exclusively to the broadcasting service;"

As a result, we consider that the Conference is not competent to consider the possible extension of HFBC bands, by using the frequency bands allocated to broadcasting in the Tropical Zone.

COMMITTEE 4

Algeria, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Gabon,
Gambia, Lebanon, Malawi, Mali, Morocco, Mauritania,
Niger, Nigeria, Senegal, Tanzania, Togo

USE OF TROPICAL ZONE BANDS FOR EXTENDING THE HF BANDS
EXCLUSIVELY ALLOCATED TO THE HFBC

In most countries situated in the Tropical Zone and in particular in Africa, broadcasting coverage of national territory is partly made through bands allocated to broadcasting services in the Tropical Zone and partly through decametric wave bands allocated exclusively to decametric waves broadcasting service.

Item 2.2.2 on the agenda of WARC-92 is self-explanatory and refers to the possibility of extending the frequency spectrum exclusively allocated to decametric waves broadcasting service, as indicated in Recommendation No. 511 of HFBC-87.

Consequently, we draw the attention of the Conference to its competence and call on it to strictly observe the provisions of item 2.2.2 of the agenda as well as Recommendation No. 513 of HFBC-87, in particular its sub-item f) which stipulates that:

- "the needs of national broadcasting in countries in the Tropical Zone are covered partially in the bands allocated to the broadcasting service for use in the Tropical Zone and partially in the HF bands allocated exclusively to the broadcasting service;"

As a result, we consider that the Conference is not competent to consider the possible extension of HFBC bands, by using the frequency bands allocated to broadcasting in the Tropical Zone.

WORKING GROUP 4A

Argentine Republic

WARC-92 AGENDA ITEM 2.2.2
(Resolution No. 995)

THE POSSIBLE EXTENSION OF THE FREQUENCY SPECTRUM ALLOCATED
EXCLUSIVELY TO HF BROADCASTING, AS INDICATED
IN (WARC HFBC-87) RECOMMENDATION No. 511

The Argentine Administration considers that the frequency bands should not be extended for allocation to broadcasting at the expense of the allocations at present held by the fixed and mobile services, given the intensive use which some administrations make of the latter.

Especially in the case of countries covering large geographical areas, it is worth noting the considerable use made of the fixed and mobile services, particularly in rural areas where there are no other means of communication.

Other solutions should be sought before bands are extended, for experience shows that changes made ahead of time cause serious inconvenience and a high cost to administrations and users for the transfer of frequencies.

Before contemplating any change, it would be better to promote a rapid shift to single-sideband technology so as to reduce the present congestion in the bands and avoid the allocation of new frequency bands.

It should also be pointed out that the world situation has changed substantially since HFBC-87 and this necessarily implies a change in frequency requirements. In addition, consideration should be given to the new space services as a means of replacing HF.

It is therefore proposed that the following measures be taken before the bands are extended.

ARG/110/1

The time-limit established in Annex A to Resolution No. 517 (HFBC-87) for converting the broadcasting service to SSB technology with reduced carrier should be brought forward as far as possible.

ARG/110/2

The spectrum at present allocated to the HF broadcasting service should be planned within a time frame compatible with the objective of proposal 1 above, solely with the frequencies at present in use.

ARG/110/3

The planning process should establish power limits designed to cause the least possible interference.

All measures should be taken to ensure that the use of power is not governed by subjective criteria.

Broadcasting should be subject to power limits in exactly the same way as the maritime- and aeronautical-mobile services used worldwide for safety communications.

ARG/110/4

In planning the bands, every effort should be made to ensure that allocations to the service are identical in all regions. If not, criteria for compatibility between services should be established, having regard to those set out in proposals 2 and 3 above.

Republic of Benin

PROPOSALS FOR THE WORK OF THE CONFERENCE

Introduction

Pursuant to Resolution No. 1(PL-B/1) of the Plenipotentiary Conference (Nice, 1989) and Administrative Council Resolution No. 995, the main task of the present World Administrative Radio Conference (WARC-92) is to study frequency allocations in certain parts of the spectrum on the basis of proposals by Administrations and having regard to the Resolutions and Recommendations of WARC HFBC-87, WARC MOB-87 and WARC ORB-88, as well as the Reports by the IFRB and the CCIR.

The Administration of Benin hereby submits to the Conference the following proposals designed essentially to:

- meet the present and future requirements of existing radiocommunication services;
- reconcile as far as possible the needs and interests of all Administrations;
- foster the promotion of new radiocommunication services, in view of the rapid technological developments in the sector, by making appropriate amendments to certain parts of the Radio Regulations;
- urge a cautious approach, at least on an interim basis, with regard to non-geostationary satellite systems, on which subject the present Radio Regulations are incomplete, pending the results of the relevant studies being carried out by the CCIR.

Agenda item 2.1 - Definitions for certain new space applications and review of the relevant provisions of Article 1

BEN/111/1

In this respect the Benin Administration is prepared to consider and accept any new definitions formulated in connection with new allocations.

On the other hand it takes the view that any other proposals to change definitions should be studied by the Voluntary Group of Experts (VGE) for the sake of harmonization.

Agenda item 2.2.1 - Allocation of frequency bands above 20 GHz to the new space service applications

BEN/111/2

The Administration of Benin is in favour of this allocation, provided that it takes account of existing and planned requirements for the services currently operated in this part of the spectrum.

Agenda item 2.2.2 - Possible extension of the frequency spectrum allocated exclusively to HF broadcasting

A study of the extension of exclusive allocations to HF broadcasting is called for by Recommendation No. 511 of WARC HFBC-87.

BEN/111/3

The Benin Administration is in favour of such an extension subject to the following conditions:

- there should be no extension in the bands allocated exclusively to the maritime mobile, aeronautical mobile and amateur services, or to standard frequency and time signals;
- the extensions should not affect the tropical bands (hence Footnote 503 is to be maintained) or adversely affect the fixed and mobile services, except aeronautical mobile;
- the new extension bands should be used to meet DSB requirements and planning, while permitting the progressive introduction of SSB in accordance with Resolution No. 517 of WARC HFBC-87;
- the conditions of use of the new extension bands should be determined at the next competent HFBC Conference.

It is understood that the transfer of existing services affected by such extensions should take place within reasonable time-limits, in accordance with the relevant Resolutions of WARC-79.

Agenda item 2.2.3 - Allocation of frequency bands to the broadcasting-satellite service and the associated feeder links in the range 500 - 3 000 MHz

a) Sound broadcasting service

Technical and economic feasibility studies carried out by international bodies, including the CCIR, have shown that the optimum band for the service would be around 1.5 GHz and that the associated feeder links could be accommodated in the band 10.7 - 11.7 GHz.

BEN/111/4

Benin would accept an allocation along the lines of the CCIR findings, provided that:

- existing services continue to receive protection (the band 1.5 - 2 GHz is widely used in Benin for radio-relay and rural telephony services);
- the frequency band chosen is allocated on a worldwide basis;
- the band chosen is subsequently planned to ensure equitable use by all countries;
- implementation of the service in the band chosen takes place within reasonable time-limits so as to permit the satisfactory transfer of existing services.

b) High-definition television (HDTV)

Studies carried out by international bodies, including the CCIR, show that the optimum band for HDTV would be 21.4 - 22 GHz and that the associated feeder links could use the bands 28.5 - 29.5 GHz and 17.3 - 18.1 GHz for countries having heavy rainfall.

BEN/111/5

Benin therefore proposes that the band 21.4 - 22 GHz be allocated to the service and the band 17.3 - 18.1 GHz to the associated feeder links, provided that:

- the frequency band in question is allocated on a worldwide basis;
- the band in question is subsequently planned to ensure equitable use by all countries.

Agenda item 2.2.4 - Allocation of frequency bands to the mobile and mobile-satellite services and associated feeder links

- a) In the approximate range 1 - 3 GHz as indicated in Resolution No. 208 (Mob-87)
At present, the only worldwide allocation is for mobile-satellite systems at 1.5/1.6 GHz, with regional allocations at 800/900 MHz and 2.5/2.6 GHz.
The allocation of an adjacent 5 MHz band for space-to-Earth links is necessary to rectify the current imbalance in the Table of Frequency Allocations between the bands for down links (1 530 - 1 544 MHz, i.e. 14 MHz) and those for up links (1 626.5 - 1 645.5 MHz, i.e. 19 MHz).

BEN/111/6

Benin therefore proposes that the frequency band 1 525 - 1 530 MHz be allocated to the (maritime and land) mobile-satellite service.

- b) Development in the approximate range 1 - 3 GHz of a worldwide system of public correspondence with aircraft, as indicated in Recommendation No. 408 (Mob-87)
We have no particular proposal to submit to the Conference on this matter. However, we point out that for any new allocation in the band 1 - 3 GHz, due account should be taken of the terrestrial fixed services which currently make widespread use of frequencies in this band (radio-relay links, rural telephony).
- c) Allocation of spectrum for the operation of mobile services for future public land mobile telecommunication systems (FPLMTS), as indicated in Recommendation No. 205 (Mob-87)

BEN/111/7

In this connection, Benin is of the opinion that the frequency band allocation should be on a worldwide basis.

- d) Low-orbit satellites below 1 GHz

BEN/111/8

Benin supports the American proposals on this matter, provided that existing systems continue to be protected.

Agenda item 2.2.5 - Allocation of the frequency band 14.5 - 14.8 GHz to the fixed-satellite service (Earth-to-space)

BEN/111/9

Benin proposes that the frequency band 14.5 - 14.8 GHz be opened up to all FSS applications, while nevertheless providing due protection for assignments for feeder links of the broadcasting-satellite service contained in Appendix 30A to the Radio Regulations. This solution, at the same time as reducing the prevailing imbalance in band Ku between up links and down links, would make it possible to satisfy more effectively the ever increasing demand for services in band Ku.

BEN/111/10

Footnote No. 863 to the Table of Frequency Allocations should be amended accordingly.

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

PLENARY MEETING
SEANCE PLENIERE
SESION PLENARIA

Minutes of the Second Plenary Meeting
Procès-verbal de la deuxième séance plénière
Acta de la segunda sesión plenaria

On page 3, paragraph 4.2, the second sentence should read:

"Firstly, he thought it would be useful if in future, in the sphere of organization, the procedure of consulting Members before and during a conference concerning officials to take charge of Committees and Working Groups was made as broad and transparent as possible."

A la page 4, paragraphe 4.2, lire la deuxième phrase comme suit:

"Il pense, premièrement, qu'il serait utile à l'avenir, dans le domaine de l'organisation, que la procédure de consultation des Membres avant et pendant la Conférence pour la direction des travaux des Commissions et des Groupes de travail soit la plus large et la plus transparente possible."

En la página 4, punto 4.2, léase la segunda frase como sigue:

"Cree, en primer lugar, que sería conveniente en el futuro, en el aspecto de la organización, que el procedimiento de consulta de los Miembros antes y durante la Conferencia para la dirección de los trabajos de la Comisiones y de los Grupos de Trabajo fuese lo más amplio y transparente posible."

PLENARY MEETING

MINUTES
OF THE
SECOND PLENARY MEETING
Friday, 7 February 1992, at 1130 hours

Chairman: Mr. J. BARRIONUEVO PEÑA (Spain)

Subjects discussed

Documents

- | | | |
|----|---|---|
| 1. | Address by the Secretary-General of ICAO | - |
| 2. | Address by the Observer for the United Nations | - |
| 3. | Oral reports by the Chairmen of the Committees and the Working Group of the Plenary | - |
| 4. | Organization of the work of the Conference | - |

1. Address by the Secretary-General of ICAO

1.1 The Secretary-General of ICAO said that the current worldwide air navigation system had been set up towards the end of the 1940s and had been a solely terrestrial system. Despite the valuable service it had provided for 40 years and the improvements made to it, the system had reached the limits of its capacity by the early 1980s when it has been unable for instance, to provide a service to certain regions in the world. A new communications, navigation and surveillance system had thus had to be designed, based primarily on satellite technology. The future air navigation system (FANS) had been officially adopted by ICAO in September 1991 at the Air Navigation Conference. A detailed description of the system was given in the Conference documents, in particular Document 10. It had the following characteristics and advantages: it could be adapted to different situations; it could be introduced gradually; it could be used throughout the world, in ocean and polar areas as well as densely populated regions; it could resolve most of the congestion problems and improve airport access; it would enable airline companies to save several billions of dollars by shortening air routes, reducing fuel consumption and securing greater efficiency and economic growth in the tourism and business sectors. Considerable progress had already been made: satellite terminals had been installed on-board aircraft, automatic dependent surveillance systems and ATC networks had been tested, mobile-satellite communication systems for air navigation had been developed. However, the future navigation system could not function without proper distribution of the frequencies allocated to the aeronautical mobile-satellite service. Safety was the paramount consideration for civil aviation operations, and everyone must fully realize its importance as the world prepared for the 21st century.

1.2 He had no doubt that the Conference would give due consideration to the legitimate requirements of air transport services.

2. Address by the observer for the United Nations

2.1 The Observer for the United Nations expressed confidence that the Conference would be a success with the support and traditional hospitality which the ITU had always received from its Spanish hosts in its work throughout its history. The remainder of his address is reproduced in annex.

3. Oral reports by the Chairmen of the Committees and the Working Group of the Plenary

3.1 The Chairman of Committee 2 said that Committee 2 had decided to set up an open Working Group composed of Mexico, Egypt, Italy, Poland, the Philippines and possibly other countries. Liechtenstein had submitted its credentials through the intermediary of Switzerland which was representing it. To date 113 delegations were present, of which 66 were duly accredited.

3.2 The Chairman of Committee 3 said that at its preparatory meeting Committee 3 had carried out a preliminary examination of the budget of the Conference and had studied the text of the Agreement concluded between the Secretary-General and the Government of the host country.

3.3 The Chairman of Committee 4 said that his Committee had held two meetings, at which delegations had introduced their documents. Three Working Groups had been set up, the terms of reference of which were outlined in Document 81. Working Group 4A, dealing with the allocation of frequencies below 137 MHz, had met twice. Working Group 4B, dealing with the allocation of frequencies in the bands between 137 and 3 000 MHz, had met three times and had already set up a sub-group to consider proposals concerning the lower part of that range. Working Group 4C, dealing with the allocation of frequencies in the bands above 3 000 MHz, had met twice; a Sub-Group 4C-1 had also been set up.

3.4 A difficulty had arisen, which might be termed the "chicken and egg problem", namely to know what to do first: allocate frequencies, which was the responsibility of Committee 4, or establish transfer procedures, which was the responsibility of Committee 5. Each of those tasks was dependent on the other. He had sent a note to the Chairman of Committee 5 on the matter (Document 116). He considered that the work of the two Committees should be conducted in parallel, with the final decisions in each Committee contingent on satisfactory solutions being found in the other. The decisions would not actually be finalized until later in the Conference.

3.5 The Chairman of Committee 5 said that Committee 5 had met twice and set up three Working Groups. The task of Working Group 5A was to consider the provisions of Articles 55(Rev.) and 56(Rev.) of the Radio Regulations; Working Group 5B had been entrusted with reviewing the regulatory procedures pertaining to Articles 11, 12, 13, 27, 28, 29 and 30 and Appendices 26, 30 and 38 and the associated Recommendations and Resolutions; Working Group 5C had been entrusted with drawing up procedures for the replacement of frequency assignments in the light of revisions in the allocation of the HF bands. Delegations had been able to introduce their proposals at the meetings of the Committee.

3.6 As he saw it, there was no problem of coordination with regard to Working Group 5A; the topics dealt with by Working Groups 5B and 5C, on the other hand, were connected with matters being studied by Committee 4. He agreed with the Chairman of Committee 4 that the work of both Committees should proceed in parallel and that the two Committees should keep each other informed. Nevertheless, delegations were requested to agree that decisions would be taken on a provisional basis pending the decisions of Committee 4.

3.7 The Chairman of Committee 6 said that at its first meeting the Committee had secured the participation of delegates for the three languages. The Committee would meet as soon as texts were transmitted to it.

3.8 The Chairman of the Working Group of the Plenary said that the Group, which had been established on the basis set out in Document 66, had already met twice. Its terms of reference consisted of four terms, based on proposals by administrations and taking into account the CCIR Report. The first three terms related to consideration of problems associated with the use of the frequency bands in the range 401 - 403 MHz by the meteorological-satellite and earth exploration-satellite services, the development of new Recommendations and Resolutions in relation to various items on the Conference agenda, and the consideration, and revision as necessary, of the relevant existing Recommendations and Resolutions. The fourth term concerned the advisory role which the Working Group of the Plenary was to play for Committees 4 and 5. The tasks had to be completed by the end of the following week - a deadline which, did not appear to allow much time. However, a very good spirit of cooperation prevailed in the Working Group, and he thought that all the work would be completed in good time.

3.9 The Chairman of Committee 6 said that all the texts prepared by the Working Group of the Plenary must be transmitted to the Editorial Committee.

4. Organization of the work of the Conference

4.1 The delegate of Saudi Arabia, referring to the problem of interaction between the tasks of Committees 4 and 5, expressed the view that Committee 5 acted on the basis of the findings of Committee 4 and the latter took account of Committee 5's work. Committee 4 dealt with the allocation of frequencies to the various services, and Committee 5 dealt with the transfer procedure; if those matters were dealt with in order there would be no difficulty. Therefore, he urged that Committee 4 should meet more often than had been envisaged in order to review and revise, as necessary, the provisions of Article 8 of the Radio Regulations and take decisions in respect of certain Resolutions and Recommendations, so that Committee 5 could then adopt procedures based on those decisions.

4.2 The delegate of Algeria stressed that his main purpose in taking the floor was to promote better understanding and consolidate ITU traditions. Firstly, he thought it would be useful if in future, in the sphere of organization, the procedure of consulting Members before and after a Conference concerning officials to take charge of Committees and Working Groups was made as broad and transparent as possible. Secondly, the principle of rotation of all the Member countries should be rigourously applied at future Conferences, except for the post of Chairman of the Conference, which, as stipulated in the Convention, was filled by a representative of the host country. Thirdly, chairmanship of the main Working Groups and Committees should be distributed on a more balanced basis, bearing in mind the need for requisite efficiency. Fourthly, the proliferation of Committees, Working Groups, Sub-Working Groups and small Drafting Groups should be curbed as far as possible, in order to enable small delegations to keep abreast of the Conference's work.

4.3 The Chairman, responding to a number of questions on practical matters, assured the delegates that every effort would be made to satisfy them.

The meeting rose at 1245 hours.

The Secretary-General:

P. TARJANNE

The Chairman:

J. BARRIONUEVO PEÑA

Annex: 1

ANNEX

Address by the observer for the United Nations

I thank you, Mr. President, for permitting me to bring to the Conference the good wishes of the United Nations Secretariat and its related organs.

The UN has particular and, indeed, even very detailed interests in the outcome of your important phase of international cooperation to establish fair and equitable results to serve adequately the interests of all nations.

The WARC-92 results can lead to enhanced national plans and related regional and global cooperation and programmes to serve more effectively, indeed accelerate achievements in development objectives over a huge array of individual national, regional and global programmes. I use the reference to development in its widest connotation, ranging from objectives for better economic efficiency, and as examples to service needs for improved education, environment, health, agriculture, transports, etc., to enable efficient deployment of resources, serving individual national objectives, and assuring adequate quality of life for all communities. Naturally, these aspirations demand cooperation in both the establishment of the radio frequency spectrum regulatory frameworks and also cooperation in service applications.

Technology changes continue at a revolutionary pace, outstripping conventional regulatory and traditional policy formulation. Technology advances provide us with :

- . a multiplicity of new and more cost effective service applications; and
- . opportunities of choices between such applications, leading to flexibility, low cost and improved quality services.

Choice and low cost competitive alternatives between wired and wireless applications are now realities for real time person to person communications, irrespective of location, distance or mobility. Long standing dependence on wired connectivity has been radically diminished.

With appropriate actions and cooperation we, i.e. all of us, can enter into the era of tetherless communications, in which handsets, stations, terminals and a host of new communication systems and devices can be linked through wireless connectivity by terrestrial and satellite means.

Thirty years ago, the UN General Assembly passed a series of Resolutions which opened up and led to significant cooperation to bring the benefits of space telecommunications to all countries.

Coupled with the international cooperation in a variety of WARC's from 1963 to 1988, regulatory frameworks were established to create the conditions for growth and service realities on a global scale. Nowhere, more evident of certain progress, has been the dramatic media portrayal of political and other events in some regions and subregions during the last year or so. Events have been instantaneously presented in graphic form in many of our living-rooms. Yet, they tend to distract from the reality that communities in many countries still do not have access to a basic development tool, i.e. facility to communicate over distance between themselves and with others within their nations. These requirements were clearly identified by the Independent Commission for World-wide Telecommunications Development in its "Missing Link" Report. They have also been well identified in the UN Transport and Communications Decades for Africa, Asia-Pacific and other programmes.

The Missing Link established the objective to have a telephone within easy reach by the turn of the Century. It is not just a telephone - a recognized pillar of economic and social efficiency, convenience and progress, but the uses to which it can now be put as an infrastructure support for national development objectives.

So far, while making great progress, satellite and terrestrial radiocommunications have not achieved the full benefits of those 1960 Resolutions of the UN General Assembly and other Programmes.

But, with the more recent, technology advances and the associated spectrum frameworks, we can move telecommunications beyond small earth stations and other fixed and mobile terminals to simple hand held terminals - albeit hand held telephone - even with a data or facsimile attachment, and quality radio receivers. Thus, I would emphasize the importance of finding the right accommodations at WARC-92 for both geostationary (GSO) and non geostationary orbit satellites, and including low earth orbit satellites (LEOs) which with appropriate cooperation can meet the Missing Link objectives and associated national choices. Here, there is the important relationship with International Telecommunication Regulations established as the World Administrative Telegraph and Telephone Conference (WATTC, Melbourne, 1988). Those Telecommunication Regulations, which have now entered into force, provide for specialized telecommunications systems and services, subject to recognition of national law provisions and mutually agreed arrangements, including related financial, technical and operational agreements. One can discuss how to ensure the appropriate application of those provisions for the evolution of services through new satellite advances and the related principles for cooperation to satisfy all countries' interests.

LEO's technology has moved fast from the initial concepts formulated in the late 1970's by my former colleague in the UN System - Professor Yash Pal. He foresaw a "store and forward" record type service. Now, we can witness instantaneous "voice and record" services, to meet both general and specialized needs through LEO's applications.

Another opportunity for accelerated development is the early prospect of satellite digital sound broadcasting which was indeed formally raised in its analogue form at WARC-79. For technical and other reasons in the climate of that decade

the concept could not be implemented. The time does seem ripe to establish the basic spectrum parameters for development of digital sound broadcasting systems and to provide in an orderly manner for services of individual nations through satellite and complementary terrestrial technology applications. It is important to keep in perspective the lowest practicable cost and quality considerations in reaching conclusions

There are, of course, other important issues on your agenda such as the accommodation of an array of mobile communications, aeronautical public correspondence, broadcasting, amateur, space manned vehicle communications, and the like.

But, Mr. President, I wished mainly to highlight some elements which, if put into place could, with implementation and appropriate cooperation, bring the Missing Link objectives to a reality, even before we pass the end of the current decade.

COMMISSION 5

COMPTE RENDU
DE LA
TROISIEME SEANCE DE LA COMMISSION 5
(REGLEMENTATION)

Lire le paragraphe 2.34 comme suit:

2.34 Le délégué du Maroc, se référant à la préoccupation exprimée par la délégation de la République islamique d'Iran, précise qu'il n'est pas nécessaire de notifier les assignations: les allotissements étant enregistrés dans le Fichier de référence, les allotissements du Plan doivent être protégés, qu'ils soient notifiés ou non. En examinant les questions très importantes dont elle est saisie, la Conférence doit veiller à respecter la tradition de l'UIT consistant à protéger les intérêts de tous ses Membres, présents ou absents.

No change in the English text.

No hay cambios en el texto español.

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 5

SUMMARY RECORD
OF THE
THIRD MEETING OF COMMITTEE 5
(REGULATORY MATTERS)

Monday, 10 February 1992, at 1110 hours

Chairman: Mr. E. GEORGE (Germany (Federal Republic of))

Subjects discussed

Documents

1. Oral reports by the Chairmen of the Working Groups
2. Consideration of the IFRB information paper on the implementation of Resolution No. 9 (Nice, 1989)

-
4, 5 + Add.1+2, 12, 40,
44, 51(Add.1), 62,
79, 94, 101, 117,
120

1. Oral reports by the Chairmen of the Working Groups

1.1 The Chairman of Working Group 5A said that in the course of three meetings Working Group 5A had reviewed the results of WARC-87, the IMO GDSS Conference and IMO Resolution A.703(17). It had completed its first examination of Article 56 and set up Drafting Group 5A1, whose terms of reference were to consider the proposals for RR 3990-3992. He estimated that work on Article 56 was 80-90 per cent completed and work on Article 55 70-80 per cent completed. All being well, the Working Group should be able to conclude its work by the end of the present week or early in the following week.

1.2 The Chairman of Working Group 5B reported that in the course of three meetings Working Group 5B had considered the request of the IFRB to harmonize the English, French and Spanish versions of RR 2613 (Article 29). A Drafting Group had been set up for that purpose. The Working Group had also taken up the European proposal for regulatory procedures concerning satellite sound broadcasting, but had decided to defer consideration of the matter for one week in order to have a better indication of the decision likely to be taken by Committee 4. The European proposal procedures for HDTV satellite broadcasting had also been considered but, once again, the matter had had to be deferred. A note had been transmitted to the Chairman of Committee 4, inviting him to take up those two issues as a matter of priority. A request had also been sent to the Working Group of the Plenary concerning power flux-density limits appearing in the procedure for HDTV satellite broadcasting.

1.3 The European, Australian and Luxembourg proposals on the broadcasting-satellite service in the 12 GHz band had been reviewed. In view of their similarity, the Working Group had decided to consider the first two proposals together and to treat the Luxembourg proposal separately. Canada had drawn attention to the need to protect the allocation plan in Region 2. Morocco, speaking on behalf of several African countries, had stated that the Geneva 1977 Plan should be revised. At the end of the debate, Luxembourg had raised the possibility of endorsing the European/Australian proposal provided some new ideas were included. Sub-Working Group 5B1 had been set up for that purpose.

1.4 The Chairman of Working Group 5C said that fairly good progress had been made in the course of four meetings. With regard to Article 1, the Working Group had agreed, subject to decisions to be taken by Committee 4, to add two new definitions and to modify several others. A large majority had been in favour of the definition of the inter-satellite service, although Saudi Arabia, Brazil, Canada and the Russian Federation had raised objections. The Canadian proposal for a new definition of the space-communications service had received no support; neither had two proposals relating to Articles 61 and 69.

1.5 Various proposals based on Resolutions Nos. 8 and 9 of WARC-79, including one from Morocco, had been submitted on the implementation of changes in the allocation to broadcasting services in the HF bands. The report of the IFRB in Document 33 had been discussed in that connection. Sub-Working Group 5C1 had been set up to examine the relevant proposals by the United States, Europe, Cuba, Japan, Mali and Morocco.

1.6 Two proposals concerning the convening of a regional planning conference for digital sound broadcasting had been introduced and some preliminary reactions heard.

1.7 The Chairman thanked the Chairmen of the Working Groups for their reports and noted that good progress had been made.

2. Consideration of the IFRB information paper on the implementation of Resolution No. 9 (Nice, 1989) (Documents 4, 5 + Add.1+2, 12, 40, 44, 51(Add.1), 62, 79, 94, 101, 117, 120

2.1 The Member of the IFRB said that in Addendum 2 to Document 5 he had endeavoured to present additional information to the Committee explaining why the Board had been unable to follow the provisions of Resolution No. 9 to the letter. Upon analysing the actions it had taken under Resolution No. 325 (Mob-87) for the maritime mobile services, the Board had realized that it would not be suitable for application to the aeronautical mobile (OR) service since it applied essentially to new channels for which there was no comparable situation under Appendix 26. The procedure of Article 16 was complex and time-consuming,

whereas that of Article 12 was relatively simple and could serve as a basis for updating the Plan in Appendix 26. Furthermore, the time and resource constraints placed upon the Board had also to be taken into consideration.

2.2 After studying the actual utilization of the exclusive bands covered by Appendix 26 and comparing it with the allotments, the Board had concluded that the major objective of providing allotments to all countries would be better served by the new approach. A crucial element in that respect was the lack of the sort of information that would allow the procedures followed under Resolution No. 325 to be applied to Resolution No. 9. Moreover, about 40 per cent of approximately 17,000 assignments in the Master Register did not correspond to primary allotments.

2.3 The Board had realized that it needed to consult Administrations and had submitted a document to the Administrative Council in 1990 describing the proposed approach. In the course of the debate objections had been raised by one Administration, after which the Council had noted the new approach. A fuller description had then been sent to all Administrations in IFRB Circular-letter No. 823, setting a time-limit for comments. Replies had been received from 25 Administrations: one had expressed disagreement, others had agreed subject to clarifications. Six Administrations had suggested modifications to the channelling arrangement, which had been incorporated. Paragraphs 9-11 of Addendum 2 contained details concerning Administrations with or without assignments, new requests and enquiries about the procedure for future requirements. In conclusion, he felt that the proposals met the major objectives of Resolution No. 9 even if they did not strictly abide by it.

2.4 The Chairman invited delegates to introduce any new proposals relevant to the issue under discussion.

2.5 The delegate of Israel, introducing Addendum 1 to Document 51, called upon the Committee to add the three new frequencies required by Israel to the plan contained in the IFRB report.

2.6 The delegate of Argentina, introducing Document 79, said that the plan prepared by the IFRB seemed satisfactory from the point of view of deadlines and dates. However, since the dates extended over a period of nearly six years, Argentina suggested that the new plan be introduced by stages in order to reduce the probability of conflicts during the changeover.

2.7 The delegate of Côte d'Ivoire, introducing Document 94, said that his country was of the opinion that Appendix 26 should include all existing allotments as well as assignments recorded in the Master Register. It had to be borne in mind that many Administrations, including his own, had been unable to respond in time to the Board's Circular-letter No. 823. Côte d'Ivoire therefore requested the Committee to restore its previous frequency allotments to the proposed new Appendix 26.

2.8 The delegate of Turkey, introducing Document 101, pointed out that the plan adopted in 1959 was now outdated and called upon the Committee to approve Turkey's urgent requirements for OR channels as set forth in Addendum 1 to Document 5.

2.9 The delegate of Canada, introducing Document 120, said that it was the duty of the present Conference to provide the IFRB with adequate resources and appropriate guidelines for carrying out the mission entrusted to it by the Nice Plenipotentiary Conference. To that end it might prove necessary to revise the provisions of Resolution No. 9. At the heart of Canada's concern was the possibility that the plan proposed by the Board might not fulfil the purpose of preventing interference between user Administrations. He appealed to the Committee to do its utmost to enable the IFRB to develop the most effective possible plan.

2.10 The delegate of the Islamic Republic of Iran considered that the IFRB approach, which was based on assignments recorded in the Master International Frequency Register, was not in conformity with the provisions of Resolution No. 9 of the Nice Plenipotentiary Conference. Instead, he proposed that the allotments in Appendix 26, which his country had had since 1959, should be taken into account, referring to paragraph 3 of "instructs the IFRB" of the Resolution to support his argument.

2.11 Furthermore, he questioned the IFRB's interpretation of Appendix 26 and Article 12 of the Radio Regulations. Quoting from RR 1214, he pointed out that there was no explicit instruction concerning registration procedures for the aeronautical-mobile service, which might explain why many countries had failed to record their assignments in the MIFR.

2.12 The Member of the IFRB replied that the interpretation of RR 1214 had never given rise to such problems in the past. He referred the delegate of the Islamic Republic of Iran to RR 1343 - 1349 which amply demonstrated that Article 12 was, and always had been, applicable to the aeronautical mobile (OR) service.

2.13 The delegate of Morocco, while appreciating the efforts and good intentions of the IFRB, considered that it had adopted the wrong approach, since when establishing its procedure it had failed to take account of the legal status of Appendix 26. It had been on those grounds that his Delegation had objected to the endorsement of the proposed procedure at the last session of the Administrative Council; moreover, to his recollection, his had not been the only Delegation to express reservations in that respect.

2.14 As instructed by the Plenipotentiary Conference, the IFRB had prepared a channelling arrangement, set out in Document 5, which, with the incorporation of the modifications proposed by Administrations, he found satisfactory. Nevertheless, he suggested that it should be submitted to the Working Group of the Plenary for discussion.

2.15 As a result of the procedure to replace allotments in Appendix 26 by single-sideband carrier frequencies, those Administrations which had not notified assignments had lost their allotments. So as to remedy the situation, he proposed an alternative, simplified and economical procedure consisting of three steps, the details of which would appear in Document 124. First and foremost, the IFRB should create new single-sideband allotments for each double sideband. Secondly, in accordance with the priorities listed in the Annex to Resolution No. 325 (Mob-87), allotments should be given to Administrations which to date had no allotments in Appendix 26. Given the additional spectrum provided by the use of single sideband emissions, the second step should not present any particular technical problems. As a third step, a second allotment should be created for those Administrations with two assignments in a primary allotment. Lastly, the IFRB, in consultation with the Delegations concerned, should find a means of satisfying Administrations' more urgent requirements. He concluded by endorsing the delegate of Canada's remarks concerning the need to provide the IFRB with appropriate guidelines and adequate funding. With regard to the former, he suggested that Document 124 might serve as a basis. As for the latter, he considered that a less costly solution might be found.

2.16 The Chairman observed that unless the Committee could agree to the approach proposed by the IFRB, with the necessary modifications, the IFRB would be obliged to review the entire procedure. It had been recognized that the instructions of the Plenipotentiary Conference had not been followed to the letter, but the IFRB had justified the pragmatic approach proposed. He urged delegates to consider the practical consequences of postponing the implementation of the new allotment plan.

2.17 The delegate of Morocco recalled that Nice Resolution No. 9 envisaged the implementation of the improved use of Appendix 26 by 31 December 1992. He was confident that the procedure which he had outlined earlier and which would be described in Document 124 could be completed by that date or within the ensuing three to six months. Nonetheless, the IFRB should consult Administrations in the meantime with a view to satisfying their urgent requirements.

2.18 The delegate of Malaysia supported the adoption of the IFRB approach since his Administration was among those which had requested the inclusion of an allotment subsequent to the publication of IFRB Circular-letter No. 883. He was therefore anxious that the present Conference should satisfy his Administration's requirements through the establishment of a plan-updating procedure.

2.19 The delegate of Israel considered that there should be no further delay of the plan-updating procedure and that the interim work should be completed before 31 December 1992.

2.20 The delegate of Canada said it was probable that not all of the 36 Administrations listed in Addendum 2 to Document 5 as currently having no allotments or assignments needed them urgently. However, he suggested that those with urgent requirements should be allowed to notify and make use of their assignments while the Board reviewed the technical basis of Appendix 26.

2.21 The delegate of the Islamic Republic of Iran favoured a complete review of the procedure proposed by the IFRB, adding that each Administration should have the opportunity to notify frequencies used and ensure their incorporation in Appendix 26.

2.22 The delegate of Zambia endorsed the views expressed by the delegates of Morocco and Canada on the need to review certain aspects of Appendix 26 in order to give Administrations the opportunity to notify their assignments.

2.23 The delegate of Algeria acknowledged that the procedure proposed by the IFRB did not correspond exactly to the provisions of Resolution No. 9. Nonetheless, he considered it an entirely satisfactory and justifiable solution and had no hesitation in giving it his full support.

2.24 The delegate of the Netherlands, speaking on behalf of the CEPT countries, said that he supported the adoption of the IFRB procedure proposed. The draft modifications to Article 12 and Appendix 26 as well as the dates for the implementation of the action proposed and the frequency allotment plan based on the IFRB approach were acceptable.

2.25 The delegate of Germany also supported the adoption of the IFRB approach, particularly since the financial and practical implications of the procedure proposed by the delegates of Morocco and Canada were far from clear.

2.26 The delegate of Australia endorsed the comments by the delegates of Germany and the Netherlands. He agreed to the adoption of the IFRB approach, on the understanding that remaining problem areas would be discussed at working group level. He was satisfied with the solution worked out by the IFRB in the face of the budgetary restrictions imposed by the Plenipotentiary Conference and the technical difficulties in meeting the requirements of Resolution No. 9.

2.27 Replying to a question by the delegate of Côte d'Ivoire, the Member of the IFRB confirmed that if the Conference were to adopt the procedure proposed by the IFRB, notices submitted subsequently would be considered in the light of the Plan adopted by the present Conference. With regard to those Administrations which had requested additional entries in the Plan, he suggested that, once at working group level, the appropriate section of Article 12 relating to the aeronautical mobile (OR) band could be amended to provide for the simultaneous recording of assignments in the Master Register and updating of the Plan, along the lines of the solution adopted at a previous regional conference.

2.28 The Chairman urged the Committee to seek a compromise solution which was less radical than a complete review of the proposed IFRB procedure, given the financial and practical implications, particularly for those Administrations with no allotments in either the old Appendix 26 or the proposed new version but with urgent requirements to be satisfied. He suggested that the meeting should be suspended and resumed later, in order to give participants an opportunity to consider their respective positions, taking into account all the views expressed and in particular the Member of the IFRB's suggestion concerning a possible procedure for updating the Plan.

2.29 It was so agreed.

The meeting was suspended at 1240 hours and resumed at 1505 hours.

2.30 The Member of the IFRB, referring to the informal discussions held during the suspension about the IFRB's compromise proposals, said that it would be possible to add a few allotments to the Plan at the current Conference, but that the number would be restricted by technical considerations.

2.31 The delegate of Canada reiterated his Delegation's support for the compromise approach; the few difficulties which subsisted could be addressed at working group level.

2.32 The delegate of the Islamic Republic of Iran said that, although his Delegation did not oppose the IFRB's proposals, it was concerned that draft Appendix 26(Rev.92) seemed to show fewer allotments for his Administration than the old Appendix 26, and requested the Board's confirmation that the original number would be retained, since all the previous allotments had already been assigned. Neither was it clear why the Board had taken the Master International Frequency Register as a basis for the calculations.

2.33 The delegate of Israel supported the IFRB's proposals; his Administration hoped that its requirements would be satisfied through the plan-updating procedure mentioned in paragraph 11 of Addendum 2 to Document 5.

2.34 The delegate of Morocco, referring to the concern voiced by the Delegation of the Islamic Republic of Iran, said that there was no need to notify assignments: the allotments in the Plan, having been recorded in the Master Register, must be protected whether notified or not. The Conference, in considering the highly important issues before it, must take care to uphold the Union's tradition of safeguarding the interests of all Members, both present and absent.

2.35 Resolution No. 9 (Nice, 1989) did not request the current Conference to adopt a Plan or to revise the one covered by Appendix 26; it requested the IFRB to prepare means to improve the use of Appendix 26. It would be for the next Plenipotentiary Conference to decide whether or not to convene a WARC to revise that Appendix. Even if the current Conference had been so mandated, Committee 5 was not empowered to take decisions bearing solely on a limited number of requirements.

2.36 One reason given for not applying Resolution No. 9 was that Resolution No. 325 (Mob-87) called for information - on traffic, for example - which was not available to the Board; but traffic such as that relating to the aeronautical mobile (OR) service was not communicated to the Board in any case.

2.37 A cautious approach should also be taken to the idea of modifying Article 12 with a view to modifying the Plan after the Conference. For the latter purpose, the current Conference must decide whether it was empowered firstly to revise Appendix 26 and secondly to adopt a new Article to revise the Plan.

2.38 For the foregoing reasons, his Administration wished to have its reservations recorded in Committee 5's report to the Plenary.

2.39 The delegates of Turkey, Ireland and Algeria said that they could support the IFRB's compromise proposals.

2.40 The delegate of Cuba, referring to Addendum 1 to Document 5, said that the procedure outlined in 26/5.2 contravened the provisions of Resolution No. 1 of the Radio Regulations on a matter of substance.

2.41 The Member of the IFRB said that the Cuban Delegation's observation was correct; perhaps the matter could be taken up at working group level with a view to producing a satisfactory text.

2.42 The Chairman agreed. Summing up the discussion, he noted that the IFRB's compromise approach appeared to have general support, one Delegation having expressed opposition. Accordingly, he took it that the debate on the principle was concluded, and that Working Group 5B could begin at once to consider the subject in detail, including the question of whether an updating procedure was needed.

2.43 It was so agreed.

The meeting rose at 1545 hours.

The Secretary:

J. LEWIS

The Chairman:

E. GEORGE

PLENARY MEETING

Note by the Secretary-General

TRANSFER OF POWERS

PRINCIPALITY OF LIECHTENSTEIN - CONFEDERATION OF SWITZERLAND

The Government of the Principality of Liechtenstein has informed me that it cannot send a delegation to the Conference.

In pursuance of 391 of the Convention, it has given the delegation of the Confederation of Switzerland powers to represent it.

The instrument for the transfer of powers has been deposited with the Secretariat of the Credentials Committee. Committee 2 at its first meeting has examined this instrument and has found it to be in order.

Pekka TARJANNE
Secretary-General

COMMITTEE 4

Belgium and Luxembourg

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 2.2.8

The Administrations of Belgium and the Grand Duchy of Luxembourg propose the following amendment to No. 797B of the Radio Regulations:

BEL/LUX/115/1

MOD

797B

Mob-87

Additional allocations: in the Federal Republic of Germany, Austria, Belgium, Denmark, Spain, France, Finland, Israel, Italy, Jordan, Luxembourg, Morocco, Norway, the Netherlands, Pakistan, the United Kingdom, Sweden, Switzerland, Syria and Tunisia, the band 5 150 - 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to the agreement obtained under the procedure set forth in Article 14.

Reasons: To include Belgium and Luxembourg in Footnote 797B of the Radio Regulations.

COMMITTEE 5

NOTE BY THE CHAIRMAN OF COMMITTEE 4
TO THE CHAIRMAN OF COMMITTEE 5

The considerations of the extensions of the allocations to the HF broadcasting services are highly dependent on the accompanying measures intended to safeguard the interests of the existing non-broadcasting services. Some delegations indicated that they are unable to continue any consideration of the allocations unless they have a clear idea about the transfer procedures and/or other measures intended to safeguard the interest of the existing services.

In view of the above, Committee 5 is requested to give its utmost priority to the subjects dealing with transfer procedures in the HF bands and/or appropriate other measures in this connection.

Nevertheless, Committee 4 will continue to make progress in these matters as quickly as possible.

I. HUTCHINGS
Chairman of Committee 4

In the Name of God,
the compassionate, the merciful

The Islamic Republic of Iran

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 2.4 of the WARC-92

Introduction

In accordance with Resolution No. 9 (PL-B/2) of the Plenipotentiary Conference (Nice 1989) concerning the improvement of use by the aeronautical mobile (OR) service of the frequency bands governed by Appendix 26 to the Radio Regulations, the IFRB was given instructions to prepare a draft channelling arrangement for the frequency bands allocated to the aeronautical mobile (OR) service using the criteria adopted in this respect for the aeronautical mobile (R) service in Appendix 27.

In accordance with the IFRB report to the Conference, the IFRB decided to adopt a simplified approach and by applying that approach, the IFRB prepared draft Appendix 26(Rev.92).

Views of the Islamic Republic of Iran

The IFRB approach is based on the assignments recorded in the Master International Frequency Register (MIFR) which is not in conformity with the instructions given by Resolution No. 9 (PL-B/2). The allotments of each country in Appendix 26 of the Radio Regulations should be taken into account instead of their assignments in the MIFR.

Paragraph 3 of "instructs the IFRB" clearly instructs the IFRB to propose to each administration concerned, single-sideband carrier frequencies intended to replace its allotment(s) in Appendix 26 and as it could be observed, there is no mentioning of recorded assignments of administrations in this Resolution. Appendix 26 adopted by the Administrative Radio Conference (Geneva 1959) shows the allotment(s) of each country with precise frequency and name of its corresponding country. Adopting such a procedure by the IFRB is neither in conformity with Plenipotentiary Conference instructions to this organ nor is it in favour of the Member countries.

In conclusion, the Islamic Republic of Iran proposes that the IFRB pursue the instructions outlined by Resolution No. 9 of the Nice Plenipotentiary Conference in order to preserve the rights of Member countries.

PLENARY MEETING

Note by the Secretary-General

TRANSFER OF POWERS

Lebanon - Kingdom of Morocco

The Delegation of Lebanon announced that it had to leave the Conference on 7 February 1992.

Pursuant to No. 392 of the Convention of Nairobi (1982), the Delegation of Lebanon has given to the Delegation of the Kingdom of Morocco a mandate to exercise its vote at the present Conference.

Pekka TARJANNE
Secretary General

COMMITTEE 4

Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Mauritania, Morocco, Oman,
Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen

THE USE OF THE BAND 2 500 - 2 690 MHz

Introduction

In 1985, the first Arab satellite, ARABSAT 1A, was launched to provide telecommunications and TV services to the Arab world community.

ARABSAT 1A, followed in orbit by ARABSAT 1B, and ARABSAT 1C scheduled for launch this month, all have TV broadcasting facilities in the above-mentioned band.

ARABSAT second generation satellites are also designed to include four TV broadcasting channels in this band, which will extend the usable existing bandwidth to 150 MHz. These frequencies are in the process of coordination and notification.

BSS in this band is limited in all three regions to national and regional systems for community reception by Footnote 757, but requires the application of Article 14 and Resolution No. 33 procedures to obtain legal recognition and be registered by the IFRB.

Many developing countries may have similar requirement for providing TV BSS in this band. Thus, it is the view of our Administrations that this service should be maintained without further restrictions that could be imposed by allowing new services to share this band on equal primary status.

It should be noted that small terminals intended to receive satellite TV broadcasting, sound broadcasting or mobile-satellite services are subjected to severe interference if operated with no sufficient frequency and spatial separation, thus raising difficulty in sharing conditions.

The CCIR Report to this Conference did not provide a guidance for a possible sharing criteria between BSS and candidate services in this band.

In conclusion, we submit the following proposal:

ARB/119/1

Any proposed new allocation to services other than those to which the band 2 500 - 2 690 MHz is allocated shall be subject to a sharing criteria agreed upon by this Conference, and that duly protection shall be provided to existing services in this band.

WORKING GROUP 5B

Canada

NOTES ON APPENDIX ITEM 2.4

APPENDIX 26

References:

- A. Plenipotentiary Resolution No. 9 (Nice 1989)
- B. IFRB Circular-letter No. 823 of 15 June 1990
- C. IFRB Circular-letter No. 858 of 11 March 1991
- D. IFRB Circular-letter No. 883 of 18 October 1991

Background

1. Resolution No. 9 (Nice 1989) was adopted because:
 - a) the Aeronautical Mobile (OR) Allotment Plan contained in Appendix 26 was adopted in 1959. Since that time many additional Members have joined the ITU but have no allotments in the Plan, and
 - b) Appendix 26 does not provide for efficient use of the spectrum because it fails to accommodate modern technology.
2. The 1989 Plenipotentiary Conference recognized that:
 - a) WARC-79 adopted technical principles for the Aeronautical Mobile (R) Allotment Plan contained in Appendix 27 service which could easily be applied to the (OR) service; and
 - b) the actions required to update Appendix 26 are very similar to those in Resolution No. 325 (Mob-87).
3. The Nice Plenipotentiary Conference (1989), therefore, instructed the IFRB to:
 - a) propose to administrations a new channelling arrangement based on the criteria adopted in Appendix 27, and
 - b) apply the procedures outlined in Resolution No. 325 (Mob-87) and Article 16 commencing with the requirements of those administrations which do not, currently, appear in Appendix 26.
4. The Nice Plenipotentiary Conference resolved that the transfer date to the new allotments would be 15 December 1992.

Current Plan

5. The current plan:
- a) has served many administrations well but does not make the most efficient possible use of the spectrum because it does not take modern technology into account;
 - b) contains primary and secondary allotments based on the need to maintain protection levels. Thus it provides allotments to a given administration which are co-primary with some administrations but which are secondary to other, neighbouring administrations.

The draft channelling arrangement produced by the IFRB

6. The revised channelling arrangement, proposed at Reference D:
- a) is based upon notified assignments rather than on the agreed allotments in the current Plan. This raises the danger that administrations might notify unnecessary assignments in order to ensure that an allotment is available for future use. Such action would deprive other administrations the use of their allotments;
 - b) does not indicate, clearly, the relationship between the new (3 kHz) channels and the channels in the current Plan;
 - c) removes the distinction between primary and secondary status and, therefore, removes the protection for users; and
 - d) fails to indicate how the principles of Resolution No. 325 are applied in order to ensure an orderly migration to the draft channelling arrangement.

Implementation dates

7. The implementation date of 15 December 1992 for the new allotments and for changes to Article 12 does not allow the IFRB sufficient time to develop a fully acceptable channelling arrangement and to apply the provisions of Resolution No. 325. This limited time frame may, in itself, create problems because it removes the primary/secondary status before it implements all other changes.

Other factors

8. Canada made these views known to the Board in 1991 but, because most Members, evidently, did not object to the Board's plans, the Board ignored Canada's remarks.
9. It is now clear, from interventions at this Conference, that other administrations share at least some of Canada's concerns with the Board's proposed revision to Appendix 26.

Recommendations

10. WARC-92 should not approve the IFRB's draft channelling arrangement, as currently formulated, because:
- a) it deprives some administrations of their approved allotments (because there is not yet a notified assignment on that channel);
 - b) the protection for established users afforded by the use of the primary/secondary status has been lost;
 - c) it is not clear how Resolution No. 325 is being implemented for Members wishing to be included in the Plan, and
 - d) the implementation date should be the same for all administrations as was the case with Appendix 27 (Aer2) - probably five years after this WARC (sometime in 1997).

Conclusions

11. It is agreed that the Board has done part of the work assigned by the Plenipotentiary Conference (Nice 1989), but a way must be found to complete the work in full accordance with those instructions.
12. Recognizing that the Board has very limited resources, WARC-92 should:
 - a) approve the revised channelling arrangement subject to the following work being undertaken:
 - 1) apply agreed technical standards for each allotment, and
 - 2) take into consideration the two basic approaches to developing an acceptable Allotment Plan as outlined in Annex 1,
 - b) recommend to the Administrative Council, revised dates for the completion of the IFRB's work and a time-scale for the implementation of the Plan, and
 - c) recommend to the Administrative Council that additional resources be identified to enable the Board to accomplish these additional tasks. Perhaps some of the funds identified in Document 47, which are available for post conference work for WARC-92, could be utilized.

Annex: 1

ANNEX 1

1. There appear to be two basic approaches to developing an acceptable Allotment Plan:
 - a) bandwidth based:
 - 1) allot the "new" channels to administrations not currently in the Plan, then
 - 2) allot the same bandwidth as provided in the existing Plan (in the form of revised/new channels) to administrations currently in the Plan, and then
 - 3) provide allotments for administrations whose current allotments are inadequate, or
 - b) channel based:
 - 1) allot the "new" channels to administrations not currently in the Plan, then
 - 2) allot one revised/new channel (3 kHz) for each "old" (6+ kHz) channel in the current Plan to administrations currently in the Plan, and then
 - 3) provide allotments for administrations whose current allotments are inadequate.
-

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

WORKING GROUP TO THE PLENARY

NOTE BY THE CHAIRMAN OF COMMITTEE 5
TO THE CHAIRMAN OF THE WORKING GROUP TO THE PLENARY

The consideration of the regulatory procedures to apply to the broadcasting-satellite service (sound) and the broadcasting-satellite service (HDTV) (see items 2.2.3a and 2.2.3b of the agenda of the Conference) is proceeding in Working Group 5B. In Section III of the annex to proposal EUR/20/59, possible limiting values of power-flux density are indicated. The Working Group to the Plenary is requested to consider the matter and to either confirm these values or provide new ones.

It is requested that priority be given to dealing with this matter.

E. GEORGE
Chairman of Committee 5

COMMITTEE 4

NOTE BY THE CHAIRMAN OF COMMITTEE 5
TO THE CHAIRMAN OF COMMITTEE 4

The consideration of the regulatory procedures to apply to the broadcasting-satellite service (sound) and the broadcasting-satellite service (HDTV) (see items 2.2.3a and 2.2.3b of the agenda of the Conference) is proceeding in Working Group 5B. Some delegations indicated that they are unable to continue detailed consideration of these procedures until they have a clearer idea about the allocations being established for these services.

In view of the above, Committee 4 is requested to give its utmost priority to dealing with the allocations to the broadcasting-satellite service (sound) and broadcasting-satellite service (HDTV).

Nevertheless, Committee 5 will continue to make progress in these matters as quickly as possible.

E. GEORGE
Chairman of Committee 5

COMMITTEE 5

Kingdom of Morocco

SIMPLIFIED PROCEDURE FOR THE REPLACEMENT OF
FREQUENCY ASSIGNMENTS IN THE HF BANDS

This administration has reviewed the various proposals in relation to frequency assignments to stations of the fixed and mobile services in the HF bands, recorded in the Master Register, which are to be transferred from the portions of the spectrum allocated to new services to other portions of the spectrum. In this review the report of the IFRB contained in document 33 of the Conference was of the utmost importance since it demonstrates:

- that any procedure adopted in respect to these transfers has to use a data base (the MIFR) which does not reflect the actual use of the HF bands and, to be realistic, such a procedure should contain efficient measures to improve this data base;
- that the application of the procedures contained in Resolutions 8 and 9 are very complex and resulted generally in negative results, more simple procedures are recommended.

In order to develop procedures which satisfy the above recommendations, this administration proposes the following simplified procedure based on actions for the improvements of the data base and on the RR1218 procedure. It is presented in a schematic form to facilitate their consideration; it requires more development if the Conference accepts its main steps as described below:

step 1

Prohibition of use of the reallocated bands: administrations shall be urged to no longer notify any frequency assignment to stations of the fixed and mobile services in the reallocated bands as of a date to be fixed by the Conference and the IFRB shall be instructed to return such notices to the notifying administrations .

Step 2

Immediate action by the IFRB: with the view to improve its data base, the IFRB shall delete from the Master Register any class A assignment for an international link for which other means of telecommunication exist; such measure shall not be applied in respect of these assignments in cases where the IFRB, in consultation with the administration concerned, reaches the conclusion that these telecommunication means do not exist or are not appropriate for the service required.

Step 3

Further improvement of the data base: the IFRB shall undertake a detailed study of recorded assignments and report the results of its study to the forthcoming radiocommunication conference, together with its recommended action

Step 4

Modification of frequency assignments: following action decided by the above radiocommunication conference, the Board shall request administrations having class

A assignments in the reallocated bands to review the need for such assignments and either delete them or modify their class of operation or, if they are still considered necessary notify them again under RR1218.

Step 5

Transfer of class A assignments:

- class A assignments notified to the IFRB under step 4 shall be treated in accordance with the procedure RR1218 and the provisions of Resolution No.103;
- classes B and C assignments shall be transferred following their examination in accordance with the relevant provisions of Article 12.

This administration proposes that the action described in step 3 should be carried out on a regular basis. It would therefore be necessary to recommend to the Additional Plenipotentiary Conference (APP-92) to be held in December 1992 to include the review of the IFRB report on this matter as a permanent duty of the radiocommunication conference, should the periodical radioconference be instituted as recommended by the High level Committee.

COMMITTEE 5

Kingdom of Morocco

APPENDIX 26

1. The Moroccan Administration noted in the IFRB report that "the Board decided to adopt a simplified approach which could meet the objectives of Resolution No. 9 ..." (Document 4, paragraph 7.2); no other details are given in respect to the simplified approach. The Conference was not formally informed of the details of the procedure applied by the IFRB in relation to the application of Resolution No. 9 of the Plenipotentiary Conference (Nice, 1989). It would be necessary for the IFRB to publish as a Conference document the material published in its circular-letter in order to record it as a formal document of the Conference.

2. The only information available to the delegates in respect to the simplified approach was an oral reply by a member of the Board indicating that the method applied by the Board consisted in creating allotments on the basis of assignments recorded in the Master Register, not on the basis of the allotments appearing in Appendix 26. The Administration of Morocco does not consider this approach as meeting the objectives of Resolution No. 9.

3. The present Appendix 26 contains primary allotments and secondary allotments in channels of 6 kHz spacing. Differences in the respective status of primary and secondary allotments may be derived from the provisions of Appendix 26 and from RR 1346 of Article 12 of the Radio Regulations. Some Administrations have, in accordance with the provisions of Appendix 26 used two single-sideband assignments and/or other telegraphic assignments. The Plenipotentiary Conference recognized the urgency for action in order to include in Appendix 26 allotments for countries having no allotment therein without waiting for the convening of a competent planning conference and adopted in this regard its Resolution No. 9 reproduced in an annex to this document. The Plenipotentiary Conference limited the action of its Resolution No. 9 to "an improvement of the use by the aeronautical mobile (OR) service of the frequency bands governed by Appendix 26 to the Radio Regulations" leaving to a competent administrative radioconference to revise Appendix 29 (see **recommends** of Resolution No. 9). Therefore action required by Resolution No. 9 consists of:

- 1) preparing a draft channelling arrangement for the frequency bands allocated to the aeronautical mobile (OR) service contained in Appendix 26 using the criteria adopted in this respect for the aeronautical mobile (R) service in Appendix 27;

Document 5 of the Conference contains the draft channelling arrangement which should be considered by the Working Group of the Plenary.

- 2) obtaining the views of all Administrations on the proposed channelling arrangement and to modify it in accordance with their comment to the extent practicable;

In accordance with the IFRB Report to the Conference, Administrations have been consulted; the views given by Administrations should be considered by the Working Group of the Plenary when reviewing the draft channel arrangement.

- 3) proposing to each Administration concerned single-sideband carrier frequencies intended to replace its allotment(s) in Appendix 26, with the minimum necessary frequency shift resulting from the new channelling arrangement, and to obtain its agreement to the proposed frequencies;

Here the reported action by the IFRB departs from the instructions given in this item since instead of proposing SSB carriers to replace allotments with their respective status of primary or secondary, it proposed SSB carriers to replace assignments recorded in the Master Register. As a result of this action:

- Administrations having notified two SSB assignments in a primary or secondary allotment benefited of two new allotments;
- Administrations with one or two assignments notified on a secondary allotment have now one or two allotments on equal footing with primary allotments;
- allotments for which Administrations have not notified assignments are lost.

The Moroccan Administration can in no way accept this "simplified approach", proposed action by this Administration intended to correct this situation is indicated in paragraph 4 below.

- 4) to inform Administrations at an appropriate date of the need for them to transfer their operating stations to the new allotted channels on the date indicated under **resolves**;

Considering the need to revise the results obtained by the IFRB, the Conference has to consider if it is appropriate to maintain this date or to replace it by another date.

- 5) to apply the procedures outlined in the annex to Resolution No. 325 (Mob-87) and in Article 16 of the Radio Regulations commencing with the requirement of those Administrations which do not appear in Appendix 26;

Here also, the reported action by the IFRB departs from the instructions given in this item since the priorities indicated in Resolution No. 325 (Mob-87) have not been applied; proposed action by this Administration intended to correct this situation is indicated in paragraph 4 below.

- 6) to prepare for consideration by the WARC-92 the minimum modification of Article 12 of the Radio Regulations to take account of the above actions.

The modifications proposed by the IFRB in Document 5 are based on its simplified approach; should the Conference accept action proposed in paragraph 4 below, the IFRB should be requested to prepare a revised set of modifications in accordance with the Conference decisions.

4. Assuming that the Conference adopts the draft channelling arrangement prepared by the IFRB, the Moroccan Administration proposes the following steps to be applied by the IFRB immediately after this Conference.

Step 1

Replace each 6 kHz primary allotment by a 3 kHz primary allotment (irrespective of the number of assignments derived from it) and consult Administrations on which of the two new allotments (upper or lower) it prefers for replacing its present allotment; an Administration having more than one assignment in its present allotment should be requested to indicate which of these assignments shall be associated with its new allotment.

Step 2

In this second step, allotments should be given to Administrations having no allotment in Appendix 26 and allotments should be identified for those assignments derived from a primary allotment not yet covered by new allotments and for secondary allotments in use. To this effect, the priorities specified in section 4 of the annex to Resolution No. 325 (Mob-87) shall be used with appropriate modifications proposed hereafter to take account of the specific character of Appendix 26. In addition, taking account of the additional capacity derived from the use of SSB transmissions, secondary allotments which can be transferred without being capable of causing harmful interference to allotments previously transferred shall be considered as primary allotments, so that the new arrangement of allotments should no longer contain secondary allotments.

In accordance with the above and following the transfers made within Step 1, the IFRB shall include the following order:

- a) allotments for requirements of Administrations having no allotment in Appendix 26; should the Board consider that such requirements communicated by an Administration exceed the average number of primary allotments to similar countries it shall, in consultation with this Administration reduce these requirements to a reasonable number;
- b) allotments to cover those assignments derived from a primary allotment, which were not taken into account in Step 1 and which satisfied the conditions specified in Appendix 26 (Parts III and IV) and RR 1347;
- c) allotments to cover assignments derived from a secondary allotment of Appendix 26 which satisfied the conditions specified in Appendix 26 (Part III, Section II, paragraph 4, sub-paragraph d) and Part IV);
- d) allotments to cover assignments derived from a primary or a secondary allotment of Appendix 26 which have not satisfied the conditions indicated in items b) and c) above;
- e) allotments corresponding to secondary allotments of Appendix 26 for which no assignment has been notified, and for additional requirements.

It is assumed that the transfer of allotments in accordance with Step 1 and the addition of new allotments in accordance with item a) of Step 2 should lead to no incompatibility cases. Should the remaining items of Step 2 result in an incompatibility following the application of the IFRB Technical Standards, the relevant provisions of Article 16 shall be applied.

Step 3

The IFRB shall consult Administrations on the result obtained and, if an Administration is not in agreement with the Board's results, the relevant provisions of Article 16 shall be applied.

5. The Delegation of Morocco apologizes to those Administrations having no allotments in Appendix 26 wishing to benefit as soon as possible from new allotments. We consider it of utmost importance that the sovereign right of countries be safeguarded even if the action by the IFRB is based on the good intent to serve efficiently the interests of the Members of the Union. Should the Conference decide to postpone the date foreseen in **resolves** of Resolution No. 9, this Administration proposes that the IFRB be instructed to take action it deems necessary to satisfy, on an interim basis, the urgent requirements of these Administrations.

Annex: 1

ANNEX

RESOLUTION No. 9

**Improvement of Use by the Aeronautical Mobile (OR)
Service of the Frequency Bands Governed by
Appendix 26 to the Radio Regulations**

The Plenipotentiary Conference of the International Telecommunication Union (Nice, 1989),
considering

- a) that the Frequency Allotment Plan for the aeronautical mobile service prepared by the International Administrative Aeronautical Radio Conference (Geneva, 1949) and adopted by the Extraordinary Administrative Radio Conference (Geneva, 1951) was substantially adopted by the Administrative Radio Conference (Geneva, 1959) and included in the Radio Regulations as Appendix 26;
- b) that the Extraordinary Administrative Radio Conference (Geneva, 1966) adopted a separate Plan for the aeronautical mobile (R) service and decided to include this Plan in the Radio Regulations as Appendix 27;
- c) that the World Administrative Radio Conference on the Aeronautical Mobile (R) Service (Geneva, 1978), adopted technical principles for establishing the Frequency Allotment Plan for the aeronautical mobile (R) service, in particular the use of the 3 kHz separation between carrier frequencies for certain classes of emission and powers which can be directly applied in establishing the Allotment Plan for the aeronautical mobile (R) service;
- d) that the Allotment Plan for the aeronautical mobile (OR) service (Appendix 26) has not therefore been revised since the Administrative Radio Conference (Geneva, 1959);
- e) that, since 1959 many additional countries have become Members of the Union and therefore have no allotments in the Plan of Appendix 26;
- f) that the World Administrative Radio Conference (Geneva, 1979) adopted Resolution No. 403 relating to the use of the frequencies 3 023 and 5 680 kHz common to the aeronautical mobile (R) and (OR) services necessitating common characteristics between these mobile services for safety purposes,

recognizing

- 1. that the Plan for the aeronautical mobile (OR) service contained in Appendix 26 of the Radio Regulations requires appropriate adjustments with a view to using modern technology and making more efficient use of the spectrum;
- 2. that the programme of conferences and meetings to be held in the period preceding the next Plenipotentiary Conference does not permit the convening of a planning conference;
- 3. that, pending the convening of such a conference, there is a need for early action to improve use by the aeronautical mobile (OR) service of the frequency bands governed by Appendix 26;

4. that the action required by this Resolution is similar to that contained in Resolution No. 325 of the World Administrative Radio Conference Mob-87*, and that the IFRB should undertake the necessary action by a rearrangement of its internal work priorities without the need for additional resources,

instructs the IFRB

1. to prepare a draft channelling arrangement for the frequency bands allocated to the aeronautical mobile (OR) service contained in Appendix 26 using the criteria adopted in this respect for the aeronautical mobile (R) service in Appendix 27;
2. to obtain the views of all Administrations on the proposed channelling arrangement and to modify it in accordance with their comment to the extent practicable;
3. to propose to each Administration concerned single-sideband carrier frequencies intended to replace its allotment(s) in Appendix 26, with the minimum necessary frequency shift resulting from the new channelling arrangement, and to obtain its agreement to the proposed frequencies;
4. to inform Administrations at an appropriate date of the need for them to transfer their operating stations to the new allotted channels on the date indicated under **resolves**;
5. to apply the procedures outlined in the annex to Resolution No. 325 (Mob-87) and in Article 16 of the Radio Regulations commencing with the requirement of those Administrations which do not appear in Appendix 26;
6. to prepare for consideration by the WARC-92 the minimum modification of Article 12 of the Radio Regulations to take account of the above actions,

resolves

that, at 0001 hours UTC on 15 December 1992 (subject to confirmation by WARC-92), Administrations shall change the transmitting frequencies of their operating stations in the aeronautical mobile (OR) service to the replacement frequencies resulting from the action taken in accordance with this Resolution,

recommends

that, when considering Recommendation No. 406** of the WARC-79, the next Plenipotentiary Conference should take account of the results of the action taken in accordance with this Resolution,

instructs the Administrative Council

to include in the agenda of the WARC to be held in 1992 the consideration of modifications to Article 12 of the Radio Regulations in order to take account of the actions taken as a result of this Resolution.

* Resolution No. 325 - "Use of Additional Channels Reserved for Duplex Radiotelephony in the HF Bands Allocated to the Maritime Mobile Services"

** Recommendation No. 406 - "Relating to the Revision of the Frequency Allotment Plan for the Aeronautical Mobile (OR) Service"

PLENARY MEETING

Note by the Secretary-General

TRANSFER OF POWERS

REPUBLIC OF LATVIA - REPUBLIC OF LITHUANIA

The Government of the Republic of Latvia has informed me that it cannot send a delegation to the Conference.

In pursuance of 391 of the Convention, it has given the Delegation of the Republic of Lithuania powers to represent it.

The instrument for the transfer of powers has been deposited with the Secretariat of the Credentials Committee.

Pekka TARJANNE
Secretary-General

People's Republic of Bangladesh

PROPOSAL FOR THE WORK OF THE CONFERENCE

Please note that the proposals BGD/126/44, BGD/126/45 and BGD/126/46 are cancelled and replaced by the following proposal:

BGD/126/47

MOD 757

The use of the band 2 500 - 2 690 MHz by the broadcasting-satellite service is limited to national and regional systems ~~for community reception~~ and such use shall be subject to agreement obtained under the procedure set forth in Article 14. The power flux-density at the Earth's surface shall not exceed the values given in Nos. 2561 to 2564.

This band can also be used for BSS (Sound) applications for operation of the broadcasting-satellite service.

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 4
COMMITTEE 5

People's Republic of Bangladesh

PROPOSALS FOR THE WORK OF THE CONFERENCE

1. In Agenda item 2.2.8, amend "Details are given in the annex" to read "No comments".
2. In Agenda item 2.4, read:
"The Bangladesh Administration is of the opinion that changeover time from the DSSB to SSB will be at least up to the year 2015. Details are given in the annex."

People's Republic of Bangladesh

PROPOSAL FOR THE CONFERENCE

Introduction

Telecommunications plays a vital role in the life of the people. It is a rapidly advancing and fast changing technology; the coming century is going to be a century of telecommunications. In that light, WARC-92 at Malaga-Torremolinos has greater importance than ever. Therefore it is generally accepted that to meet new demands it has become necessary to change the Table of Frequency Allocations.

In Bangladesh the frequency bands 1 - 3 GHz are widely used for fixed and mobile services. From the technical and economic viewpoints its uses in future will also be extensive for point-to-point and point-to-multipoint analogue and digital radio links. Bangladesh, like other developing countries, will use these bands extensively. Bangladesh, though a delta, is full of rivers and waterlogged areas, making it a calamity-prone area. Use of radio links is the only way to connect different areas of the country. Radio links have been established to connect the rural exchanges already, and further work is going on.

Bangladesh feels very much that under the changed circumstances the need to change the Table of Frequency Allocations is necessary, but is also concerned that due to the changes, if our interests are not protected then it will be very difficult to keep the services in order and peoples' hardship will increase. Bangladesh has confidence that WARC-92 will take into consideration all these points and ensure that developing nations, including Bangladesh, are not put into a situation difficult for them to tackle due to changes in the Table of Frequency Allocations.

The Conference mainly deals with frequency allocation of certain parts of the spectrum to update the Radio Regulations for advancement in telecommunications.

In consideration of the above points the views of the Bangladesh Administration are given in the following paragraphs:

Agenda item 2.2.1

Increasing spectrum requirement due to introduction of new services has made it necessary to update the Table of Frequency Allocations. The frequency above 20 GHz may be allocated to space services on a primary basis providing adequate protection to those existing in this band.

Agenda items 2.2.2, 2.2.3a, 2.2.3b and 2.2.4c

Details are given in the annex.

Agenda item 2.2.4a

May be set up from 1 - 3 GHz in Region 3. No change recommended in Radio Regulations.

Agenda item 2.2.4b

Details are given in the annex.

Agenda item 2.2.4d

BGD/126/1

The suggested bands, 137 - 138 MHz and 146 - 149.9 MHz for proposed LEO services, are being used extensively by the Bangladesh Administration. We recommend no change. Bangladesh suggests below 136 MHz and above 270 - 300 MHz for LEO services.

Agenda item 2.2.5

For fixed-satellite service the present band (14.5 - 14.8 GHz) is adequate.

BGD/126/2

The Bangladesh Administration is of the view that there should be no change in the Radio Regulations in this respect.

Agenda item 2.2.6

Viewpoints have been given in Agenda item 2.2.1.

BGD/126/3

Bangladesh suggests that WARC-92 may consider Resolutions for the examination of future space services in the bands 2 025 - 2 110 MHz and 2 200 - 2 290 MHz.

Agenda item 2.2.7

The band 1 610 - 1 626.5 MHz is primarily allocated to radiodetermination services as per the Radio Regulations.

BGD/126/4

No change is recommended in the Radio Regulations but can be used on a share-basis on new allocations.

Agenda item 2.2.8

Details are given in the annex.

Agenda item 2.3 - Certificate of maritime radio operators

BGD/126/5

The Bangladesh Administration is of the view that as per the SOLAS Convention for maintenance and operation of radio equipment at sea, a holder of a first- or second-class radio operator's certificate is essential and should continue.

Agenda item 2.4

The Bangladesh Administration is of the opinion that changeover time from the DSB system to SSB will be at least up to the year 2010. Details are given in the annex.

Agenda items 2.5 and 2.6 - Changes proposed to the Radio Regulations

These two items are to be decided upon at the Conference.

Agenda item 2.7

BGD/126/6

For the meteorological services, the band should remain as it is. No change recommended (for COSPAS/SARSAT the distress alerting system frequency is 402 - 406 MHz).

Agenda item 2.8

BGD/126/7

For the meteorological and earth exploration services, the frequency band 401 - 403 MHz may remain as it is. No changes are recommended. But for any future interference problem, there should be a competent Conference on the issue.

Agenda item 2.9

BGD/126/8

If any services are affected in future by changes to the Table of Frequency Allocations, Bangladesh is of the view that all fixed and mobile services be safeguarded against any new allocation/sharing of frequency by new services.

Agenda item 2.10

No comments.

Annex: 1

ANNEX
Expansion of HF bands

The high frequency (HF) wave popularly known as shortwave is the only medium by which communication can reach distant areas directly and in the most economical manner. Due to heavy congestion in the HFBC frequency spectrum, mutual interferences between stations are very serious and so the quality of reception is often quite poor. In the last two World Administrative Radio Conferences on HFBC (WARC-84/87), it was proved to be impossible to make a plan which would ensure the minimum technical criteria required and acceptable to most of the administrations. Therefore Recommendation No. 511, adopted at WARC-87, recommends to consider convening a WARC with an agenda including the possible expansion of the HFBC bands.

The amount of spectrum allocated to the broadcasting services is not enough to meet the requirement. The amount of spectrum allocated to the broadcasting service by WARC-79 is 17.0%. The amount of spectrum allocated to the fixed service is the largest (7 800 kHz, about 49.0%); the fixed service is not a required dedicated frequency assignment. Taking into account HF, radiocommunications (i.e. fixed service) are increasingly replaced by modern techniques such as microwave, cable and satellite communications with high quality and a large capacity. Therefore, it would be possible to save part of the spectrum from the fixed service for broadcasting.

BGD/126/9

We propose the modification of Article 8 of the Radio Regulations under the following principle for additional allocation in HF broadcasting:

- a) no intrusion into internationally planned bands, viz. exclusive maritime mobile, aeronautical mobile (OR) and aeronautical mobile (R) bands;
- b) no intrusion into standard time and frequency signal bands;
- c) that it be adjacent to existing exclusive HFBC bands as far as possible;
- d) that it be allocated on a worldwide basis as far as possible.

ARTICLE 8

Frequency Allocations

Section IV. Table of Frequency Allocations

kHz 5 730 - 6 200			
Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/10 MOD	5 730 - 5-9595 900 FIXED LAND MOBILE	5 730 - 5-9595 900 FIXED MOBILE except aeronautical mobile (R)	5 730 - 5-9595 900 FIXED Mobile except aeronautical mobile (R)
BGD/126/11 MOD	5-9595 900 - 6 200	BROADCASTING	

Reasons: To provide additional allocation for the HF broadcasting service and for the necessity of using the HF spectrum in the most efficient manner. The fixed and mobile can use it where feasible. They may not require dedicated frequency assignment. At the same time, it encourages broadcast operations to use the most efficient technical characteristics to reach their target areas.

kHz 7 100 - 8 100			
Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/12 MOD	7 100 - 7-3997 600 BROADCASTING	7 100 - 7-3997 600 AMATEUR-510 BROADCASTING 528	7 100 - 7-3997 600 BROADCASTING
BGD/126/13 MOD	7-3997 600 - 8 100	FIXED Land Mobile 529	

Reasons: As realignment of the existing regional broadcast allocation at 7 MHz, 7 100 - 7 300 kHz may be made an exclusive worldwide allocation for HF broadcasting for interference-free transmission. This may be compensated by allocating the band 6 900 - 7 000 kHz to protect the amateur service to promote additional allocation for HF broadcasting, while utilizing current technology.

BGD/126/14
SUP 528

kHz
9 040 - 9 900

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/15 MOD	9 040 - 9 500 <u>200</u>	FIXED
BGD/126/16 MOD	9 500 <u>200</u> - 9 900	BROADCASTING 530 531

Reasons: To provide additional allocation for the broadcasting service and at the same time permitting access for itinerant fixed and mobile services on a secondary basis.

kHz
11 400 - 12 230

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/17 MOD	11 400 - 11 650	FIXED <u>BROADCASTING</u>
BGD/126/18 <u>NOC</u>	11 650 - 12 050	BROADCASTING 530 531
BGD/126/19 <u>NOC</u>	12 050 - 12 230	FIXED

Reasons: To provide additional allocation for the broadcasting service for removal of congestion in HF broadcasting. The fixed and the mobile are not required dedicated frequency assignment. With the introduction of satellite services, and microwave and cable, the use of the fixed and mobile services on HF communication has been diminished.

kHz
13 600 - 14 000

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/20 <u>NOC</u>	13 600 - 13 800	BROADCASTING 531
BGD/126/21 MOD	13 800 - 14 000	FIXED <u>BROADCASTING</u> Mobile except aeronautical mobile (R)

Reasons: To provide additional allocations for the broadcasting service on a primary basis and at the same time permitting access for itinerant fixed and mobile services on a secondary basis.

kHz
15 100 - 16 360

Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/22 MOD	15 100 - 15 600 <u>15 900</u>	BROADCASTING 531	
BGD/126/23 MOD	15 600 <u>15 900</u> - 16 360	FIXED 536	

Reasons: To provide additional allocations for the broadcasting service on a primary basis and at the same time permitting access for itinerant fixed and mobile services on a secondary basis.

kHz
17 410 - 17 900

Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/24 MOD	17 410 - 17 550	FIXED <u>BROADCASTING</u>	
BGD/126/25 <u>NOC</u>	17 550 - 17 900	BROADCASTING 531	

Reasons: To extend HF spectrum for removal of congestion following the principle of no intrusion into safety and distress services.

kHz
18 168 - 18 780

Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/26 MOD	18 168 - 18 780 <u>18 480</u>	FIXED Mobile except aeronautical mobile	
BGD/126/27 MOD	18 168 <u>18 480</u> - 18 780	FIXED <u>BROADCASTING</u> Mobile except aeronautical mobile	

Reasons: To provide additional allocations for avoidance of congestion in HF broadcasting keeping in view the guiding principle of no intrusion into safety and disaster services.

kHz
20 010 - 21 000

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/28 MOD	20 010 - 21 00020 200	FIXED Mobile
BGD/126/29 MOD	20 01020 200 - 21 00020 700	FIXED Mobile <u>BROADCASTING</u>
BGD/126/30 MOD	20 01020 700 - 21 000	FIXED Mobile

Reasons: To provide additional allocation for avoidance of congestion in HF broadcasting for efficient use of the spectrum, as 49% of the spectrum has been allocated for fixed and mobile services. There is a scope for reallocation for broadcasting reducing the fixed and mobile service allocation.

kHz
21 450 - 21 870

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/31 <u>NOC</u>	21 450 - 21 850	BROADCASTING 531
BGD/126/32 MOD	21 850 - 21 870	FIXED <u>BROADCASTING</u> 539

Reasons: To provide additional allocation for broadcasting services.

**BSS (HDTV)
(FEEDER LINK)**

**GHz
21.4 - 22.2**

**BGD/126/33
MOD**

Allocation to Services		
Region 1	Region 2	Region 3
21.4 - 22.2 <u>22.2</u>	FIXED <u>FIXED-SATELLITE (Earth-to-space)</u> MOBILE	

Reasons: To provide feeder links in the long-term assignments of the broadcasting-satellite service in the 12 GHz band, after the feeder-link assignments of Appendix 30A are replaced as required by individual administrations by down-link broadcasting satellite assignments in the 17 GHz band.

**BSS (HDTV)
(DOWN LINK)**

**GHz
17.3 - 18.1**

**BGD/126/34
MOD**

Allocation to Services		
Region 1	Region 2	Region 3
17.3 - 17.7	FIXED-SATELLITE (Earth-to-space) 869 Radiolocation <u>BROADCASTING-SATELLITE</u> 868	

**BGD/126/35
MOD**

17.7 - 18.1	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 MOBILE	
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Reasons: To provide spectrum for the use of BSS (HDTV) signals by satellite. A 500 MHz wideband is estimated to be required for six channels of each country for the implementation of such a service. It has been earmarked for this for rain attenuation, atmospheric absorption loss and depolarization.

GHz
11.7 - 12.75

Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/36 <u>NOC</u>	11.7 - 12.5 FIXED BROADCASTING BROADCASTING-SATELLITE Mobile except aeronautical mobile	11.7 - 12.1 FIXED 837 FIXED-SATELLITE (space-to-Earth) Mobile except aeronautical mobile 836 839	11.7 - 12.2 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE
BGD/126/37 MOD		12.1 - 12.2 12.3 <u>FIXED</u> FIXED-SATELLITE (space-to-Earth) 836 839 842	
BGD/126/38 MOD		12.2 12.3 - 12.7 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING-SATELLITE 838	12.2 - 12.5 FIXED MOBILE except aeronautical mobile BROADCASTING 838 845
BGD/126/39 <u>NOC</u>	12.5 - 12.75 FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 848 849 850	839 844 846	12.5 - 12.75 FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile BROADCASTING-SATELLITE 847
		12.7 - 12.75 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile	

MHz
5 925 - 7 075

Allocation to Services			
	Region 1	Region 2	Region 3
BGD/126/40 MOD	5 925 - 7 075 <u>7 025</u>	FIXED	
		FIXED-SATELLITE (Earth-to-space) 792A	
BGD/126/41 MOD	5 925 <u>7 025</u> - 7 075	MOBILE	
		791 809	
		FIXED	
		FIXED-SATELLITE (Earth-to-space) 792A	
		MOBILE	
		<u>FEEDER LINK FOR BROADCASTING SATELLITE</u>	
		791 809	

Reasons: To ensure the availability of feeder links to sound broadcasting-satellite systems operating in the 0.5 to 3 GHz range and to improve utilization of the geostationary orbit by the fixed-satellite service by concentrating such relatively narrow Earth-to-space links in a specified band of adequate bandwidth.

MHz
2 500 - 2 690

BGD/126/42
NOC

BGD/126/43
NOC

Allocation to Services		
Region 1	Region 2	Region 3
2 500 - 2 655 FIXED 762 763 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 720 753 756 758 759	2 500 - 2 655 FIXED 762 764 FIXED-SATELLITE (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 720 755	2 500 - 2 535 FIXED 762 764 FIXED-SATELLITE (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 754 754A 2 535 - 2 655 FIXED 762 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 720
2 655 - 2 690 FIXED 762 763 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) 758 759 765	2 655 - 2 690 FIXED 762 764 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) 765	2 655 - 2 690 FIXED 762 764 FIXED-SATELLITE (Earth-to-space) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive) 765 766

BSS (SOUND)

MHz
1 427 - 1 525

Allocation to Services		
Region 1	Region 2	Region 3
BGD/126/44 NOC	1 427 - 1 429 SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile 722	
BGD/126/45 MOD	1 429 - 1 525 1 441 FIXED MOBILE except aeronautical mobile 722	1 429 - 1 525 1 441 FIXED MOBILE 723 <u>BROADCASTING</u> <u>BROADCASTING-SATELLITE</u> 722
BGD/126/46 MOD	1 429 1 441 - 1 525 FIXED MOBILE except aeronautical mobile <u>BROADCASTING</u> <u>BROADCASTING-SATELLITE</u> 722	1 429 1 441 - 1 525 FIXED MOBILE 723 <u>BROADCASTING</u> <u>BROADCASTING-SATELLITE</u> 722

Reasons: To enable the implementation of the broadcasting-satellite service and the complementary terrestrial broadcasting for the provision of digital audio broadcasting. To define a process for the introduction of a broadcasting-satellite system that will provide a period of time to make any required adjustment to the existing fixed and mobile systems.

HF BROADCASTING ALLOCATIONS

Before WARC-79		After WARC-79		BGD proposed Revision		
Bands (kHz)	Width (kHz)	Bands (kHz)	Width (kHz)	Bands (kHz)	Width (kHz)	Variation
5 950 - 6 200	250	5 950 - 6 200	250	5 900 - 6 200	300	+50
7 100 - 7 300	200	7 100 - 7 300	200	7 100 - 7 600	500	+300
9 500 - 9 775	275	9 500 - 9 900	400	9 200 - 9 900	700	+300
11 700 - 11 975	275	11 650 - 12 050	400	11 400 - 12 050	650	+250
		13 600 - 13 800	200	13 600 - 14 000	400	+200
15 100 - 15 450	350	15 100 - 15 600	500	15 100 - 15 900	800	+300
17 700 - 17 900	200	17 550 - 17 900	350	17 410 - 17 900	490	+140
				18 480 - 18 780	300	+300
				20 200 - 20 700	500	+500
21 450 - 21 750	300	21 450 - 21 850	400	21 450 - 21 870	420	+20
25 600 - 26 100	500	25 670 - 26 400	430	-	-	-
Total	2 350		3 130		5 060	2 360

UNION INTERNACIONAL DE TELECOMUNICACIONES

CAMR-92

CAMR PARA EXAMINAR LA ATRIBUCION DE
FRECUENCIAS EN CIERTAS PARTES DEL ESPECTRO

Corrigendum 1 au
Document 127-F/E/S
11 février 1992
Original: anglais

MALAGA-TORREMOLINOS, FEBRERO/MARZO 1992

COMMISSION 5

Origine: DT/17

Premier rapport du Président du Groupe de travail 5A à la Commission 5

Texte français: Pas de changement.

English text: No change.

Texto español: Sustitúyase la página 3 del documento por la página adjunta.

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NOC	Mob-87	Sección III. Clase y personal mínimo en las estaciones de barco y estaciones terrenas de barco que utilizan las técnicas y frecuencias prescritas en el capítulo N IX y las prescritas para la correspondencia pública	
NOC	3987 Mob-87	§ 4.	Las administraciones adoptarán las medidas necesarias para que el personal de las estaciones de barco y estaciones terrenas de barco posea las aptitudes profesionales necesarias para operar eficazmente la estación, y tomarán las medidas que garanticen la disponibilidad operacional y el mantenimiento de los equipos para comunicaciones de socorro y seguridad, de conformidad con los acuerdos internacionales pertinentes.
NOC	3988 Mob-87	§ 5.	Una persona que posea las aptitudes profesionales necesarias deberá estar en disposición de actuar como operador especializado en casos de socorro.
MOD	3989 Mob-87	§ 6.	El personal de las estaciones de barco <u>y estaciones terrenas de barco</u> provistas obligatoriamente de aparatos de radicomunicaciones en cumplimiento de acuerdos internacionales y que utilizan las frecuencias y técnicas prescritas en el capítulo N IX incluirá, por lo menos, en lo relativo a las disposiciones del artículo 55:
MOD	3990 Mob-87	a)	para estaciones a bordo de barcos que navegan fuera del alcance de las estaciones costeras que transmiten en ondas hectométricas <u>métricas, teniendo en cuenta las disposiciones del Convenio para la Seguridad de la Vida Humana en el Mar</u> , un titular del certificado de radioelectrónico de primera o de segunda clase <u>o del certificado de operador general</u> ;
SUP	3991 Mob-87		
MOD	3992 Mob-87	e)b)	para estaciones de barco a bordo de barcos que navegan al alcance de las estaciones costeras que transmiten en ondas métricas <u>teniendo en cuenta las disposiciones del Convenio para la Seguridad de la Vida Humana en el Mar</u> , un titular del certificado de radioelectrónico de primera o de segunda clase o del certificado de operador general o del certificado de operador restringido.
MOD	3993 Mob-87	§ 7.	El personal de las estaciones de barco <u>y estaciones terrenas de barco</u> que no están provistas obligatoriamente de equipos de radicomunicaciones en cumplimiento de acuerdos internacionales y que utilizan las frecuencias y técnicas prescritas en el capítulo N IX estará debidamente calificado y poseerá los certificados necesarios de conformidad con las exigencias de la administración.
	3994 a 4011		NO atribuidos.

MÁLAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 5

Source: DT/17

FIRST REPORT OF THE CHAIRMAN OF WORKING GROUP 5A
TO COMMITTEE 5

1.0 Introduction:

Included in this Report are the modifications to Article 56 prepared by Working Group 5A. These modifications are based on consideration of proposals submitted to the Conference by nineteen Administrations in documents: 9, 12, 20, 23, 26, 27, 30, 31, 44, 52, 57, 61, 62, 63, 65, 74, 75, 79 and 101. Three information papers from IMO (Doc. 11), ICS (Doc. 83) and ITF (Doc. 87) were also considered.

2.0 Background Material:

Texts from IMO Resolution A.703(17) on training of radio personnel in the GMDSS, IMO Resolution A.702 (17) on guide-lines for ensuring availability of radio equipment and Resolution No. 5 of the IMO GMDSS Conference (London, 1988) on Regulation IV/15.7 on maintenance requirements were considered by the Working Group when developing modifications to the relevant provisions of the Radio Regulations.

3.0 Conclusions:

The Working Group considered the proposals of Administrations concerning personnel of stations in the Maritime Mobile and the Maritime Mobile-Satellite Service. After discussion of this matter the Group agreed that the ITU Regulations and the amendments to the 1974 SOLAS Convention concerning Radiocommunications for the GMDSS should be harmonized. Provisions RR 3990-3992 reflecting this decision are in the Report of the Drafting Group 5A1 (DL/14) based on its terms of reference contained in DL/13. Attached is the result of the Working Group's recommendations concerning Article 56.

Annex: 1

Robert C. McIntyre
Chairman, Working Group 5A

ANNEX 1

ARTICLE 56

NOC	Mob-87	Personnel of Stations in the Maritime Mobile and the Maritime Mobile-Satellite Service
NOC	Mob-87	Section I. Personnel of Coast Stations and Coast Earth Stations
NOC	3979 Mob-87	§ 1. Administrations shall ensure that the staff on duty in coast stations and in coast earth stations are adequately qualified to operate the stations efficiently.
NOC	Mob-87	Section II. Class and Minimum Number of Operators of Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX and for Public Correspondence
NOC	3980	§ 2. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships of its own nationality have personnel adequate to perform efficient service.
NOC	3981	§ 3. The personnel of ship stations in the public correspondence service shall, having regard to the provisions of Article 55, include at least:
NOC	3982	a) ship stations of the first category, except in the case provided for in No. 3986: a chief operator holding a radiocommunication operator's general certificate or a first-class radiotelegraph operator's certificate;
NOC	3983	b) ship stations of the second and third categories, except in the case provided for in No. 3986: a chief operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate;
NOC	3984	c) ship stations of the fourth category, except in the cases provided for in Nos. 3985 and 3986: one operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate;
NOC	3985	d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements: one operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate, or a radiotelegraph operator's special certificate;
NOC	3986	e) ship stations equipped with a radiotelephone installation only: one operator holding either a radiotelephone operator's certificate or a radiotelegraph operator's certificate.

NOC	Mob-87	Section III. Class and Minimum Number of Personnel for Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX and for Public Correspondence
NOC	3987 Mob-87	§ 4. Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to enable efficient operation of the station, and shall take steps to ensure the operational availability and maintenance of equipment for distress and safety communications in accordance with the relevant international agreements.
NOC	3988 Mob-87	§ 5. An adequately qualified person shall be available to act as a dedicated communications operator in cases of distress.
MOD	3989 Mob-87	§ 6. The personnel of ship stations <u>and ship earth stations</u> for which a radio installation is compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall, with respect to the provisions of Article 55, include at least:
MOD	3990 Mob-87	a) for stations on board ships which sail beyond the range of MF VHF coast stations, <u>taking into account the provisions of the Convention for the Safety of Life at Sea</u> , a holder of a first- or second-class radio electronic certificate <u>or a general operator's certificate</u> ;
SUP	3991 Mob-87	
MOD	3992 Mob-87	e) b) for ship stations on board ships which sail within the range of VHF coast stations, <u>taking into account the provisions of the Convention for the Safety of Life at Sea</u> , a holder of a first- or second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.
MOD	3993 Mob-87	§ 7. The personnel of ship stations <u>and ship earth stations</u> for which a radio installation is not compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall be adequately qualified and certificated in accordance with the administration's requirements.
	3994 to 4011	NOT allocated.

COMMITTEE 4

Gabonese Republic

PROPOSALS FOR THE WORK OF THE CONFERENCE

ALLOCATION OF FREQUENCY BANDS TO THE BROADCASTING
SERVICE FOR HIGH-DEFINITION TELEVISION

(Agenda item 2.2.3b)

Pursuant to the relevant provisions of Resolutions Nos. 1 (PL-B/1) and 521 (ORB-88) concerning the need to plan the broadcasting-satellite service for high-definition television, having taken cognizance of the results of the studies so far undertaken by the CCIR and considering that Gabon is an equatorial country and therefore subject to heavy rainfall which constitutes a major natural handicap in terms of propagation;

the Gabonese Republic proposes the following for the sake of equity:

GAB/128/1

1. allocations to BSS-HDTV should be made on the following basis:
 - a bandwidth of 300 MHz in the frequency range between 12 and 17 GHz for tropical countries;
 - a bandwidth of 600 MHz in the frequency range between 21.4 and 25 GHz for countries other than those referred to above;

GAB/128/2

2. the associated feeder links should be planned in the frequency range between 12 and 25 GHz, preferentially giving the tropical countries access to the lower part of that range;

GAB/128/3

3. the CCIR should be instructed to pursue its studies along those lines, even if they lead to a revision of the 1977 Plan.
-

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 129-E
11 February 1992
Original: Spanish

COMMITTEE 4

Note by the Secretary-General

I have the honour to transmit to the Conference the information document annexed herewith, at the request of the International Association of Broadcasting.

Pekka TARJANNE
Secretary-General

Annex: 1

ANNEX

Recommendation by the International Association
of Broadcasting (IAB)

Digital sound broadcasting

"Considering the many advantages offered by the new digital technologies for consumers worldwide, the International Association of Broadcasting (IAB) recommends that 50 MHz of the L band, from 1 425 - 1 525 MHz, should be used for sound broadcasting transmissions. The decision as to whether this band should be used or not for transmissions originating either from satellites or from ground antennas should be adopted by each of the Member States."

COMMITTEE 4

Greece

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda item 2.2.8

The Administration of Greece proposes the following amendment of No. 797B of the Radio Regulations:

GRC/130/1

MOD

797B

Mob-87

Additional allocation: in the Federal Republic of Germany, Austria, Denmark, Spain, France, Finland, Greece, Israel, Italy, Jordan, Morocco, Norway, Netherlands, Pakistan, United Kingdom, Sweden, Switzerland, Syria and Tunisia, the band 5 150 - 5 250 MHz is also allocated to the mobile service, on a primary basis, subject to the agreement obtained under the procedure set forth in Article 14.

Reasons: To include Greece in Footnote 797B of the Radio Regulations.

COMMITTEE 4

Libya

PROPOSALS FOR THE WORK OF THE CONFERENCE

Agenda item 2.2.3

- a) Allocation for the broadcasting-satellite service (sound) in the range 500 - 3 000 MHz

Since there is a need and demand for the establishment of the sound broadcasting-satellite service, the Libyan Administration (considering the technical and economical reasons of the matter) proposes that:

LBY/131/1

A band of 60 MHz around 1.5 GHz could be chosen, provided that these allocations are made through a worldwide plan taking into consideration both national and sub-regional coverage. With due consideration, protection should be given to existing services.

- b) Wide RF band high-definition television

The Libyan Administration proposes that:

LBY/131/2

The spectrum above 20 GHz could be used for a wide RF band HDTV allocation through a worldwide plan.

COMMITTEE 4

Libya

PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda item 2.2.2

HF broadcasting services

On the examination of the extension of the HFBC bands, the Libyan Administration believes that developing countries are major users of HF for both fixed and broadcasting services to reach parts of their countries that are not served by other terrestrial technologies such as via satellite.

HF transmission remains a relatively inexpensive means of communications across long distances, but on the other hand, there is an apparent need for an increase in the spectrum available for HFBC.

Thus extension is recommended on the condition that fixed services are safeguarded and protected and that no extension below 10 MHz is made.

WORKING GROUP 5C

Source: DT/25

FIRST REPORT OF THE CHAIRMAN OF WORKING GROUP 5C
TO COMMITTEE 5

1. Introduction:

Included in this Report are the modifications to Article 1 prepared by Working Group 5C. These modifications are based on consideration of proposals submitted to the Conference by fifteen Administrations in documents 6, 7, 12, 23, 27, 31, 37, 39, 41, 44, 46, 52, 61, 63 and 75.

The proposals relating to Articles 61 and 69 in the documents 12 and 30 were also considered as well as four other papers from CCIR (Doc 3), IFRB (docs 4, 33) and VGE (Doc 22).

2. Conclusions:

The Working Group considered the proposals of Administrations concerning modifications to Article 1, 61 and 69. After discussion the Group agreed, subject to the decisions in Committee 4, to add two new, and to modify several other definitions.

With regard to addition of definition of General-Service Satellite, RR 22A, there were objections from some administrations.

With regard to the modification of the definition for the Inter-Satellite Service (RR24) concern and objections were expressed by ARS, B, CAN and URS. However, a large majority was in favor of the modification.

With regard to modification to the definition of Geostationary Satellite, RR 181, the Administration of Japan indicated that prior to the acceptance of the proposed modification, the Working Group to the Plenary should have finalized the applicable technical studies.

With regard to Articles 61 and 69 the two proposals submitted to the Conference were not adopted.

Attached is the result of the Working Group's recommendations concerning Article 1.

J.F. BROERE
Chairman

ANNEX

CHAPTER I

Terminology

ARTICLE 1

Terms and Definitions

Section I. General Terms

NOC 3, 4, 7

Section III. Radio Services

- | | | |
|-------------------|------------|---|
| ADD | 22A | [3.3A General-Satellite Service: A radiocommunication service using satellites for fixed and/or mobile applications.] |
| MOD | 24 | [3.5 Inter-Satellite Service: A radiocommunication service providing links between artificial earth-satellites.] |
| <u>NOC</u> | 26 | |
| <u>NOC</u> | 36 | |
| ADD | 46A | [3.27A Radiolocation-Satellite Service: A radiodetermination-satellite service used for the purpose of radiolocation.
This service may also include feeder links necessary for its operation.] |
| MOD | 48 | 3.29 Earth Exploration-Satellite Service: A radiocommunication service between earth stations and one or more space stations, which may include links between space stations, in which: <ul style="list-style-type: none">- information relating to the characteristics of the Earth and its natural phenomena, <u>including data relating to the state of the environment</u>, is obtained from active sensors or passive sensors on earth satellites;- similar information is collected from airborne or Earth-based platforms;- such information may be distributed to earth stations within the system concerned;- platform interrogation may be included. This service may also include feeder links necessary for its operation. |

Section V. Operational Terms

NOC **110, 111, 112, 117**

Section VII. Frequency Sharing

NOC **163**

Section VIII. Technical Terms Relating to Space

MOD	181	8.13 Geostationary Satellite: A geosynchronous satellite whose circular and direct orbit lies in <u>or near</u> the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a satellite which remains approximately fixed relative to the Earth.
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COMMITTEE 4

Federal Republic of Nigeria

PROPOSAL FOR ADDITIONAL MOBILE-SATELLITE
SERVICE SPECTRUM BELOW 3 GHz

1. Introduction

In recent years, the use of mobile-satellite services in Nigeria has increased by over 300%, consistent with the worldwide increased demand for instant communications from the remotest areas. The relevance of this service to this Administration, and indeed to the Administrations of most developing countries, lies in the fact that the services support the economic sector extensively, while providing interim solutions to some rural telecommunications requirements.

2. Summary of proposals to date

There is virtual unanimity in the balancing of the up-link/down-link bands of the MSS allocation, by the allocation of an additional 5 MHz in the band 1 525 - 1 530 MHz. This Administration supports this proposal.

There are however, diverse proposals on the need for, and location of, additional spectrum. The Administrations of Canada, Brazil, the United States, India, and many others support new spectrum allocations to MSS, but do not agree on precise locations of the new bands.

3. Proposed compromise

This Administration wishes to propose the following compromise solutions:

NIG/133/1

- 1) that the present band segmentation in the current allocation [Maritime, Land and Aeronautical (R)] be retained;

NIG/133/2

- 2) that additional 20 MHz (2 x 10 MHz) be allocated to generic MSS in the bands 1 515 - 1 525 MHz (space-to-Earth) and 1 616.5 - 1 626.5 MHz (Earth-to-space);

NIG/133/3

- 3) that an additional 60 MHz be allocated to generic MSS in the bands 1 900 - 2 200 MHz.

4. Rationale for proposals

The following points have guided this Administration in recommending the compromise proposals:

- a) The investments by developing countries in mobile-satellite services are best protected by maintaining the status quo (band segmentation in current MSS allocations); it is not fair to expect developing countries to bear the financial burdens of technological developments in the name of spectrum efficiency.
- b) Expansion of the existing band downwards in a contiguous manner by a modest 2 x 10 MHz will encourage the application of new technology (LEOs) or the orderly expansion of GEO systems.
- c) The modest allocation will have minimal impact on GLONASS and sharing with fixed services can be accommodated by a framework to be developed by the CCIR.
- d) The bands around 2.5/2.6 GHz require link margins greater than at 1.5/1.6 GHz and would require more spot beams for a given service. It has less developed technology and would generally result in more complex and MSS systems.
- e) The bands around 1.9/2.2 GHz are more appropriate for the development and testing of new 21st century technologies.
- f) The bands around 1.9/2.2 GHz are essential for generic MSS-LEO competition as it may not be feasible to accommodate more than one LEO worldwide service in the 2 x 10 MHz allocation around 1.5/1.6 GHz.

5. Conclusion

Some Administrations have proposed bands in the vicinity of 1.9/2.2 GHz for FPLMTS. It is considered that satellite systems could be used on an intermediate basis prior to full FPLMTS implementation, and thereafter, as a complimentary service to FPLMTS.

It is also recognized that this band (1.9/2.2 GHz) is used in many countries for fixed services. However, the possibilities of sharing with MSS services exist and should be fully developed, as a matter of priority, by the CCIR. The proposal is subject to conformation by CCIR studies that sharing in this band will not cause harmful interference or place undue constraints to fixed services networks.

Finally, this Administration wishes to draw the attention of the Conference to the exploding use of satellites in space and the potential problems of collision and space pollution by satellite debris. The implications of this for developing countries wishing to launch satellites for national/regional development can only be imagined.

It is the view of this Administration that as a minimum, this Conference can request a competent future conference to address this very important issue.

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

MINUTES
OF THE
OFFICIAL OPENING CEREMONY

Monday, 2 February 1992, at 1200 hours

1. Opening of the ceremony by Her Majesty the Queen of Spain
2. Address by the Secretary-General of the ITU
3. Address by the Minister of Public Works and Transport of Spain
4. Address by the President of the Regional Government of Andalusia
5. Closure of the ceremony by Her Majesty the Queen

1. Opening of the ceremony by Her Majesty the Queen of Spain

Her Majesty the Queen of Spain declared open the inaugural meeting of the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum.

2. Address by the Secretary-General of the ITU

Dr. Pekka Tarjanne, Secretary-General of the ITU, delivered the following address:

"Your Majesty,

I should like first of all to pay my respects to you on behalf of the International Telecommunication Union, and also to express our gratitude and that of all delegations here present for the honour you have done us by presiding over this opening ceremony of the World Administrative Radio Conference. No one can fail to realize that your presence here today is of great symbolic value and provides striking confirmation of the keen interest that both your Majesty and the Government of Spain have taken in the work of the ITU. Spain's generous invitation was welcomed at the time with great pleasure by all Members of the Union. Allow me, therefore, on behalf of the 166 countries making up our Union, to voice our sincere thanks to the host country, for offering us the magnificent facilities of this Palacio de Congresos.

It may be worth reminding ourselves that this Conference is the third to be held by the Union in Torremolinos: apart from this one opening today, the Plenipotentiary Conference was held here in 1973, and the Plenary Assembly of the International Telegraph and Telephone Consultative Committee in 1984. To these three events I would add the Telegraph and Radiotelegraph Conference held in Madrid in 1932, and no one will be surprised to hear that Spain has been one of the countries that have played host to the largest number of ITU conferences held away from Headquarters during its almost 127 years of existence.

I am quite sure that Torremolinos, with its ideal situation in the heart of the Costa del Sol, its agreeable climate, its beautiful countryside and the proverbial hospitality of its people, will provide a perfect setting in which the Conference can proceed smoothly on its way over the next few weeks.

Your Majesty,
Your Excellencies,
Ladies and Gentlemen,

From today, and for the next four weeks, Spain will be the scene for the discussion of many important questions on the Conference's agenda. What words can one use to describe a conference of this importance? With its 1,300 participants, and with the range and technical content of the proposals put forward by Member countries, this 1992 Conference will constitute a major point in the history of radiocommunications.

The year 2000 is already just round the corner. We are about to embark on a new century! And this brand new century will certainly be the century of telecommunications. Ever since the early 1970s we have been witnessing a profound transformation which is resulting in considerable changes in the structure of society and the way it operates: telecommunications have become a peripheral of computer intelligence and transmission has become a largely transparent utility. This trend, however, should not make us lose sight of the importance of radiocommunications, which ever since the turn of the century have been such an important factor in the development of human, economic and social systems.

Unfortunately, we all know that the opportunities opened up by radiocommunications depend on a limited frequency spectrum, despite technical progress extending the upper limit of its usable range and the increasing use of processing techniques to significantly improve the spectrum throughout. The limited nature of the spectrum was recognized so quickly that already at the beginning of the century, at the Radiotelegraph Conference held in Berlin in 1906, the problem of saturation of the radio spectrum was raised with regard to maritime communication.

As a result, the first international radio treaty provisions were adopted already at the 1906 Berlin Conference. The Radio Regulations were completely revised in Washington in 1927 and again at Geneva in 1959 and 1979. The progress of technology and the expansion of radiocommunication systems were such that it has been necessary to convene specialized conferences to make partial revisions of the Regulations which were of concern only to certain categories of users. Space, maritime and aeronautical conferences were therefore held which were strictly limited to specific services and could not revise provisions common to more than one service.

We all now look to the Voluntary Group of Experts on the simplification of the Radio Regulations for creative new solutions to our existing cumbersome international spectrum management arrangements.

The work of the Voluntary Group of Experts responsible for studying the allocation and improved use of the radio-frequency spectrum and simplification of the Radio Regulations is closely related to the work that is going to be done in this Palacio de Congresos over the next few weeks. All our deliberations must bear in mind this work that is being carried on in parallel with our own.

Thus, for example, among the Group's tasks is the study and possible modification of the Table of Frequency Allocations, and it will have to concern itself with such varied subjects as simplification of the Table, the need for it, its advantages and disadvantages, the type of services that it should in future include, and even possibly eliminating the "service" concept as it has been used in the past. Whatever is decided here will have to be reflected in one way or another in the work of the Group, which will be holding its third meeting here, in Torremolinos, immediately after this Conference.

Frequency allocations by the WARC-92 and eventual action on proposals by the VGE to streamline the Radio Regulations, serve to provide the international context for spectrum regulation for another decade or more. But national administrations must attempt to satisfy competing demands for new services and introduction of new technologies within the very limited bands which inevitably result.

It is no longer in question that the frequency spectrum is an important economic resource. In view of congestion and scarcity, there is increasing interest in apportioning frequency rights in accordance with economic value. There are proposals for fee systems and auctions. Some economists hold that nothing short of a market system can reflect the economic value and achieve most efficient use. At least one country has introduced a market system for certain bands and services which, in its own case, encounter little international interference problems. At least three other countries, intensive users of the spectrum, are considering ways in which fee or market systems might promote efficient assignment and use.

So far, little consideration has been given as to whether or how a market or fee system might be helpful on an international scale. It will be interesting to see the results of national studies and trials.

Ladies and Gentlemen,

In 1990, the Administrative Council of the Union set both the agenda for this Conference and its duration. The Council's proposals were submitted to Members for approval.

The CCIR and the IFRB have undertaken major preparatory activities that are reflected in the input materials.

It is not my intention to go into the details of the Conference's agenda. However, it might be useful to make some comments on certain problems you will be discussing.

The management and allocation of frequencies involves various complex factors, and the decisions adopted at WARC-92 will have lasting consequences of prime importance for individual applications. They will also have considerable implications for the world of commerce.

Delegations will have to balance present and future needs and applications in ways that make technological and economic sense and in ways that do not create a lot of future bureaucratic overhead to stifle innovation.

The Conference will also consider the appropriate bands for satellite broadcasting of high-definition television and digital sound broadcasting. There is predictable demand for greater allocations for the aeronautical, maritime and land mobile-satellite services. There is thus no doubt that the transmission via satellite of mobile communications on land and sea and in the air will be an essential element.

I should like to emphasize the need to adopt consensus positions from the start of the Conference, as offering the only chance of a success. I would ask all delegations here present to consider my appeal as an expression of the fervent hope of the Secretary-General of the Union that this Conference should succeed and in so doing allow radiocommunications to be used in the most flexible and useful ways as a "wireless" link in the world of human communication.

Your Majesty,
Ladies and Gentlemen,

You will understand that I wished to make a few comments and draw some key aspects of the Conference to your attention. Because of its short duration - and we shall have to be scrupulous about meeting the deadline - you will only have four weeks to carry out a task that everyone regards as an extremely difficult one. For that reason, I wanted to indicate the framework, a very strict one, for the work we have been given by the Plenipotentiaries and the Administrative Council.

To conclude, I should like to reiterate our gratitude to the country that is our host in this 500th anniversary of the year when three tiny Spanish ships set sail towards new horizons. When the Plenipotentiary Conference adopted its resolution to hold this allocation conference, it included the subject of a new allocation above 20 GHz for use in space exploration and the development and establishment of installations in space in the year 2000 and beyond. We are thus also setting sails towards new horizons. Our Conference will be the first of the many events to be held all over Spain during this anniversary year. We are glad that that is so and wish to place our thanks on record. I am convinced that all delegations here present will also have the greatest interest in ensuring that WARC-92 is an outstanding success for our Union and for the country that is our gracious host.

Let us roll up our sleeves, then, and get down to work.

Your Majesty,
Ladies and Gentlemen,

I thank you for your attention."

3. Address by the Minister of Public Works and Transport of Spain

His Excellency Mr. José Borrell Fontelles, Minister of Public Works and Transport of Spain, delivered the following address:

"Your Majesty,
Mister Secretary-General,
President of the Council of Andalucia,
Delegates,
Ladies and Gentlemen,

Your Majesty, with your permission my first words will be words of welcome to delegates from countries around the world who are visiting us today. Mister Secretary-General, welcome to Spain; Ladies and Gentlemen, welcome to Spain. This year, Spain will host some of the most important events and gatherings in its history, and among them the Conference that you are about to conduct takes pride of place. The first in a long series of outstanding events for my country begins today with your presence in the Palacio de Congresos to inaugurate this World Administrative Radio Conference, which is the leading forum for telecommunications in general and radiocommunications in particular, in these vertiginous last years of the century.

Your presence here, the fact that you are taking part in this Conference, is the living proof of its importance, for which I extend my most sincere congratulations to the ITU and to all of you as members of the international telecommunications community.

My congratulations, too, on the persistent efforts that the ITU has made over the years in the service of universality and cooperation in international telecommunications, and on its adaptability to the "changing environment" and permanent "challenge of change" that this sector represents.

It has to be acknowledged - and I believe this most sincerely - that the attitude of openness and consensus that characterises and governs all ITU's undertakings is the key to its present success and to a future to which you will all contribute as from today through the decisions to be taken at this Conference.

It is now commonplace to say that every day witnesses the emergence of new and more highly developed systems of telecommunication, which never cease to astonish us, in a vibrant world where every advance feeds on itself and produces another at ever-shorter intervals, with the result that the universe appears to be within our grasp and we have the impression that the dimensions of our world have shrunk.

Information, news, men and events are constantly opening wider perspectives for our lives, so that whatever happens in any part of the world has instant repercussions, influencing our opinions, decisions, way of life and attitudes. Let us hope that these marvels of human ingenuity will help to liberate mankind and make us all more human.

As everyone knows, Spain has contributed to the great work of the ITU since its inception, beginning with the long-past Madrid meeting of 1932, which may well have coined the term "telecommunications" and gave birth to the Union as we know it today, and continuing to this very moment as the present Conference opens, through the daily efforts of our leading experts, working shoulder to shoulder with experts and scientists from other Member countries in pursuit of the Union's purposes as laid down in Article 4 of the Nairobi Convention, which it may be worth recalling:

- to maintain and extend international cooperation between all Members of the Union for the ... rational use of telecommunications ... and to offer technical assistance to developing countries ...;
- to promote the development of technical facilities ... with a view to improving their efficiency ... and usefulness and making them ... generally available to the public; and
- to harmonize the actions of nations in the attainment of those ends.

These are noble and positive ends which will once again give proof of their enduring worth in Spain in this year of 1992. This is why we wished to demonstrate our interest in and support for the work of ITU by inviting you here to work in the spirit of cooperation underlying the Nairobi Convention, that we would like to see as representing and symbolizing our country and our people as we commemorate the 500th anniversary of the encounter between the New World and Europe, the Universal Exhibition of Seville, the Olympic Games of Barcelona and the Proclamation of Madrid as European Cultural Capital.

In this context, during this symbolic year, Spain has made substantial investments for the improvement of its national telecommunications networks, which will continue until the close of the century through a stringent investment plan and the establishment of a framework to guide our development, including most notably the launch in the second quarter of this year of the first of our telecommunication satellites, HISPASAT, which will expand our capacities, open up new perspectives and above all play a vital role in enhancing our cultural and technical cooperation activities with the countries of Latin America through the American beam of the system.

By this and other means we intend to continue to pursue policies that will promote the well-being and progress of our society, just as we shall continue to collaborate with the ITU, particularly in all matters relating to the search for solutions to the problems of developing countries.

Ladies and Gentlemen,

In the Torremolinos Palacio de Congresos, which has already been the venue of other important ITU conferences and meetings, and in which I trust you all feel at home, I should like to convey to you the hope of the Government of Spain, and my own hope, that the difficult task that lies ahead of you in the coming four weeks and two days will be crowned with every success, and also that you will be able to enjoy your stay with us, our climate, our people, our peace and our desire for progress and cooperation.

Many thanks."

4. Address by the President of the Regional Government of Andalusia

His Excellency Mr. Manuel Chaves, President of the Regional Government of Andalusia, delivered the following address:

"Your Majesty,
Minister,
Mister Secretary-General of the ITU,
Ladies and Gentlemen,

Just a few words to welcome to Andalusia the many personalities invited by the International Telecommunication Union, and, above all to welcome the presence of Her Majesty the Queen who, in presiding this solemn opening ceremony, lends special importance and meaning to this new World Administrative Radio Conference.

It has sometimes quite rightly been said that 1992, a key year filled with implications and commitments for Andalusia, may prove a kind of threshold, marking both the end and the beginning of a historical era.

People have already put behind them that period, started in 1492, in which mankind became more aware of itself and formed a more complete picture of the world.

The future begins now. In times gone by, the arrival of a new millennium caused anxiety, disturbance and dread in the collective mind. However, circumstances have changed and humanity appears more to be facing the year 2000 with renewed possibilities of consolidating its advances.

The prospects of international détente, peaceful cooperation between countries and scientific development, all contribute towards that promise.

In few areas of present-day technological development is the future so patent as in telecommunications. Recent research, combined with the emergence of new procedures and the development of novel technologies, has opened up a world of possibilities and even of surprises to the non-specialist.

High-definition television, digital sound broadcasting, mobile communications and the use of satellites are issues which involve numerous systems and, owing to their very complexity, require cooperation between nations in order both to continue research and to apply its results for the benefit of human safety and quality of life.

Cooperation comes first because, without it, the imbalances between countries would inevitably increase and further widen the economic and technological gap which separates them.

Moreover, we must bring order to an international communication system, which the array of media employed is urging upon us. I know that there are technical aspects, legal factors and delicate balances at stake, and even that the presence of so many participants and representatives of more than 100 countries in Torremolinos today may look like an excessive gathering of conflicting interests.

However, I am also sure that the discussions of this Conference will be guided by understanding and that, in any case, the general interest will overcome local concerns.

In fostering solidarity and collaboration, we are at the same time giving an inestimable impulse to scientific and technological research. Science is fed not only with patient dedication, nor is it achieved by exemplary individual effort. It also needs a social means of support and recognition, a relaxed atmosphere in which the difficulties consist of coordinating teamwork, overcoming theoretical problems and solving immediate practical applications.

We are increasingly aware of these objectives and these needs. It is clear that the involvement of public administrations, the universities and economic and social sectors has been decisive in the level achieved by science and technology in our own times.

Andalusia is not detached from that process. We are increasing our investment in training and research because we, too, have to catch up on the path to development. The introduction of new courses and degrees in computing and telecommunications clearly shows our concern in these times of essential changes. Only in this way may we lay solid foundations for progress and a fruitful future harvest.

The creation in Malaga of the Technology Park of Andalusia, as a complement to and culmination of other progressive initiatives, reflects our acceptance of the challenge now held out by advanced production processes and the need to place them in the most favourable environment. In the not too distant future, Andalusia may become a home for innovation and technology exchanges, and therefore a privileged enclave for tightening the links of close cooperation.

The approach of the 21st century and the beginning of a new millennium appear to foreshadow an almost unknown horizon which the new technologies will make ever more intelligible.

Your Majesty,

We are surely already in a new galaxy, one of information and telecommunications, the heir to the galaxy created by Gutenberg also 500 years ago, which, like its predecessor, is destined to unify the thrilling adventure of human history.

Thank you".

5. Closure of the ceremony by Her Majesty the Queen

Her Majesty the Queen of Spain declared open the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum and closed the inaugural meeting.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 135-E
12 February 1992
Original: French

COMMITTEE 4

Vatican City State

PROPOSAL FOR THE WORK OF THE CONFERENCE

CVA/135/1

The Administration of Vatican City State (CVA) wishes to endorse the recommendation of the International Association of Broadcasting (Document 129 of 11 February 1992) for the allocation of some 50 MHz around 1 500 MHz to sound broadcasting (satellite or terrestrial).

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

Document 136-E
12 February 1992
Original: English

MÁLAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

WORKING GROUP TO THE PLENARY

FIRST REPORT TO THE PLENARY
FROM THE WORKING GROUP TO THE PLENARY

DRAFT RECOMMENDATION ON WIND PROFILER RADARS

1. The Working Group to the Plenary established the Drafting Group 1 to WG/PL, chaired by Mr. Van Diepenbeek (Netherland) to develop a draft Recommendation relating to implementation of wind profiler radars at frequencies near 50 MHz, 400 MHz and 1 GHz (Agenda item 2.7).
2. The Drafting Group worked on the basis of proposals from USA, PNG, AUS, IND, PAK, EUR and TZA, and the CCIR Report. The Group was composed of representatives from the Administrations of TCH, URS, CAN, G, F, AUS, J, IND and USA.
3. The Working Group to the Plenary agreed on the text of the draft Recommendation as given in the annex.

M. MUROTANI
Chairman, Working Group to the Plenary

Annex: 1

ANNEX

DRAFT RECOMMENDATION

Relating to Implementation of Wind Profiler Radars at Frequencies Near 50 MHz, 400 MHz and 1 GHz

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

having noted

a request to the ITU from the Secretary-General of the World Meteorological Organization, in May 1989, for advice and assistance in the identification of appropriate frequencies near 50 MHz, 400 MHz and 1 GHz in order to accommodate allocations and assignments for wind profiler radars:

considering

- a) that wind profiler radars are important meteorological systems used to measure wind direction and speed as a function of altitude;
- b) that in order to measure wind velocities up to a height of 30 kilometres it is necessary to allocate frequency bands for these radars in the general vicinity of 50 (3 to 30 km), 400 (500 m to about 10 km) and 1 000 MHz (100 m to 3 km), respectively;
- c) that many administrations plan to deploy wind profiler radars in operational networks in order to improve meteorological predictions, support studies of the climate, and enhance the safety of navigation;
- d) that it is highly desirable to use wind profiler radars in frequency bands which have been generally agreed, preferably on a worldwide basis;
- e) that the CCIR has studied various proposals for these wind profiler radars and conducted that frequencies around 50 MHz, 400 MHz and 1 GHz are preferred, and that frequencies in the 400 MHz region are preferred for measurements of winds at altitudes that are of the greatest general interest;
- f) that it is essential in the interest of safety to protect the COSPAS/SARSAT system and other safety services from harmful interference which may be caused by wind profiler radars;
- g) that studies have already shown that wind profiler radars operating in the vicinity of 400 MHz must be sufficiently separated in frequency from the COSPAS/SARSAT system centred on 406,025 MHz;
- h) that in the interest of efficient spectrum utilization it is necessary to include technical characteristics and sharing criteria in future studies,

invites the CCIR

to continue as a matter of urgency its studies of the characteristics and requirements of wind profiler radars and make Recommendations as to the technically suitable frequency bands and associated standards and frequency sharing criteria necessary for compatibility with the services that may be affected, and to provide a report to the Conference referred to in **invites the Administrative Council**,

recommends

1. that, as an interim measure, administrations authorizing experiments with or the operational use of such radars should take all necessary actions to ensure protection from harmful interference to the COSPAS/SARSAT system, particularly by avoiding assignments in the band 402 - 406 MHz, and to other services including aeronautical radionavigation systems in the band 960 - 1 215 MHz;

2. that administrations and international organizations concerned with wind profiler radars, particularly ICAO, IMO and WMO, should be invited to contribute to the CCIR studies;

invites the Administrative Council,

to consider the inclusion in the agenda for the next competent WARC of the question of appropriate frequency allocations for the operational use of wind profiler radars,

requests the Secretary-General

to bring this Recommendation to the attention of the World Meteorological Organization, the International Civil Aviation Organization, and the International Maritime Organization.

COMMITTEE 2

First report of Working Group 2A to Committee 2

1. The Working Group of Committee 2 (Credentials) met on 12 February 1992. It considered the credentials of the following delegations:

Germany (Federal Republic of)
Saudi Arabia (Kingdom of)
Argentine Republic
Australia
Austria
Bahamas (Commonwealth of the)
Bahrain (State of)
Belarus (Republic of)
Belgium
Benin (Republic of)
Bhutan (Kingdom of)
Brazil (Federative Republic of)
Brunei Darussalam
Bulgaria (Republic of)
Burkina Faso
Cameroon (Republic of)
Cape Verde (Republic of)
Central African Republic
Chile
China (People's Republic of)
Cyprus (Republic of)
Vatican City State
Colombia (Republic of)
Korea (Republic of)
Côte d'Ivoire (Republic of)
Cuba
Denmark
Ecuador
Spain

United States of America
Ethiopia (People's Democratic Republic of)
Russian Federation
Finland
France
Gabonese Republic
Gambia (Republic of the)
Ghana
Honduras (Republic of)
Hungary (Republic of)
India (Republic of)
Indonesia (Republic of)
Iran (Islamic Republic of)
Ireland
Iceland
Israel (State of)
Italy
Japan
Jordan (Hashemite Kingdom of)
Kenya (Republic of)
Lebanon
Lithuania (Republic of)
Luxembourg
Madagascar (Democratic Republic of)
Malaysia
Mali (Republic of)
Malta (Republic of)
Morocco (Kingdom of)
Mexico (provisional accreditation under No. 383 of the Nairobi Convention)
Monaco
Mozambique (Republic of)
Nicaragua
Niger (Republic of the)
Norway
New Zealand
Oman (Sultanate of)
Uganda (Republic of)
Panama (Republic of)
Papua New Guinea
Netherlands (Kingdom of the)
Philippines (Republic of the)
Portugal

Qatar (State of)
Democratic People's Republic of Korea
Romania
United Kingdom of Great Britain and Northern Ireland
San Marino (Republic of)
Senegal (Republic of)
Singapore (Republic of)
Sri Lanka (Democratic Socialist Republic of)
Sweden
Switzerland (Confederation of)
Suriname (Republic of)
Swaziland (Kingdom of)
Tanzania (United Republic of)
Chad (Republic of)
Thailand
Togolese Republic
Tunisia
Turkey
Ukraine
Venezuela (Republic of)
Yemen (Republic of)
Yugoslavia (Socialist Federal Republic of)
Zimbabwe (Republic of)

(94 delegations in all)

These credentials are all in order.

2. The Working Group also declared that the Instrument for the transfer of powers by the Republic of Latvia to the Delegation of the Republic of Lithuania is in order (see Document 125).
3. The Working Group noted that some delegations attending the Conference had not yet deposited their credentials. They would be contacted by the Committee's Secretariat.

J.A. PADILLA LONGORIA
Chairman of Working Group 2A

Source: Document DT/45

COMITEE 4

First report of Working Group 4A to Committee 4

1. Working Group 4A, after in-depth discussions of the subjects related to the extensions of the spectrum to the HF broadcasting service, came to the conclusion that several subjects are closely interrelated and that they cannot be considered in isolation, nor a separate decision can be adopted for any separate item. All subjects represent elements of a package, and the final decision will depend on the compromise solution for each element of the package. The elements of the package are contained in Document DT/6.
2. For the examination of the issue of extension of the spectrum to the HF broadcasting, the Working Group adopted a set of guidelines which are to be found in Document DT/16.
3. As an element of the package, the Working Group considered the issue of the allocations to the HF broadcasting in the bands currently regulated by RR 503. The Working Group decided to leave aside, provisionally, these bands, pending consideration of the other bands.
4. The Working Group examined the proposals concerning the possible extensions in the bands above 10 MHz and identified the options which obtained greater support. As elements of the package they will be reconsidered in the light of the other deliberations.
5. Particularly important was the issue of safeguarding the interests of the existing services, the Working Group agreed that this issue represents a substantial element of the package and therefore Committee 5 was urged, by bias of the Chairman of Committee 4, to give priority to this issue (see Document 116).

S. HESS
Chairman of Working Group 4A

WORKING GROUPS 4A, 4B, 4CNote by the Chairman of Committee 4

ALLOCATION OF PROPOSALS CONCERNING RESOLUTIONS AND RECOMMENDATIONS

The proposals concerning Resolutions and Recommendations (see Document 92) are allocated to Working Groups 4A, 4B and 4C, as follows:

WG 4A		WG 4B		WG 4C	
USA/12/170-177	Res. No. 517	E/25/13	Res. No. 520	E/25/14	Res. No. 521
CTR/SLV/NCG/14	Res. No. AAA	EUR/20/118	Res. No. EEE	EUR/20/61	Res. No. GGG
EUR/20/35	Rec. No. WWW	CAN/23/149	Res. No. ZZZ	EUR/20/131	Res. No. RRR
EUR/20/36	Rec. No. XXX	EUR/20/129	Rec. No. QQQ		
EUR/20/37	Rec. No. YYY	J/27/84	Rec. No. JJ		
EUR/20/38	Rec. No. ZZZ	AUS/31/80-83	Res. No. 44		
E/25/12	Rec. No. 511	MLI/39/43	Res. No. XX2		
YEM/41/3-6	Res. No. 517	EUR/46/4	Rec. No. FFF		
NZL/26/2	Res. No. AAA	MEX/63/123	Res. No. MEX1		
IND/34/45	Rec. No. ZZZ				
IND/43/46	Rec. No. YYY				

I. HUTCHINGS
Chairman of Committee 4

WORKING GROUPS 4A, 4B, 4CNote by the Chairman of Committee 4

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WG 4A		WG 4B		WG 4C	
USA/12/170-177	Res. No. 517	E/25/13	Res. No. 520	E/25/14	Res. No. 521
CTR/SLV/NCG/14	Res. No. AAA	EUR/20/118	Res. No. EEE	EUR/20/61	Res. No. GGG
EUR/20/35	Rec. No. WWW	CAN/23/149	Res. No. ZZZ	EUR/20/131	Res. No. RRR
EUR/20/36	Rec. No. XXX	EUR/20/129	Rec. No. QQQ		
EUR/20/37	Rec. No. YYY	J/27/84	Rec. No. JJ		
EUR/20/38	Rec. No. ZZZ	AUS/31/80-83	Res. No. 44		
YEM/41/3-6	Res. No. 517	MLI/39/43	Res. No. XX2		
NZL/26/2	Res. No. AAA	EUR/46/4	Rec. No. FFF		
IND/34/45	Rec. No. ZZZ	MEX/63/123	Res. No. MEX1		
IND/43/46	Rec. No. YYY				

I. HUTCHINGS
Chairman of Committee 4

COMMITTEE 4Hungary

PROPOSALS FOR THE WORK OF THE CONFERENCE

AMENDMENTS TO THE RADIO REGULATIONS

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992), offers an excellent opportunity for updating, amending or deleting certain provisions of the Radio Regulations.

Hungary therefore proposes the following:

HNG/140/1**MOD 446**

Additional allocation: in Bulgaria, ~~Hungary~~, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the band 14 - 17 kHz is also allocated to the radionavigation service on a permitted basis.

HNG/140/2**MOD 447**

The stations of services to which the bands 14 - 19.95 kHz and 20.05 - 70 kHz and in Region 1 also the bands 72 - 84 kHz and 86 - 90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Bulgaria, ~~Hungary~~, Mongolia, Poland, Czechoslovakia and the U.S.S.R., the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions.

HNG/140/3**MOD 449**

Additional allocation: in Bulgaria, ~~Hungary~~, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the band 67 - 70 kHz is also allocated to the radionavigation service on a permitted basis.

HNG/140/4**MOD 457**

Additional allocation: in Bulgaria, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 130 - 148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate.

HNG/140/5**MOD 571**

Additional allocation: in Bulgaria, China, ~~Hungary~~, Mongolia, Poland, Czechoslovakia and the U.S.S.R., the bands 74.6 - 74.8 MHz and 75.2 - 75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only.

- HNG/140/6**
MOD 587 Additional allocation: in Austria, Bulgaria, ~~Hungary~~, Israel, Kenya, Mongolia, Poland, Syria, the German Democratic Republic, the United Kingdom, Somalia, Czechoslovakia, Turkey, and the U.S.S.R., the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995 and, thereafter, on a secondary basis.
- HNG/140/7**
MOD 672 Different category of service: in Afghanistan, Bulgaria, China, Cuba, ~~Hungary~~, Japan, Mongolia, Poland, Czechoslovakia and the U.S.S.R., the allocation of the band 460 - 470 MHz to the meteorological-satellite service (space-to-Earth) is on a primary basis (see No. 425) and is subject to agreement obtained under the procedure set forth in Article 14.
- HNG/140/8**
MOD 719 In Bulgaria, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the existing installations of the radionavigation service may continue to operate in the band 1 350 - 1 400 MHz.
- HNG/140/9**
MOD 724 Different category of service: in Afghanistan, Saudi Arabia, Bahrain, Bulgaria, Cameroon, Egypt, the United Arab Emirates, France, ~~Hungary~~, Iran, Iraq, Israel, Kuwait, the Lebanon, Morocco, Mongolia, Oman, Poland, Qatar, Syria, the German Democratic Republic, Roumania, Czechoslovakia, the U.S.S.R., Yemen (P.D.R. of) and Yugoslavia, the allocation of the band 1 525 - 1 530 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. 425).
- HNG/140/10**
MOD 746 Additional allocation: in Bulgaria, Cuba, ~~Hungary~~, Mali, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 1 770 - 1 790 MHz is also allocated to the meteorological-satellite service on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.
- HNG/140/11**
MOD 769 Additional allocation: in Afghanistan, Saudi Arabia, Bahrain, Bulgaria, Cameroon, the Central African Republic, the Congo, the Ivory Coast, Cuba, Egypt, the United Arab Emirates, Ethiopia, Gabon, Guinea, Guinea-Bissau, ~~Hungary~~, Iran, Iraq, Israel, the Lebanon, Malaysia, Malawi, Mali, Morocco, Mauritania, Mongolia, Nigeria, Oman, Pakistan, the Philippines, Poland, Qatar, Syria, the German Democratic Republic, Roumania, Singapore, Somalia, Sri Lanka, Czechoslovakia, Thailand, Tunisia, the U.S.S.R., Yemen A.R., Yemen (P. D. R. of), Yugoslavia, Zaire and Zambia, the band 2 690 - 2 700 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.
- HNG/140/12**
MOD 777 Additional allocation: in Bulgaria, Canada, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 3 100 - 3 300 MHz is also allocated to the radionavigation service on a primary basis.

HNG/140/13
MOD 780

Additional allocation: in Bulgaria, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 3 300 - 3 400 MHz is also allocated to the radionavigation service on a primary basis.

HNG/140/14
MOD 798

Additional allocation: in Austria, Bulgaria, ~~Hungary~~, Libya, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 5 250 - 5 350 MHz is also allocated to the radionavigation service on a primary basis.

HNG/140/15
MOD 800

Additional allocation: in Afghanistan, Austria, Bulgaria, ~~Hungary~~, Iran, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 5 470 - 5 650 MHz is also allocated to the aeronautical radionavigation service on a primary basis.

HNG/140/16
MOD 804

Different category of service: in Bulgaria, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 5 670 - 5 725 MHz to the space research service is on a primary basis (see No. 425).

HNG/140/17
MOD 834

Additional allocation: in Saudi Arabia, Bahrain, Bulgaria, Cameroon, China, Colombia, the Republic of Korea, Costa Rica, Cuba, Egypt, the United Arab Emirates, Ecuador, ~~Hungary~~, Iran, Iraq, Israel, Japan, Kuwait, the Lebanon, Mongolia, Pakistan, Poland, Qatar, the German Democratic Republic, Roumania, Czechoslovakia, the U.S.S.R. and Yugoslavia, the band 10.68 - 10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.

HNG/140/18
MOD 885

Different category of service: in Bulgaria, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 31 - 31.3 GHz to the space research service is on a primary basis (see No. 425).

HNG/140/19
MOD 889

Different category of service: in Bulgaria, Egypt, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the allocation of the band 31.5 - 31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. 425).

HNG/140/20
MOD 891

Different category of service: in Bulgaria, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 31.8 - 32.33 GHz to the space research service is on a primary basis (see No. 425).

HNG/140/21
MOD 896

Different category of service: in Bulgaria, Cuba, ~~Hungary~~, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 34.2 - 35.2 GHz to the space research service is on a primary basis (see No. 425).

Reasons: Do not correspond to the national allocation any longer.

COMMITTEE 6

Source: DT/36
DT/29

FIRST SERIES OF TEXTS
FROM THE WORKING GROUP TO THE PLENARY
TO THE EDITORIAL COMMITTEE

The Working Group to the Plenary has approved the annexed texts to be submitted to the Editorial Committee for consideration and subsequent transmission to the Plenary Session:

- Resolution GT-PLN/1 (Agenda item 2.8)
- Recommendation No. 66 (WARC-92) (Agenda item 2.9.1)

M. MUROTANI
Chairman, Working Group to the Plenary

RESOLUTION GT-PLEN/1

**Relating to Primary Service Requirements for Earth Exploration-Satellite
and Meteorological-Satellite Services in the Bands 401 - 403 MHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that many administrations use frequencies in the bands 401 - 402 and 402 - 403 MHz for reporting to satellites from airborne, land-based and maritime data collection platforms (DCPs);
- b) that the CCIR has conducted studies of the characteristics, requirements and sharing criteria necessary for compatibility with the services sharing the bands with these systems, the results are reported in CCIR Report 541 and Recommendation 514;
- c) that the meteorological-satellite and earth exploration-satellite services in the bands 401 - 402 and 402 - 403 MHz are secondary to other services in these bands and that in order for continuous reliable observations to be made, it is essential that transmission of the data be achieved without harmful interference,

resolves

that the next competent world administrative radio conference examine the allocation to the meteorological-satellite and earth exploration-satellite services in the bands 401 - 402 and 402 - 403 MHz with the intent of raising the allocation status to primary,

invites the Administrative Council

to take the necessary action to place this matter on the agenda of the next competent world administrative radio conference.

RECOMMENDATION No. 66 (Rev.WARC-92)

**Relating to Studies of the Maximum
Permitted Levels of Spurious Emissions**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that Appendix 8 to the Radio Regulations specifies the maximum permitted levels of spurious emissions, in terms of the mean power level of any spurious component supplied by a transmitter to the antenna transmission line, for the frequency bands below 17.7 GHz;
- b) that the principal objective of Appendix 8 is to specify the maximum permitted levels of spurious emissions that, while being achievable, provide protection against harmful interference;
- c) that excessive levels of spurious emissions may give rise to harmful interference;
- d) that while Appendix 8 applies only to the mean power of the transmitter and the spurious emissions, there are a variety of emissions where the interpretation of the term "mean power" and its consequential measurement are difficult;
- e) that whilst the CCIR is studying this problem, it has not yet furnished adequate Recommendations pertaining to Appendix 8 for frequency bands above 960 MHz;
- f) that spurious emissions from transmitters operating in space stations may cause harmful interference, particularly in regard to intermodulation components from wide-band amplifiers which cannot be adjusted after launch;

ADD g) that spurious emissions can cause harmful interference to passive services including the radio astronomy service in bands above 17.7 GHz;

MOD gh) that spurious emissions from earth stations also require particular study;

MOD hi) that no information is available from the CCIR regarding spurious emissions from stations employing digital modulation techniques;

ADD k) that transmitters operating in space stations, are increasingly employing spread-spectrum and other wide-band digital modulation techniques that can produce out-of-band and spurious emission at frequencies far removed from the carrier frequency,

recommends that the CCIR

1. study as a matter of urgency the question of spurious emissions resulting from space services transmissions, and, on the basis of those studies, develop Recommendations for maximum permitted levels of spurious emissions in terms of mean power of spurious components supplied by the transmitter to the antenna transmission line;

2. continue the study of spurious emission levels in all frequency bands, emphasizing the study of those frequency bands, services and modulation techniques not presently covered by Appendix 8;
3. establish appropriate measurement techniques for spurious emissions, including the determination of reference levels for wide-band transmissions as well as the applicability of reference measurement bandwidths;
4. study the categorizing of emissions and spurious emissions in terms of "mean power" and develop appropriate Recommendations to facilitate the interpretation and measurement of "mean power" as it applies to the various classes of emissions;
5. provide a report to the next competent conference on the results of its studies with a view to reviewing and including spurious and out-of-band emission limits in Appendix 8 of the Radio Regulations principally for the protection of the radio astronomy and other passive services.

ADD

COMMISSION 4

Espagne

PROPOSITIONS POUR LES TRAVAUX DE LA CONFERENCE

SUPPRESSION DE LA REFERENCE AU RENVOI 733E DANS LA BANDE DE
FREQUENCES 1 610 - 1 626,5 MHz POUR LA REGION 2

E/142/1

Dans la Région 2 les attributions au service de radiorepérage par satellite (Terre vers espace) ont le statut primaire.

Il ne convient donc pas de faire référence pour ladite bande, dans la Région 2, au renvoi 733E.

De plus, il faut tenir compte du renvoi 734 qui prie déjà les administrations de prendre toutes les mesures pratiquement réalisables pour éviter de causer des brouillages préjudiciables au service de radioastronomie dans la bande 1 610,6 - 1 613,8 MHz.

Nous considérons que le renvoi 734 est suffisamment explicite pour empêcher de causer des brouillages préjudiciables au service de radioastronomie dans la Région 2.

Motifs: Outre le contenu de la présente proposition, il s'agit de rappeler que le renvoi 733E ne concerne que les Régions 1 et 3.

COMMITTEE 4

Yugoslavia

**Agenda item 2.2.3a - Allocation of frequency bands in the range 500 - 3 000 MHz for
broadcasting-satellite service (sound)**

Yugoslavia supports provision for the establishment of a digital sound broadcasting system that uses broadcasting-satellite and complementary terrestrial broadcasting techniques.

Since there are technical and economic arguments in favour of an allocation around 1.5 GHz, Yugoslavia, under this agenda item, is proposing:

YUG/143/1

The broadcasting services (sound) should be accommodated within the band
1 429 - 1 515 MHz.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 144-E
13 February 1992
Original: English

COMMITTEE 4

Note by the Chairman of the Conference

I have the honour to bring to the attention of the Conference, at the request of the Administration of Viet Nam, the annexed information paper.

J. BARRIONUEVO PEÑA
Chairman of the Conference

Annex: 1

ANNEX

Socialist Republic of Viet Nam

Mr. Chairman,

We highly appreciate the aim of WARC-92 and last year in August we had the opportunity to attend the preparatory meeting for the conference organized in Bangkok.

The spectrum of frequencies used for communication and broadcasting and other services is the common resource of humanity and its allocation must be equitable, logical and efficient for the needs of the people.

We have received documents for WARC-92 provided by ITU and ABU and documents of Japan and Australia presenting their points of view and proposals for WARC-92.

We have read these documents and consider as precious ones to make the countries known each other on the point or view of the common problem.

It is a regret that we could not arrange to attend this important WARC-92 for this time of calendar is our traditional holiday (the TET feast of Viet Nam) that our responsibility is to increase the time of broadcasting and to assure the quality of service.

We would like to send our greetings and best wishes to the Conference and to our colleagues.

In our service of radio and TV broadcasting, these bands of frequencies are used:

- band MW for in-country and provincial broadcasting;
- band SW for coverage some regions far from the capital;
- band SW for international broadcasting;
- band FM (88 - 108 MHz) for broadcasting in large cities (in stereo mode) and for rural broadcasting of the district (about 260 stations);
- band C in BSS to transmit the central programme in radio and TV to all the country and then retransmit the TV programme on band VHF and the radio programme on MW band of provincial stations and on FM band of district station;
- band 8 GHz for transmitting the programme from studio to central station of TV and radio broadcasting;
- band FM for transmitting the programme from studio to some regional and provincial stations.

The service of radio and TV in Viet Nam now is already limited because our economy meet some difficulties but the need of the people and the government in this problem is very great. In the near future, we shall extend the coverage of central programme in radio and TV by satellite and with the improvement of the economy of the country, our people will get more equipments in the service of information and entertainment.

Therefore, we appreciate the just and logical allocation of frequency for radio and TV broadcasting.

We agree with principles presented in the documents of ABU and we are in the same point of view with Japan in the three principles:

- frequency spectrum is a limited resource to be used efficiently;
- every Member has the right to use all the frequency bands;
- every Member will mutually respect the various needs of others.

We also agree with the opinion of Australia that it is not feasible to increase HF broadcasting allocation because now there are too interference in HF broadcasting, affecting each other.

We hope that the Conference would give careful consideration to the problem and have logical and just decision to improve the development of radio and TV broadcasting as well as communication and their services using the spectrum of frequency.

We shall submit to international regulation and of radio and TV in our country.

We hope to receive the help and support to improve our service in radio and TV broadcasting for the need of our people and to reach the international level and aim of broadcasting to serve the peace and friendship on the Earth, our dear common home.

We send to the Conference and to our dear colleagues our best and warmest heart-felt wishes.

NGUYEN DO KHOA
Director of Radio and TV Department
Ministry of Culture Information
and Sports Viet Nam

COMMITTEE 5

Kingdom of Morocco

PROPOSALS FOR THE WORK OF THE CONFERENCE

RESOLUTION NO. 9 OF THE PLENIPOTENTIARY CONFERENCE (NICE, 1989)

During the session of the Administrative Council, the Administration of the Kingdom of Morocco informed the Council that it disagreed with the simplified procedure proposed by the IFRB, considering that it did not comply with the instructions given to the IFRB by the Plenipotentiary Conference in Resolution No. 9. In due course this Administration also informed the IFRB in writing of its disagreement with that procedure. The Moroccan Delegation is surprised that the IFRB, despite the small number of replies received in response to its consultation on this procedure and the opposition expressed in some of them, should have persisted with the application of its procedure. The procedure this permanent organ ought to have applied is described in Document 124 of this Conference.

Document 5 contains the list of allotments resulting from application of the IFRB procedure. A study of it by the Administration has revealed the following anomalies as far as the Kingdom of Morocco is concerned:

- the IFRB has taken it upon itself to delete seven allotments appearing in Appendix 26 (it should be noted that under Article 12 or any other appendix to the Regulations an assignment or allotment is only supposed to be deleted with the agreement of the administration concerned);
- several of the allotments given in Document 5 for Morocco are in different bands from the original allotments in Appendix 26, although Resolution No. 9 stated that the replacement of allotments was to be done with the "minimum necessary frequency shift";
- several of the allotments given in Document 5 for Morocco are also given to adjacent or neighbouring countries, which could give rise to serious incompatibilities.

In view of this situation, the Moroccan Delegation has felt obliged to provide the Chairman of Working Group 5B with an initial list of corrections that are needed. The Moroccan Delegation is willing to provide any assistance in resolving the difficulties resulting from the approach adopted by the IFRB. In raising this matter it does not wish in any way to call in question the good will of the specialized Secretariat of the IFRB or the members of the Board, who, it is sure, have acted solely in the interests of Member States.

COMMITTEE 5

Source: Document DT/44

First report of Working Group 5B to Committee 5

1. Working Group 5B submits the following texts for approval by Committee 5:
 - 1) the draft modifications to Article 12 of the Radio Regulations (Annex 1 to this report);
 - 2) the draft revision of Appendix 26 to the Radio Regulations, without Part III (Annex 2 to this report);
 - 3) the draft new Resolution No. COM5/[1] on the implementation of the new provisions applicable in the frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3 025 kHz and 18 030 kHz (Annex 3 to this report).
2. The Delegation of the Kingdom of Morocco reserved its position with respect to these texts.

J.P. LUCIANI
Chairman of Working Group 5B

Annexes: 3

ANNEX 1

**DRAFT MODIFICATIONS TO ARTICLE 12 OF THE RADIO REGULATIONS
AS A RESULT OF ACTIONS TAKEN WITH REGARD TO APPENDIX 26,
AS INDICATED IN RESOLUTION No. 9 OF THE PLENIPOTENTIARY
CONFERENCE (NICE, 1989) (FORMERLY RESOLUTION NO. PL-B/2)**

1. Draft modifications to Sub-Section IIC (paragraph 27)

- | | | |
|-------|-------|--|
| NOC | 1343 | <i>§27. (1) Examination of Notices Concerning Frequency Assignments to Aeronautical Stations in the Aeronautical Mobile (OR) Service in the Bands Allocated Exclusively to that Service Between 3 025 kHz and 18 030 kHz (see No. 1239)</i> |
| NOC | 1344 | (2) The Board shall examine each notice covered by No. 1343 to determine whether: |
| MOD | 1344A | (a) the notice is in conformity with the provisions of No. 1240 <u>and those contained in Part .II. of Appendix 26 (Rev.)</u> ; |
| MOD | 1345 | (b) the assignment is in conformity with the primary an allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 26 (Parts III and IV) contained in Part .III. of Appendix 26 (Rev.) . |
| SUP | 1346 | |
| SUP | 1347 | |
| SUP | 1348 | |
| (MOD) | 1348A | (3A) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article. |

Annex 1 (cont.)

ADD 1348B (4) Any frequency assignment for which the finding is favourable with respect to Nos. 1344A and 1345 shall be recorded in the Master Register. The date to be entered in Column 2a shall be that determined in accordance with the relevant provisions of Section III of this Article.

ADD 1348C (5) A notice which is in conformity with the provisions of No. 1344A, but not with those of No. 1345, shall be examined with respect to the allotments in the Plan and to assignments already recorded with a favourable finding with respect to this present provision. In so doing, the Board shall apply the technical criteria specified in Part IV of Appendix 26 (Rev.). The date to be entered in Column 2a or 2b shall be that determined in accordance with the relevant provisions of Section III of this Article.

SUP 1349

2. Draft modifications to Section III

NOC 1406 **\$45. (1) *Frequency Bands Allocated Exclusively to the Aeronautical Mobile (OR) Service Between 3 025 kHz and 18 030 kHz***

MOD 1407 **(2) If the finding is favourable with respect to Nos. 1344A and 1345, the date of 15 December 1992 shall be entered in Column 2a.**

MOD 1408 **(3) If the finding is favourable with respect to No. ~~4346~~ 1348C, the date of 15 December 1992 shall be entered in Column 2b 2a.**

SUP 1409

MOD 1410 **(4) In all other cases covered by No. 1343, the date of receipt of the notice by the Board 16 December 1992 shall be entered in Column 2b.**

(MOD) 1411 **(5) For assignments to stations other than aeronautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).**

ANNEX 2

DRAFT APPENDIX 26(Rev.)
to the Radio Regulations

**Provisions and Associated Frequency Allotment Plan
for the Aeronautical Mobile (OR) Service
in the Bands Allocated Exclusively to that Service
Between 3 025 kHz and 18 030 kHz**

(see Article 50 of the Radio Regulations)

PART I: General Provisions, Definitions

26/1 The provisions of this Appendix shall apply to the aeronautical mobile (OR) service in the following frequency bands:

3 025 - 3 155 kHz
3 800 - 3 950 kHz (Region 1 only),
4 700 - 4 750 kHz
5 680 - 5 730 kHz
6 685 - 6 765 kHz
8 965 - 9 040 kHz
11 175 - 11 275 kHz
13 200 - 13 260 kHz
15 010 - 15 100 kHz
17 970 - 18 030 kHz

26/2 For the purpose of this Appendix, the terms used comprise the following:

26/2.1 Frequency Allotment Plan : The Plan for the aeronautical mobile (OR) service, contained in Part III of this Appendix.

26/2.2 Allotment in the aeronautical mobile (OR) service: A frequency allotment in the aeronautical mobile (OR) service which comprises:

- a frequency channel from the channels appearing in the channelling arrangement in No. 26/3;
- a bandwidth of up to 2.8 kHz, situated wholly within the frequency channel concerned;
- a power within the limits laid down in No. 26/4.4 and/or against the allotted frequency channel;
- an allotment area which is the area in which the aeronautical station can be situated and which coincides with the territory of the country, or the geographical area, or with a part of the territory, as indicated against the frequency channel concerned in the Frequency Allotment Plan.

Annex 2 (cont.)

**PART II: Technical Bases Used for the Establishment of the
Frequency Allotment Plan for the Aeronautical Mobile (OR) Service
in the Exclusive Bands Between 3 025 kHz and 18 030 kHz**

26/3 Channelling arrangement

26/3.1 The channelling arrangement for the frequencies to be used by aeronautical stations in the aeronautical mobile (OR) service in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz is indicated in Table 1 below.

TABLE 1

Frequency band 3 025 - 3 155 kHz: 43 + 1 channel

3 023 ¹⁾	3 026	3 029	3 032	3 035	3 038	3 041	3 044	3 047	3 050
3 053	3 056	3 059	3 062	3 065	3 068	3 071	3 074	3 077	3 080
3 083	3 086	3 089	3 092	3 095	3 098	3 101	3 104	3 107	3 110
3 113	3 116	3 119	3 122	3 125	3 128	3 131	3 134	3 137	3 140
3 143	3 146	3 149	3 152						

Frequency band 3 900 - 3 950 kHz (Region 1 only): 16 channels

3 900	3 903	3 906	3 909	3 912	3 915	3 918	3 921	3 924	3 927
3 930	3 933	3 936	3 939	3 942	3 945				

Frequency band 4 700 - 4 750 kHz: 16 channels

4 700	4 703	4 706	4 709	4 712	4 715	4 718	4 721	4 724	4 727
4 730	4 733	4 736	4 739	4 742	4 745				

Frequency band 5 680 - 5 730 kHz: 15 + 1 channels

5 680 ¹⁾	5 684	5 687	5 690	5 693	5 696	5 699	5 702	5 705	5 708
5 711	5 714	5 717	5 720	5 723	5 726				

Frequency band 6 685 - 6 765 kHz: 26 channels

6 685	6 688	6 691	6 694	6 697	6 700	6 703	6 706	6 709	6 712
6 715	6 718	6 721	6 724	6 727	6 730	6 733	6 736	6 739	6 742
6 745	6 748	6 751	6 754	6 757	6 760				

Frequency band 8 965 - 9 040 kHz: 25 channels

8 965	8 968	8 971	8 974	8 977	8 980	8 983	8 986	8 989	8 992
8 995	8 998	9 001	9 004	9 007	9 010	9 013	9 016	9 019	9 022
9 025	9 028	9 031	9 034	9 037					

Frequency band 11 175 - 11 275 kHz: 33 channels

11 175	11 178	11 181	11 184	11 187	11 190	11 193	11 196	11 199	11 202
11 205	11 208	11 211	11 214	11 217	11 220	11 223	11 226	11 229	11 232
11 235	11 238	11 241	11 244	11 247	11 250	11 253	11 256	11 259	11 262
11 265	11 268	11 271							

¹⁾ For use of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz see No. 26/3.4

Annex 2 (cont.)

Frequency band 13 200 - 13 260 kHz: 20 channels

13 200	13 203	13 206	13 209	13 212	13 215	13 218	13 221	13 224	13 227
13 230	13 233	13 236	13 239	13 242	13 245	13 248	13 251	13 254	13 257

Frequency band 15 010 - 15 100 kHz: 30 channels

15 010	15 013	15 016	15 019	15 022	15 025	15 028	15 031	15 034	15 037
15 040	15 043	15 046	15 049	15 052	15 055	15 058	15 061	15 064	15 067
15 070	15 073	15 076	15 079	15 082	15 085	15 088	15 091	15 094	15 097

Frequency band 17 970 - 18 030 kHz: 20 channels

17 970	17 973	17 976	17 979	17 982	17 985	17 988	17 991	17 994	17 997
18 000	18 003	18 006	18 009	18 012	18 015	18 018	18 021	18 024	18 027

26/3.2 The frequencies indicated in No. 26/3.1 are the carrier (reference) frequencies.

26/3.3 With the exception of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz (see 26/3.4 below), one or more frequencies from Table 1 may be assigned to any aeronautical station and/or aircraft station, in accordance with the Frequency Allotment Plan, as contained in Part III of this Appendix.

26/3.4 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz are provided for worldwide common use (see also Nos. 27/208 to 27/214).

26/3.5 The aeronautical radiotelephone stations shall use only single-sideband emissions (J3E). The upper sideband mode shall be employed, and the assigned frequency (see No. RR142) shall be 1 400 Hz higher than the carrier (reference) frequency.

26/3.6 The channelling arrangement established in No. 26/3.1 does not prejudice the rights of administrations to establish, and to notify assignments to stations in the aeronautical mobile (OR) service other than those using radiotelephony, provided that

- the occupied bandwidth does not exceed 2 800 Hz and is situated wholly within one frequency channel (see also Resolution No. AER-1);
- the limits of unwanted emission are met (see No. 27/66C).

26/4 **Classes of emission and power**

26/4.1 In the aeronautical mobile (OR) service, in the bands governed by this Appendix, the use of the emissions listed below is permissible; additionally the use of other emissions is also permissible, subject to compliance with No. 26/3.6

26/4.2 **Telephony :**

- J3E (single-sideband, suppressed carrier).

26/4.3 **Telegraphy (including automatic data transmission):**

- A1A, A1B, F1B;
- (A,H)2(A,B);
- (R,J)2(A,B,D);
- J(7.9)(B,D,X).

Annex 2 (cont.)

26/4.4 Unless otherwise specified in Part III of this Appendix, the following transmitter power limits (i.e. power supplied to the antenna), shall be respected:

Class of emission	Power limit values (Peak envelope power supplied to the antenna)	
	Aeronautical station	Aircraft station
J3E	36 dBW (PX)	23 dBW (PX)
A1A, A1B	30 dBW (PX)	17 dBW (PX)
F1B	30 dBW (PX)	17 dBW (PX)
A2A, A2B	32 dBW (PX)	19 dBW (PX)
H2A, H2B	33 dBW (PX)	20 dBW (PX)
(R,J)2(A,B,D)	36 dBW (PX)	23 dBW (PX)
J(7,9)(B,D,X)	36 dBW (PX)	23 dBW (PX)

26/4.5 On the assumption that no antenna gain is involved, the transmitter powers, specified in No. 26/4.4 above, will result in a mean effective radiated power of 1 kW (for the aeronautical stations) and 50 W (for the aircraft stations) used as the basis for the establishment of the Plan contained in Part III of this Appendix.

Annex 2 (cont.)

**PART III: Plan for the Allotment of Frequencies
for the Aeronautical Mobile (OR) Service
in the Exclusive Bands Between 3 025 kHz and 18 030 kHz
(see Document DT/40)**

Annex 2 (cont.)

PART IV: Criteria for Compatibility Assessment

26/6 For assessment of the sharing possibilities between the allotments contained in Part III of this Appendix, and any new assignment which is not covered by an appropriate allotment, the following criteria shall be used:

26/6.1 A new station, not covered by an allotment, which uses the standardized transmission characteristics (J3E, 36 dBW PX), shall be considered compatible with the Plan, if it fulfils the criterion of being separated from any point of any allotment area, indicated in the Plan on the given channel, by the half-repetition distance, determined for the given conditions of operation (frequency band used, geographical position of the station, direction of propagation), which are given below:

Frequency band (kHz)	Half-repetition distances (in km)			
	Northern hemisphere		Southern hemisphere	
	North-South	East-West	North-South	East-West
3 025 - 3 155	550	600	550	600
3 900 - 3 950	650	650	650	650
4 700 - 4 750	725	775	725	775
5 680 - 5 730	1 175	1 325	1 150	1 300
6 685 - 6 765	1 350	1 600	1 225	1 425
8 965 - 9 040	2 525	3 525	2 225	3 075
11 175 - 11 275	3 375	5 575	2 675	3 925
13 200 - 13 260	4 550	6 650	3 475	5 625
15 010 - 15 100	5 050	7 450	4 800	7 100
17 970 - 18 030	5 750	8 250	5 675	7 475

26/6.2 The relevant value of the half-repetition distance, for paths which are situated partially in the northern hemisphere and partially in the southern hemisphere, shall be corrected using the linear interpolation procedure. The linear interpolation procedure shall be used for calculation of the correction due to the azimuth of the propagation path with respect to the true North.

26/6.3 The relevant value of the half-repetition distance, obtained in accordance with No. 26/6.2, shall be corrected, where necessary, to take into account the difference in the radiated power of the assignment with respect to the reference radiated power (30 dBW, mean radiated power), on the basis that a variation of 1 dB in the radiated power corresponds to a variation of 4% in the repetition distance.

PART V: Procedure for Modification and for Maintenance of the Plan

26/7 The Plan will be updated, by the Board, in accordance with the following procedure:

26/7.1 a) when a country, which has no allotment in the Plan, requests an allotment, the Board shall select an appropriate allotment on a priority basis and shall enter it in the Plan;

26/7.2 b) when a notice, which is submitted under Article 12 of the Radio Regulations and which is not covered by appropriate allotment, receives a favourable finding with respect to the provisions of No. 1348C, the corresponding allotment shall be entered in the Plan;

26/7.3 c) when a country informs the Board that it renounces the use of an allotment, the Board shall cancel the allotment concerned from the Plan;

26/7.4 d) when no notification, under Article 12 of the Radio Regulation, is received within a period of two years following the entry of the allotment in the Plan, the Board shall consult the Administration concerned within the next six months about the deletion of that allotment from the Plan: if the Administration so wishes an extension of a period not exceeding twelve months may be granted: if, thereafter, no notification is received the allotment shall be deleted.

26/8 The Board shall maintain an up-to-date master copy of the Plan, taking account of the application of the procedure specified in this appendix; and shall periodically, but no less frequently than once a year, prepare recapitulative documents listing all amendments made to the Plan since its last publication.

26/9 The Secretary-General shall publish an up-to-date version of the Plan in an appropriate form no later than once every four years.

ANNEX 3

DRAFT RESOLUTION No. COM5/[1]

**RELATING TO THE IMPLEMENTATION OF THE NEW PROVISIONS
APPLICABLE IN THE FREQUENCY BANDS ALLOCATED EXCLUSIVELY TO
THE AERONAUTICAL MOBILE (OR) SERVICE BETWEEN
3 025 KHZ AND 18 030 KHZ**

**The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts
of the Spectrum, Malaga - Torremolinos, 1992,**

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the frequency spectrum available;
- b) that the implementation of the modified conditions of use will require a considerable workload for the administrations since a large number of frequency assignments to both aircraft and aeronautical stations will have to be transferred from existing frequencies to the new frequencies and channels designated by the present Conference;
- c) that the full implementation of the modified provisions for the frequency usage may require considerable investments in replacement of the existing equipment;
- d) that, nevertheless, the full implementation of the modified provisions for the frequency usage should be made as soon as possible so that the advantages of the new arrangement may be realized at the earliest opportunity;
- e) that the changeover to the new conditions of operation should be made with the least possible disruption to the service rendered by each station,

recognizing

- a) that the implementation of the decisions made by the present Conference relating to the new arrangement of the frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3 025 kHz and 18 030 kHz should follow an orderly procedure for the transfer of existing services from the old to the new conditions of operation;
- b) that the transfer procedures of the existing frequency assignments in the aeronautical mobile (OR) service, in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz, are dealt with in Resolution No. COM5/[1] adopted by the present Conference,

resolves

1. that the provisions of Appendix 26 (Rev.), as well as the relevant provisions of Article 12 of the Radio Regulations, as modified by the present Conference, shall apply to any new frequency assignment, as from 0001 UTC on 15 December 1992.

Annex 3 (cont.)

2. that administrations shall take all the necessary measures to conform with the new conditions of use of the bands governed by Appendix 26 (Rev.) by not permitting the installations of new equipment whose emissions require a necessary bandwidth exceeding 2 800 Hz as from 15 December 1992;

3. that, until 15 December 1995, the administrations may continue to use their existing assignments in accordance with the characteristics recorded in the Master International Frequency Register; after that date the administrations shall take all necessary measures to modify the characteristics of their assignments so as to bring them in conformity with the provisions of Appendix 26 (Rev.) ;

4. that, not later than 15 December 1997, the Administrations shall discontinue all emissions whose bandwidth exceeds 2 800 Hz,

invites Administrations

to make every effort to eliminate mutual incompatibilities which may occur in the transition period.

COMMITTEE 5

Second Report of Working Group 5B to Committee 5

ALLOTMENT ARRANGEMENT FOR THE AERONAUTICAL MOBILE (OR) SERVICE
IN THE EXCLUSIVE BANDS BETWEEN 3 025 kHz AND 18 030 kHz

1. The attached version of the allotment arrangement is a revision of the allotment arrangement contained in Addendum 1 to Document 5, adjusted as follows:
 - 1.1 It contains allotments derived from the notifications, received under Article 12 of the Radio Regulations, in the period after 1 April 1991 which are referred to in paragraph 9 of Addendum 2 to Document 5.
 - 1.2 It also contains the following allotments, as decided at the last meeting of Working Group 5B:
 - CTI: as presented in Document 94;
 - IRN: as received from the Delegation of IRN;
 - ISR: as presented in Addendum 1 to Document 51.
2. It contains editorial amendments concerning the allotments for the allotment area ATA(USA), since that allotment area was listed differently on different channels. The adjusted version of the allotment arrangement contains entries for this allotment area only under REGY.
3. With respect to the other requests for adjustments, the situation was clarified with the delegations concerned as follows:
 - 3.1 The Delegation of Zambia was shown the communication from the Administration of Zambia, in response to the IFRB request for requirements, which indicated that the Administration of Zambia had, at that time, no requirement to notify assignments.
 - 3.2 The Delegations of INS, MLA, SEN, SNG and SUR were informed of their situations in the current AP26 Plan and in the proposed new allotment arrangement. The new allotment arrangement correctly reflects their allotments resulting from the application of the IFRB approach. Their future needs could be satisfied through the procedure of modification to the Plan, as contained in Part V of Appendix 26(Rev.).
4. The Delegation of Cuba indicated their non-acceptance of those allotments shown as in CUB but for which the notifying Administration was not that of Cuba.
5. The Delegations of the Kingdom of Morocco and of Spain indicated their concern about allotments sharing MRC or E on the same channel as GIB. The Chairman of Sub-Working Group 5B2 has been requested to seek a solution to this problem with the two Administrations in conjunction with the IFRB.
6. The Delegation of the Kingdom of Morocco reserved its position with respect to those texts.
7. The texts are submitted to Committee 5 for approval.

J.P. LUCIANI
Chairman of Working Group 5B

Attachment: Part III of Appendix 26(Rev.).

Attachment 1

APPENDIX 26(Rev.)

**PART III: Plan for the Allotment of Frequencies
for the Aeronautical Mobile (OR) Service
in the Exclusive Bands Between 3 025 kHz and 18 030 kHz**

26/5.1 Column headings

Column 1: Carrier (reference frequency), in kHz

Column 2: Allotment area (designated by the symbol of the country or the geographical area the meaning of which is given in the Preface to the IFL)

26/5.2 Whenever the allotment area is followed by another administration's code, indicated in parenthesis, the notifications are receivable from the latter administration on the basis of an agreement in accordance with Resolution No. 1.

3026	REG1 ARS G MCO URS REG3 KOR
3029	REGY ATA(ARG) REG1 ARS AZR BLR COG F G I IRQ NOR POL SEN TUN URS REG2 ALS ARG B BER(USA) CLM HWA USA REG3 AUS CHN GUM IND J KOR MRL NZL PNG VTN
3032	REGY ATA(ARG) REG1 AZR BLR COG CTI F HNG IRQ MDG MLT NOR OMA POL SEN TUN URS REG2 ALS ARG B BER(USA) CLM DOM HWA USA REG3 AUS CHN GUM IND J J(USA) MRL NZL PHL(USA) PNG VTN
3035	REGY ATA(ARG) REG1 ARS BFA BHR(USA) BLR COG F G G(USA) I(USA) ISL MLT MRC NOR SEN TCD TUN TUR URS YUG REG2 ALS ARG B BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS CHN GUM IND INS J J(USA) NZL PHL(USA) PNG
3038	REGY ATA(ARG) REG1 ARS BFA BHR(USA) BLR COG CTI CYP(G) F G G(USA) GRC I(USA) ISL MDG MTN NOR OMA REU SEN TCD TUN URS YUG REG2 ALS ARG ATG(USA) B BAH(USA) BER(USA) BRB(USA) CUB(USA) HWA MDW MRT PNR PTR TCA(USA) TRD(USA) USA REG3 AUS CHN GUM IND INS J J(USA) MRL NCL NZL OCE PHL(USA) PNG
3041	REG1 ALG G I ISL KWT NMB URS REG3 HKG IRN KRE PHL
3044	REGY ATA(ARG) REG1 AFS ALG CME COG DJI(F) F G GAB I ISR MDG MLI MTN POR ROU SEN TCD TCH UKR URS REG2 ARG CAN CLM JON MEX REG3 AUS BGD CHN GUM IRN J(USA) NCL NZL OCE PAK PHL(USA) PNG
3047	REGY ATA(ARG) REG1 AFS ALG BLR CME COG CTI DJI(F) F GAB IRL ISR MDG MLI MLT MTN POR SEN TCD TCH TUR UKR URS REG2 ARG CAN CLM JON MEX REG3 AUS BGD CHN GUM J(USA) NCL NZL OCE PNG

3050	REGY ATA(ARG) REG1 AZR BLR CME COG DNK F G GIB I MDG MLI MLT MRC POR REU SEN TCD UKR URS REG2 ALS ARG B BER(USA) CAN CUB HWA MDW PNR PTR USA REG3 AUS CHN DGA(USA) FJI GUM IND IRN J(USA) MRL NZL PAK PHL(USA) PNG
3053	REGY ATA(ARG) REG1 AZR CME COG CTI DNK F G GIB HNG MDG MLI MRC POR SEN TCD UKR URS REG2 ALS ARG ATN B BER(USA) CAN CUB HWA MDW PNR PTR USA REG3 AUS CHN FJI GUM IND IRN J(USA) MRL NZL PHL(USA) PNG
3056	REG1 BLR COG D F G GAB GIB MDG MLI ROU SEN TCD UKR URS REG2 ATN B CAN HWA JON MEX MRT USA REG3 AUS IND INS J(USA) KOR PNG
3059	REG1 BLR COG CTI D F G GAB GRC I MDG MLI REU ROU SEN TCD UKR URS REG2 B CAN HWA JON MEX MRT USA REG3 AUS IND INS J(USA) KOR NZL PNG
3062	REG1 G GUI I ROU URS REG3 IRN J
3065	REGY ATA(ARG) REG1 AZR D F G POR ROU S UKR URS REG2 ALS ARG B BER(USA) CUB GRL HWA JON PNR USA REG3 AUS GUM IND IRN J J(USA) MRL PHL(USA) PNG
3068	REGY ATA(ARG) REG1 AZR F G POR S UKR URS YUG REG2 ALS ARG B BER(USA) CUB HWA JON PNR USA REG3 AUS GUM J J(USA) MRL PHL(USA) PNG
3071	REGY ATA(ARG) REG1 AGL BUL DJI(F) F G HOL I ISL MOZ POR REU STP TUN UKR URS REG2 ALS ARG B BER(USA) CLM JON MDW USA REG3 AUS BGD CHN HKG J MRL PAK PNG

3074	REGY ATA(ARG) REG1 AGL AZR BUL F G GIB HNG I MLT MOZ POR STP TUN UKR URS REG2 ALS ARG B BER(USA) CLM GRL JON MDW USA REG3 AUS BGD CHN HKG J MRL PAK PHL(USA) PNG
3077	REGY ATA(ARG) REG1 ARS AZR CYP(G) D F G MLT POR UKR URS REG2 ALS ARG B CAN HWA PRG URG USA VEN REG3 AUS CHN HKG J(USA) KOR NZL PNG SNG
3080	REGY ATA(ARG) REG1 ARS AZR CYP(G) D F G GIB MLT POR TUR UKR URS REG2 ALS ARG B CAN CUB HWA PRG URG USA VEN REG3 AUS CHN GUM HKG IND J(USA) KOR NZL PNG SNG
3083	REG1 CYP(G) G I URS REG3 HKG J
3086	REG1 AFS BLR CYP(G) D F G OMA ROU TCH UKR URS REG2 ALS B BER(USA) CAN CHL CUB(USA) HWA MDW PNR PTR USA REG3 AUS BRM CHN GUM J J(USA) MRL PHL(USA) PNG
3089	REGY ATA(USA) REG1 ALG BLR D G GRC(USA) I I(USA) MRC ROU TCH UKR URS REG2 ALS B BER(USA) CHL CUB(USA) HWA MDW PNR PTR USA REG3 AUS CHN GUM J J(USA) MRL PHL(USA) PNG
3092	REGY ATA(ARG) REG1 ALG ARS AZR DJI(F) F G GIB ISL POL REU URS REG2 ALS ARG B BER(USA) CAN CUB(USA) DOM HWA MDW MEX PNR PTR USA REG3 AUS BGD CHN GUM J MRL NZL PNG
3095	REGY ATA(ARG) REG1 ALG ARS CYP(G) F G GIB GRC(USA) I ISR POL URS REG2 ALS ARG B CAN CUB(USA) DOM HWA MDW MEX PNR PTR USA REG3 AUS BGD CHN GUM J MRL NZL PNG

3098	REG1 ALB AZR BHR(USA) BLR E G GIB I I(USA) UKR URS REG2 ALS ATG(USA) B BAH(USA) BER(USA) BRB(USA) CHL HWA MDW MRT PNR PTR TCA(USA) TRD(USA) USA REG3 AUS BGD GUM HKG J MRL PAK PHL(USA) PNG
3101	REG1 AFS ALB AZR BHR(USA) BLR E G GIB GRC(USA) HNG I I(USA) ISL LBY TUN UKR URS REG2 ALS B BER(USA) BRB(USA) CHL HWA MDW MRT PNR PTR TRD(USA) USA REG3 AUS BGD CHN GUM HKG J MRL PAK PHL(USA) PNG SNG
3104	REG1 GIB I IRL ISL TUN UKR URS REG2 ALS REG3 J
3107	REG1 D E F G GRC(USA) I MNG S UKR URS REG2 ALS B BER(USA) CHL CUB(USA) HWA MDW PNR PTR USA REG3 AUS BRM CHN GUM IND INS J J(USA) MRL PAK PHL(USA) PNG
3110	REG1 ALB AZR D E G GRC(USA) I ISL MNG S TUR UKR URS REG2 ALS B BER(USA) CAN CHL CUB(USA) HWA MDW PNR PTR USA REG3 AUS CHN DGA(USA) GUM IND INS J J(USA) MRL PAK PHL(USA) PNG
3113	REG1 ALB ALG BLR F G G(USA) KEN TCH TUN UKR URS REG2 B CAN CHL DOM MEX USA VEN REG3 AUS CHN GUM HKG J J(USA) PAK PNG SNG
3116	REG1 AFS ALG BLR G GIB I ISL MLT MNG TCH TUN UKR URS REG2 B CAN CHL DOM MEX USA VEN REG3 AUS CHN HKG IND J J(USA) NZL PAK PNG SNG
3119	REGY ATA(ARG) REG1 ALB BLR F G GRC(USA) I I(USA) MRC ROU UKR URS YUG REG2 ALS ARG B BER(USA) HWA MDW PNR PTR USA REG3 AUS BGD CHN FJI GUM IND INS J KIR MRL PHL(USA) PNG

3122	REGY ATA(ARG) REG1 AZR BLR F G GRC(USA) HOL I I(USA) MRC ROU TUR UKR URS REG2 ALS ARG B BER(USA) HWA MDW PNR PTR USA REG3 AUS BGD CHN FJI GUM INS J KIR MRL NZL PAK PHL(USA) PNG
3125	REG1 BLR CYP(G) G MLT MNG ROU URS REG3 J PAK
3128	REG1 BEL BLR G HNG HOL I ROU UKR URS REG2 ALS ATN CAN CUB HWA MDW PNR PTR URG USA REG3 AUS CHN FJI GUM HKG IND INS J MRL NCL NZL OCE PAK PNG
3131	REG1 G I MNG UKR URS REG2 ALS ATN CAN CUB HWA MDW PNR PTR SUR URG USA REG3 AUS CHN CKH FJI GUM IND INS J MRL NCL NZL OCE PAK PNG
3134	REG1 ARS(USA) AZR BUL D(USA) G HOL I OMA TUR(USA) UKR URS REG2 ALS B BER(USA) DOM HWA JON PRG USA VEN REG3 AUS CHN GUM IND J J(USA) MRL PNG TMP(POR)
3137	REG1 ARS(USA) AZR BHR BUL D(USA) F G G(USA) I MNG MRC TUR(USA) UKR URS REG2 ALS B BER(USA) CHL DOM HWA JON PRG SUR USA VEN REG3 AUS CHN GUM IND J J(USA) MRL PHL(USA) PNG TMP(POR)
3140	REGY ATA(ARG) REG1 ALG CME COG D F G GAB I MDG MLI ROU SEN TCD UKR URS YUG REG2 ALS ARG B BER(USA) GRL HWA JON PNR USA REG3 AUS CHN GUM J J(USA) MRL PHL(USA) PNG
3143	REGY ATA(ARG) REG1 ALG CME COG CTI CYP(G) D F G GAB GIB MDG MLI MLT ROU SEN TCD TUN UKR URS YUG REG2 ALS ARG B BER(USA) GRL HWA JON PNR USA REG3 AUS BRM CHN GUM J J(USA) MRL PHL(USA) PNG
3146	REG1 G GHA I MLT MNG URS REG3 J PAK

3149	REG1 AGL ALG BLR BUL CME COG D D(F) G GAB GHA I MDG MLI MLT MTN ROU SEN TCD TUN UKR URS REG2 ALS CAN DOM HWA MDW MEX PNR PTR USA REG3 AUS BRM CHN GUM INS J PAK PNG WAK
3152	REG1 ALG BLR BUL CME COG CTI D D(F) G GAB MDG MLI ROU SEN TCD TUN UKR URS REG2 ALS B CAN DOM HWA MDW MEX PNR PTR SUR USA REG3 AUS CHN GUM INS J NZL PNG WAK
3900	REG1 ALG CME COG D F G ISL MDG MLI OMA SEN TCD TCH TUN TUR UKR URS YUG
3903	REG1 AFS ALG CME COG CTI D F G ISL MDG MLI REU SEN TCD TCH TUN TZA UGA UKR URS YUG
3906	REG1 ALB IRL MLT TZA UGA UKR URS YUG
3909	REG1 BLR COG DJI(F) F G GIB MDG REU SEN TCD UKR URS YUG
3912	REG1 BLR COG CTI F G GIB MDG SEN TCD UKR URS YUG
3915	REG1 ALB ALG BLR F G MNG ROU TCH UKR URS
3918	REG1 AFS ALB ALG BLR ETH F G I ROU TCH UKR URS
3921	REG1 ALG F G KWT MLT POR ROU UKR URS
3924	REG1 CYP(G) F G GIB MLT POR ROU UKR URS
3927	REG1 BUL G GIB IRL TUR URS
3930	REG1 AFS ALG BUL CAF CME CYP(G) DJI(F) G GIB MDG MLI MLT ROU TCH TUN UKR URS

3933	REG1 ALG CAF CME CTI CYP(G) DJI(F) F G GIB I MDG MLI MLT ROU TCH TUN UKR URS
3936	REG1 AFS E G I POL TUR URS
3939	REG1 AFS CYP(G) E F G I MLT POL TUN URS
3942	REG1 F G GIB ISL NOR POL TCH UKR URS
3945	REG1 AFS ETH F G GIB ISL NOR POL SEN TCH UKR URS
4700	REG1 ARS BHR(USA) CYP(G) G GIB I KEN LBY MLT POL URS REG2 ALS B CAN DOM HWA MDW MEX PNR PTR USA REG3 AUS BGD BRM CHN DGA(USA) FJI GUM HKG IND J J(USA) KOR MAC MRL NZL PAK PNG TMP(POR)
4703	REG1 AFS ALG ARS AZR BHR(USA) CYP(G) DNK F G GIB I KEN LBY MLT MRC POL TUR URS REG2 ALS B CAN CHL DOM HWA MDW MEX PNR PTR SUR USA REG3 AUS BGD BRM CHN FJI GUM HKG IND J J(USA) KOR MAC MRL NZL PAK PNG TMP(POR)
4706	REGY ATA(USA) REG1 ALG BLR CYP(G) D F G I I(USA) KEN LBY MLT TUR UKR URS YUG REG2 ALS B BER(USA) CAN CUB(USA) HWA MDW PAQ PNR PRG PTR URG USA REG3 AUS CHN DGA(USA) GUM IND J J(USA) MRL NZL PHL(USA) SNG THA
4709	REG1 AFS ALG ARS BLR CYP(G) D F G I I(USA) KEN LBY MLT OMA TUR UKR URS YUG REG2 ALS B BER(USA) CHL CUB(USA) HWA MDW PAQ PNR PRG PTR URG USA REG3 AUS CHN GUM IND INS J J(USA) MRL NZL PHL(USA) THA
4712	REGY ATA(USA) REG1 AZR BLR CYP(G) F G GIB I(USA) IRL ISL MLT MRC POL ROU UKR URS REG2 ALS BER(USA) CAN CUB(USA) HWA MDW PNR PTR USA REG3 AUS GUM J(USA) KRE MRL PHL

4715	REGY ATA(ARG) ATA(USA) REG1 AGL ALB AZR BHR(USA) BLR CME DJI(F) F G HOL I ISL ISR MNG MOZ POL POR STP TCD TUN TUR UKR URS REG2 ALS ARG ATG(USA) ATN BAH(USA) BER(USA) BRB(USA) CAN CLM HWA MDW PNR PTR TCA(USA) TRD(USA) USA REG3 AUS BGD BRM FJI GUM HKG IND J(USA) MLA MRL PAK THA
4718	REGY ATA(ARG) ATA(USA) REG1 AGL ALB ALG AZR BHR(USA) CME DJI(F) F G I ISL ISR MDG MLT MOZ POR STP TCD TUN UKR URS REG2 ALS ARG ATN BER(USA) BRB(USA) CAN CLM HWA MDW PNR PRU PTR TRD(USA) USA REG3 AUS BGD BRM FJI GUM HKG IND J(USA) MLA MRL NZL PAK THA
4721	REGY ATA(ARG) REG1 AGL ALG BLR CME D D(USA) DJI(F) E F G I MLT MOZ POR ROU STP TCD TUR(USA) UKR URS REG2 ALS ARG BER(USA) CAN CUB GRL HWA JON PNR PRU USA REG3 AUS BGD CHN GUM IND J J(USA) MRL NCL NZL OCE PAK PHL(USA) PNG THA TMP(POR)
4724	REGY ATA(ARG) REG1 AGL ALG BEL BLR CME D D(USA) DJI(F) E F G G(USA) HNG I MDG MOZ POR REU STP TCD TUR(USA) UKR URS REG2 ALS ARG BER(USA) CUB HWA JON PNR USA REG3 AUS CHN GUM IND INS J J(USA) MRL NCL NZL OCE PAK PHL(USA) PNG THA TMP(POR)
4727	REG1 BEL BUL COG CYP(G) DJI(F) F G MDG ROU SEN TCD TCH TUN TUR UKR URS REG2 ALS BER(USA) CAN CUB FLK GRL HWA JON URG USA REG3 AUS BRM CHN GUM IND J MRL PHL(USA) THA
4730	REG1 AFS BUL COG CTI CYP(G) F G I MDG MNG ROU SEN TCH TUN UKR URS REG2 ALS BER(USA) CAN CUB FLK GRL HWA JON URG USA REG3 AUS BRM CHN GUM IND INS J J(USA) MRL NZL PHL(USA) THA
4733	REG1 BDI G GUI KWT MLT NMB URS REG2 HND USA REG3 AUS BTN GUM J PHL(USA)

4736	REGY ATA(ARG) REG1 AFS ALB ALG ARS AUT AZR BLR BUL COG D D(F) DJI(F) ETH F I IRL LBN MDG MLI MRC NOR OMA POR REU SEN TCD UKR URS REG2 ALS ARG B BER(USA) CAN CUB(USA) HND HWA JON MDW MEX MRT PNR PTR USA REG3 AUS CHN GUM IND J MRL NZL PHL(USA) THA WAK
4739	REGY ATA(ARG) REG1 ALB ALG ARS AUT AZR BLR COG CTI D D(F) F G GIB I ISL LBN MDG MLI NOR POR ROU SEN TCD UKR URS REG2 ALS ARG B CAN CUB(USA) HWA JON MDW MRT PNR PTR USA REG3 AUS CHN FJI GUM IND J MRL NZL PAK PHL(USA) THA WAK
4742	REG1 ALG CME COG DJI(F) F G GIB I MDG MLI MNG POL POR REU ROU SEN TCD TGO TUN URS YUG REG2 ALS BER(USA) CAN CHL GRL HND HWA JON PRG URG USA VEN REG3 AUS CHN FJI GUM HKG IND IRN J J(USA) KOR MRL PAK PNG
4745	REG1 AZR CME COG CTI DJI(F) F G I ISL MDG MLI POL POR REU SEN TCD TGO TUN TUR URS REG2 ALS BER(USA) CAN CHL GRL HND HWA JON PRG URG USA VEN REG3 AUS CHN FJI GUM IND IRN J J(USA) KOR MRL NZL PNG
5684	REGY ATA(ARG) REG1 AGL ALB AZR BLR CPV D F G I KWT MOZ POR STP UKR URS REG2 ARG ATN CAN MEX PRG USA REG3 AUS CHN GUM HKG IND J J(USA) KOR THA VTN
5687	REGY ATA(ARG) REG1 AFS AGL ALB AZR BLR CPV D G GIB I MOZ OMA POR STP UKR URS YUG REG2 ARG ATN CAN MEX PRG USA REG3 AUS CHN GUM IND INS IRN J J(USA) KOR NZL PNG THA
5690	REG1 BDI G GRC I IRL ROU TUR URS REG2 HTI REG3 CHN IRN

5693	REGY ATA(ARG) REG1 AFS ARS AZR CME COG CYP(G) F G GIB I IRQ ISL ISR MLI MRC ROU TCH TUN TUR UKR URS REG2 ALS ARG ATG(USA) BAH(USA) BER(USA) BRB(USA) CAN CUB(USA) HWA MDW PNR PTR TCA(USA) TRD(USA) USA VEN REG3 AUS BGD BRM GUM HKG J J(USA) MLA NZL PAK PHL(USA) PNG THA
5696	REGY ATA(ARG) REG1 ARS CME COG CTI CYP(G) G GIB GRC(USA) IRQ ISL MCO MDG MLI OMA ROU TCH TUR UKR URS REG2 ALS ARG BER(USA) BOL BRB(USA) CAN CUB(USA) GTM HWA MDW MEX PNR PTR TRD(USA) USA VEN REG3 AUS BGD BRM GUM J J(USA) NZL PAK PHL(USA) THA
5699	REGY ATA(ARG) REG1 ALG AZR BFA BLR CME DJI(F) F G GAB MLI TCD TUR UKR URS YUG REG2 ALS ARG CAN GRL GTM HWA MEX USA REG3 AUS BRM CHN IND IRN J MAC MRL NZL PAK THA VTN
5702	REGY ATA(ARG) REG1 ALG AZR BFA BLR CME CTI DJI(F) ETH F G G(USA) GAB HOL MDG MLI MTN OMA REU ROU SEN TCD UKR URS YUG REG2 ALS ARG CAN CLM GRL MEX USA REG3 AUS BRM CHN FJI IND IRN J MAC NZL PNG THA
5705	REG1 CYP(G) ETH F G GIB MLT ROU UKR URS REG2 B REG3 HKG J
5708	REG1 AFS AGL COG F HNG IRL IRQ LBN MTN NOR OMA POL ROU SEN SYR TUN TUR URS REG2 ALS B BER(USA) BOL CAN CHL CLM GRL HWA MDW USA REG3 AUS BRM CHN IND J(USA) KOR MRL NZL PNG SNG THA TMP(POR)
5711	REG1 AGL COG CTI F G GIB IRQ ISL LBN MDG MTN NOR POL SEN SYR TUN TUR UKR URS REG2 ALS B BER(USA) BOL CAN CHL CLM GRL HWA MDW USA REG3 AUS BRM CHN IND J(USA) KOR MRL NZL PNG THA TMP(POR)

5714	REGY ATA(USA) REG1 AFS AUT BLR BOT BUL CME CTI CYP(G) D D(F) DJI(F) F G GIB I MLI MLT MNG NMB(AFS) REU ROU TCD TGO TUN UKR URS YUG REG2 ALS B CAN CUB HWA MDW PNR PTR USA REG3 AUS CHN DGA(USA) FJI GUM J J(USA) MRL NZL PAK PHL(USA) THA
5717	REGY ATA(USA) REG1 AFS AUT AZR BLR BOT BUL CME CTI CYP(G) D D(F) DJI(F) ETH F G MDG MLI MLT NMB(AFS) OMA REU ROU SEN TCD TGO TUN UKR URS REG2 ALS B BOL CAN CUB GTM HWA MDW MEX PNR PTR USA REG3 AUS CHN DGA(USA) FJI GUM J J(USA) MRL NZL PAK PHL(USA) PNG THA
5720	REG1 ALG CYP(G) G GIB ISL MLT NMB OMA ROU URS REG2 BOL GTM REG3 HKG IND KRE PHL
5723	REGY ATA(USA) REG1 AFS ALG BHR(USA) BLR COG F G GRC(USA) HNG I ISL MRC MTN NMB(AFS) POR SEN SOM TCH UKR URS REG2 ALS ATG(USA) B BER(USA) BRB BRB(USA) CAN CHL CUB(USA) HND HWA MDW PNR PTR TCA(USA) URG USA REG3 AUS CHN GUM IND J J(USA) KOR MRL NCL OCE PHL(USA) PNG THA
5726	REGY ATA(USA) REG1 AFS ALG AZR BHR(USA) BLR COG CTI F G GIB I ISL MDG MTN NMB(AFS) POR ROU SEN TCH UKR URS REG2 ALS ATG(USA) B BAH(USA) BER(USA) BRB CAN CHL CUB(USA) HND HWA MDW PNR PTR TCA(USA) URG USA REG3 AUS CHN GUM IND J J(USA) KOR MRL NCL NZL OCE PHL(USA) THA VUT
6685	REG1 AFS ALB BHR(USA) EGY G GRC(USA) I I(USA) ISL MRC NOR POR TCH TUR URS YUG REG2 ALS B BER(USA) CAN CUB(USA) DOM EQA HWA MDW MEX PNR PTR URG USA REG3 AUS CHN GUM HKG IND J J(USA) MRL PAK PHL(USA) PNG SNG

6688	REG1 ALB ALG EGY F G GRC(USA) I I(USA) ISL MLT MRC TCH TUN URS YUG REG2 ALS CUB(USA) DOM HWA MDW PNR PTR USA REG3 AFG AUS BGD GUM J J(USA) KRE MRL PAK PHL(USA)
6691	REGY ATA(ARG) REG1 ALG ARS AZR BLR CYP(G) G GHA GIB HNG I I(USA) KEN LBY MLT ROU TCH URS REG2 ALS ARG CAN CLM HWA MDW MEX PNR PTR USA REG3 AUS BGD BRM CHN GUM HKG IND J J(USA) KOR PAK PHL(USA) SLM SNG WAK
6694	REGY ATA(ARG) REG1 ALG ARS AZR BLR CYP(G) ETH G GIB I I(USA) KEN LBY OMA ROU TCH URS REG2 ALS ARG CAN HWA MDW MEX PNR PTR USA REG3 AUS BRM CHN GUM HKG IND J J(USA) KOR NZL PHL(USA) PNG SNG WAK
6697	REGY ATA(ARG) REG1 ARS BDI BHR(USA) BLR CYP(G) D G I I(USA) ISL MLT MRC URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW PNR PTR TRD USA REG3 AUS BGD GUM HKG J J(USA) PAK PHL(USA) THA
6700	REGY ATA(ARG) REG1 ARS AZR BHR(USA) CYP(G) D F G GIB I I(USA) ISL KEN MLT MRC TUR URS REG2 ALS ARG ATG(USA) BAH(USA) BER(USA) BRB CAN CUB(USA) HWA MDW PNR PTR TCA(USA) TRD USA REG3 AUS BGD CLN GUM HKG J J(USA) MRL NZL PAK PHL(USA) PNG THA
6703	REG1 ALB ETH G I IRL ISL LUX NMB UKR URS YUG REG2 HTI REG3 PHL
6706	REG1 AFS BLR CYP(G) EGY G GIB GRC MLT TCH UKR URS YUG REG2 ALS B CAN CUB HWA MDW PNR PTR USA REG3 AUS BGD CHN DGA(USA) FJI GUM HKG IND INS J J(USA) KIR MAC MRL NZL PAK PHL(USA) THA

6709	REG1 BLR CYP(G) G MLT ROU URS YUG REG2 ALS B CAN CUB HWA MDW PNR PTR SUR USA REG3 AUS BGD CHN FJI GUM HKG IND INS J J(USA) KIR MAC MRL NZL PAK PHL(USA) PNG THA VTN
6712	REG1 AFS ALG AUT BLR CME COG CYP(G) D D(F) DJI(F) F G ISL ISR MDG MLI MLT MTN OMA REU ROU SEN TCD TGO TUN TUR TUR(USA) UKR URS REG2 B CAN HWA MEX PNR USA REG3 AUS BRM CHN IND J(USA) KOR PAK PHL(USA) THA TMP(POR) VTN
6715	REG1 AFS ALG AUT BLR CME COG CTI D D(F) DJI(F) F G G(USA) HNG ISR MDG MLI MTN REU ROU SEN TCD TGO TUN TUR(USA) UKR URS REG2 B CAN GRL HWA MEX PNR SUR USA REG3 AUS BRM CHN FJI GUM IND J(USA) KOR NZL PAK PHL(USA) PNG THA TMP(POR)
6718	REG1 AGL ALG F IRL MLT ROU TUR TZA URS REG3 IND PAK
6721	REGY ATA(ARG) ATA(USA) REG1 AGL ARS AZR BHR(USA) F G GRC(USA) HOL I I(USA) JOR MRC TZA UKR URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW MEX PNR PTR USA REG3 AUS CHN FJI GUM IND J J(USA) MRL NZL PHL(USA) SNG THA
6724	REGY ATA(ARG) ATA(USA) REG1 ARS BHR(USA) E G GRC(USA) I I(USA) MRC UKR URS YUG REG2 ALS ARG BER(USA) CUB(USA) HWA MDW MEX PNR PTR SUR USA REG3 AUS CHN FJI GUM IND J J(USA) MRL NZL PHL(USA) PNG SNG THA
6727	REGY ATA(ARG) REG1 AGL ALG ARS ARS(USA) AZR D(USA) ETH G MOZ STP TUR(USA) UKR URS REG2 ALS ARG BER(USA) CAN CUB GRL GUY HWA JON MDW PNR USA REG3 AUS CHN GUM IND J(USA) MRL PHL(USA) THA

6730	REGY ATA(ARG) REG1 AGL ALG ARS ARS(USA) AZR D D(USA) DNK ETH F G MOZ STP TUR(USA) UKR URS REG2 ALS ARG BER(USA) CAN CUB GRL GUY HWA JON MDW PNR USA REG3 AUS CHN GUM IND J J(USA) MRL NZL PAK PHL(USA) PNG THA
6733	REG1 ALG F G GUI I KEN TUR URS REG2 B REG3 IND VTN
6736	REG1 AFS ASC(USA) CYP(G) G GIB I ISL KEN MLT MRC NMB(AFS) OMA ROU SEY(USA) TCH URS REG2 ALS B BER(USA) CAN CHL CLM GTM HWA PNR PTR URG USA REG3 AUS BRM CHN GUM J J(USA) KOR MRL PAK PHL(USA) SNG THA VTN
6739	REG1 AFS ASC(USA) CYP(G) F G G(USA) I MLT NMB(AFS) ROU TCH TUR(USA) UKR URS REG2 ALS BER(USA) CHL CLM GRL GTM HWA PNR PTR SUR URG USA REG3 AUS BRM CHN GUM J J(USA) KOR MRL NZL PAK PHL(USA) PNG THA VTN
6742	REG1 BFA BLR CAF CME COG CYP(G) DJI(F) F FNL G GIB GRC MDG MLI NGR POL REU SEN TCD TGO TUN TUR UKR URS REG2 ALS BER(USA) CAN CHL CUB CUB(USA) GTM HWA JON MDW PNR PTR USA REG3 AUS CHN GUM HKG IND IRN J J(USA) MRL NZL SNG THA VTN WAK
6745	REG1 ASC(USA) BFA BLR CAF CME COG CTI CYP(G) DJI(F) E F FNL G GIB HNG MDG MLI MLT NGR POL REU SEN SEY(USA) TCD TCH TGO TUN UKR URS REG2 ALS BER(USA) BOL CAN CHL CUB CUB(USA) GTM HWA JON MDW PNR PTR USA REG3 AUS BGD CHN GUM HKG IND IRN J J(USA) MRL NZL PNG SNG THA WAK
6748	REG1 BUL CYP(G) G KWT MLT POR REU UKR URS ZWE REG3 BGD

6751	REG1 ASC(USA) BFA BUL CME COG CTI CYP(G) D F G HNG MTN OMA POR SEN TCD TUN UKR URS YUG REG2 B CAN CHL HWA JON MEX USA REG3 AUS CHN FJI GUM IND INS J J(USA) MRL NZL PHL(USA) THA VTN
6754	REG1 ASC(USA) BFA COG CTI D ETH F G MDG SEN TCD TUN UKR URS REG2 B BOL CAN CHL HWA JON MEX SUR USA REG3 AUS FJI GUM IND INS J J(USA) MRL NZL THA VTN
6757	REGY ATA(ARG) REG1 ARS BLR COG F G GIB MLT SEN TCD TCH TUN UKR URS REG2 ARG ATN BER(USA) BOL HWA JON USA REG3 AUS BRM CHN GUM IND J J(USA) MRL THA TMP(POR)
6760	REGY ATA(ARG) REG1 ARS BLR COG CTI F G ISL ISR MDG SEN TCD TCH TUN UKR URS REG2 ALS ARG ATN BER(USA) HWA JON USA REG3 AUS BRM CHN GUM IND J J(USA) MRL NZL PHL(USA) PNG SNG THA TMP(POR)
8965	REG1 AFS ASC(USA) CTI CYP(G) D EGY ETH G GIB KEN NMB(AFS) TUR URS REG2 ALS B CAN GRL HWA MEX PNR USA REG3 AUS BRM FJI HKG J(USA) KRE MRL NZL PAK PHL(USA) PNG
8968	REG1 AFS ARS CYP(G) D G GIB KEN NMB(AFS) OMA URS YUG REG2 ALS B BOL CAN GRL HWA MEX PNR USA REG3 AUS BRM FJI HKG INS J(USA) MRL NZL PNG
8971	REGY ATA(ARG) REG1 ARS AZR BHR(USA) BLR F G GRC(USA) HOL I I(USA) ISL ISR MRC S UKR URS YUG REG2 ALS ARG ATG(USA) ATN BAH(USA) BER(USA) BOL BRB(USA) CUB(USA) DOM HWA MDW PNR PTR TCA(USA) TRD(USA) USA REG3 AUS BRM CHN DGA(USA) GUM J J(USA) MRL PHL(USA) PNG VTN
8974	REGY ATA(ARG) REG1 AFS AZR BLR GRC(USA) I I(USA) IRL ISL ISR MRC UKR URS REG2 ALS ARG ATG(USA) ATN BAH(USA) BER(USA) BRB(USA) CUB(USA) DOM HWA MDW PNR PTR TCA(USA) USA REG3 AUS BRM CHN GUM J J(USA) MRL NZL PHL(USA) PNG VTN

8977	REG1 ALB ARS BHR(USA) G GRC(USA) I ISL MRC OMA UKR URS REG2 ALS BRB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS DGA(USA) GUM INS J(USA) PHL(USA)
8980	REGY ATA(ARG) REG1 ALB ALG ARS AZR BFA BHR(USA) CME COG CYP(G) D DJI(F) F G I LBN MDG REU SEN TCD TGO TUN URS REG2 ALS ARG ATG(USA) BAH(USA) BER(USA) BRB BRB(USA) CUB(USA) HWA MDW PNR PTR TCA(USA) USA REG3 AUS CHN GUM HKG IND INS J(USA) MRL PHL(USA)
8983	REGY ATA(ARG) REG1 ALG BFA BHR(USA) CME COG CYP(G) D DJI(F) F G HNG I LBN MDG MLT MNG MTN OMA REU SEN TCD TGO TUN URS REG2 ALS ARG BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR USA REG3 AUS CHN GUM IND J J(USA) MRL NZL PHL(USA) PNG
8986	REG1 ALG BHR(USA) CYP(G) F G GRC MDG MLT ROU TUR UKR URS REG2 BRB(USA) CUB(USA) REG3 J(USA) PHL
8989	REG1 AGL BEL BLR G MCO MOZ POL POR ROU STP UKR URS REG2 ALS BER(USA) CAN GRL HWA MEX USA REG3 AUS BRM FJI IND J(USA) NZL
8992	REG1 AGL ASC(USA) BLR F G ISL MOZ POL POR S STP UKR URS REG2 ALS BER(USA) CAN CHL HWA MEX USA REG3 AUS BRM CHN FJI GUM IND J(USA) NZL PHL(USA) PNG
8995	REG1 ARS AZR CYP(G) G GIB ISL MLT MNG UKR URS REG3 HKG
8998	REGY ATA(USA) REG1 AGL AZR BHR(USA) BLR COG F G GRC(USA) HOL ISL MDG MTN NOR SEN TUN UKR REG2 ALS B BER(USA) CUB CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS CHN GUM IND J J(USA) MRL NZL PHL(USA)

9001	REGY ATA(USA) REG1 AGL ATA(USA) BHR(USA) BLR COG CTI CYP(G) F G GRC(USA) I(USA) ISL JOR MDG MLT MRC MTN NOR SEN TUN UKR URS REG2 ALS ATA(USA) B BER(USA) CUB CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS CHN DGA(USA) GUM HKG IND J J(USA) MRL NZL PHL(USA)
9004	REG1 BDI BLR CYP(G) G IRL ISL KWT LUX MLT ROU URS REG2 B REG3 HKG IRN
9007	REG1 AZR BUL CME COG G GIB GRC(USA) I(USA) ISL MDG MLT ROU ROU SEN TCD URS YUG REG2 ALS B CAN HWA MDW MEX PNR PTR USA REG3 AUS BRM CHN FJI GUM INS IRN J KIR VTN WAK
9010	REG1 ARS AZR BUL CME COG CTI G MDG REU SEN TCD TUR URS REG2 ALS ARG B CAN HWA MDW MEX PNR PTR USA REG3 AUS BRM FJI GUM INS IRN J KIR NZL PAK PHL(USA) VTN WAK
9013	REG1 AFS ARS ETH G GRC MLT MOZ UKR URS YUG REG2 ARG GTM REG3 AUS FJI IND J
9016	REG1 AUT COG F G GIB HNG MDG SEN TCD TUN TUR UKR URS REG2 BER(USA) CHL CUB REG3 AUS CHN FJI HKG IRN J(USA) NZL PAK SNG THA
9019	REG1 ALG AUT COG CTI E F G GIB MDG MLT SEN TCD TUN UKR URS REG2 ALS BER(USA) CHL CUB HWA REG3 AUS CHN IRN J(USA) NZL PAK PNG SNG THA
9022	REGY ATA(ARG) REG1 AFS ALG AZR COG CYP(G) D(USA) EGY ETH F G MDG MLT ROU SEN SOM TCH URS REG2 ARG BER(USA) CAN GRL HWA JON PNR PTR USA REG3 AUS CHN GUM HKG IND J J(USA) MRL NZL PHL(USA)

9025	REGY ATA(ARG) ATA(NZL) REG1 AFS ALG AZR COG CYP(G) D D(USA) EGY G GIB MDG MLT ROU SEN TCH URS REG2 ARG BER(USA) CUB HWA JON MEX PNR PTR USA REG3 AUS CHN FJI GUM HKG IND J J(USA) MRL NZL PAK PHL(USA) PNG SNG THA
9028	REG1 G G(USA) GIB MLT ROU URS ZAI REG2 CAN CUB HWA MEX USA REG3 AUS J J(USA)
9031	REGY ATA(USA) REG1 CYP(G) G G(USA) GIB GRC(USA) I I(USA) MLT MRC POL TCH TUR URS REG2 ALS BER(USA) CAN CHL CLM HWA MDW PNR PTR URG USA REG3 AUS BGD BRM CHN GUM J J(USA) MLA MRL NZL PAK PHL(USA) TMP(POR) WAK
9034	REGY ATA(USA) REG1 AUT DNK G G(USA) GHA GRC(USA) I I(USA) MRC POL TUR URS REG2 ALS BER(USA) CHL CLM EQA HWA MDW PNR PTR URG USA REG3 BGD BRM CHN GUM INS J(USA) MLA MRL NZL PAK PHL(USA) SMO(NZL) TMP(POR) WAK
9037	REGY ATA(USA) REG1 AUT G I I(USA) MRC NMB TUR URS REG2 ALS CAN HWA MDW PNR PTR USA REG3 AUS DGA(USA) GUM J J(USA) MRL PHL(USA) WAK
11175	REG1 ASC(USA) G MLT TUR(USA) REG2 ALS HWA USA REG3 AUS GUM PHL(USA)
11178	REGY ATA(ARG) REG1 AGL G GRC MOZ NOR POL POR STP TUN TUR(USA) URS REG2 ALS ARG ATN CLM HWA JON USA REG3 AUS CHN GUM IND INS J J(USA) MRL NZL PHL(USA)
11181	REGY ATA(ARG) REG1 AGL G ISL MOZ NOR POL POR STP TUR TUR(USA) URS REG2 ALS ARG ATN CLM JON USA REG3 AUS CHN GUM IND INS J J(USA) MRL NZL PHL(USA)

11184	REG1 CYP(G) G ISL MLT MNG ROU TUR YUG REG3 J
11187	REGY ATA(USA) REG1 ALG BHR(USA) BLR CME COG DJI(F) ETH GRC(USA) ISL ISR MDG ROU SEN TCD UKR URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) CAN CHL HWA MDW MEX PNR PTR TCA(USA) TRD(USA) USA REG3 AUS CHN DGA(USA) GUM J(USA) MRL PHL(USA)
11190	REGY ATA(USA) REG1 ALG BHR(USA) BLR CME COG DJI(F) ISR MDG ROU SEN TCD UKR URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) CAN CHL HWA MDW MEX PNR PTR TCA(USA) TRD(USA) USA REG3 AUS BRM CHN DGA(USA) GUM INS J(USA) MRL NZL PHL(USA)
11193	REG1 CYP(G) G MNG URS REG2 MEX URG REG3 IND PHL
11196	REG1 ARS BHR(USA) CYP(G) D G KEN URS REG2 ALS ATG(USA) B BAH(USA) BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR TCA(USA) TRD(USA) URG USA REG3 AUS CHN GUM HKG J(USA) MRL PHL(USA) WAK
11199	REG1 ARS BHR(USA) CYP(G) D G I(USA) KEN MLT MRC OMA URS REG2 ALS ATG(USA) B BAH(USA) BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR TCA(USA) TRD(USA) USA REG3 AUS CHN GUM HKG J(USA) PHL(USA) PNG SNG WAK
11202	REG1 BHR(USA) IRL TUN REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) CUB(USA) HWA MDW PTR TCA(USA) TRD(USA) USA REG3 AUS GUM J(USA) PHL(USA) WAK
11205	REGY ATA(ARG) REG1 AZR CME COG DJI(F) F G MDG MNG REU SEN TGO TUN URS REG2 ALS ARG CAN CUB HWA JON MDW PNR PTR USA REG3 AUS GUM J J(USA) PHL(USA) WAK

11208	REGY ATA(ARG) REG1 AZR CME COG CYP(G) DJI(F) F G GIB GRC(USA) HNG LBY MDG REU SEN TGO TUN TUR URS REG2 ALS ARG CAN CUB HWA JON MDW PNR PTR USA REG3 AUS GUM J J(USA) PHL(USA) PNG WAK
11211	REG1 G OMA TUN URS REG2 ALS HWA JON MDW PNR PTR REG3 GUM J J(USA) MRL PHL(USA) WAK
11214	REGY ATA(ARG) REG1 AUT COG DJI(F) F G GAB GIB ISL MDG MLT REU SEN TCD TUN URS REG2 ALS ARG BER(USA) CAN HWA MRT USA REG3 AUS NCL OCE
11217	REGY ATA(ARG) REG1 ASC(USA) AUT COG D DJI(F) F G GRC MDG SEN SEY(USA) TCD TUN URS REG2 ALS ARG BER(USA) CAN GRL HWA MRT USA REG3 AUS CHN NCL NZL OCE PHL(USA)
11220	REG1 BDI KWT ROU URS REG2 CAN USA REG3 AUS CHN J PHL(USA)
11223	REG1 G MLT ROU S UKR REG2 ALS CAN REG3 AUS J KRE
11226	REG1 ARS(USA) AZR D D(USA) G TUR(USA) UKR URS YUG REG2 ALS BER(USA) CHL CUB GRL HWA JON MDW PNR USA REG3 AUS BGD CHN GUM J J(USA) MRL NZL PAK PHL(USA)
11229	REG1 ARS(USA) AZR D D(USA) G TUR(USA) URS YUG REG2 ALS BER(USA) CAN CUB GRL HWA JON MDW PNR USA REG3 AUS BGD CHN GUM J J(USA) MRL NZL PAK PHL(USA)
11232	REG1 IRL URS REG2 CAN REG3 AUS J PHL(USA) SNG

11235	REG1 AFS BLR CYP(G) D G MNG SEN TUN UKR URS REG2 ALS ARG BER(USA) CAN GRL HWA MEX USA REG3 AUS BRM GUM J(USA) PNG SNG
11238	REG1 BLR D SEN TUN UKR URS REG2 ALS ARG BER(USA) CAN HWA MEX REG3 AUS CHN J(USA) NZL
11241	REG1 CYP(G) G GIB MLT TUR(USA) URS REG2 USA REG3 CHN HKG
11244	REG1 ALG CYP(G) DNK G G(USA) GIB MNG TUR(USA) URS REG2 B BER(USA) CAN USA REG3 AUS FJI J J(USA) NZL PNG
11247	REG1 ALG CYP(G) G GIB URS REG2 B BER(USA) CAN HWA REG3 AUS CHN FJI GUM HKG J J(USA) NZL PHL(USA)
11250	REG1 ALG F G GIB GUI I TUR URS REG2 CAN REG3 AUS CHN
11253	REGY ATA(USA) REG1 AZR BHR(USA) BLR ETH F G GRC(USA) I I(USA) MOZ MRC UKR URS REG2 ALS B BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 CHN GUM J(USA) MRL PHL(USA)
11256	REGY ATA(USA) REG1 BHR(USA) BLR G GRC(USA) HOL I I(USA) ISL MRC UKR URS REG2 ALS B BRB(USA) CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS BRM CHN FJI GUM J(USA) PHL(USA)
11259	REGY ATA(USA) REG1 AZR BHR(USA) CYP(G) G ISL MLT UKR REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) CUB(USA) HWA MDW PNR PTR TCA(USA) TRD(USA) USA REG3 GUM J(USA) PHL(USA)

11262	REGY ATA(ARG) ATA(USA) REG1 D G GRC(USA) I I(USA) ISL MRC TCH TUR UKR URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW PNR PTR USA REG3 AUS CHN DGA(USA) GUM IND J J(USA) MRL PHL(USA)
11265	REGY ATA(ARG) ATA(USA) REG1 BEL D GRC(USA) I I(USA) ISL MNG MRC OMA TCH UKR URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW PNR PTR USA REG3 CHN GUM IND J J(USA) MRL PHL(USA)
11268	REGY ATA(USA) REG1 ALG ARS BEL COG G ISL MDG MLT REU SEN URS YUG REG2 ALS BER(USA) HWA MDW PNR PTR USA REG3 AUS GUM J(USA) MRL PHL(USA)
11271	REG1 ALG ARS BLR BUL COG G MDG MLT REU SEN URS REG2 B CAN REG3 AUS J(USA)
13200	REG1 AFS ALG G URS REG2 ALS GRL HWA USA REG3 AUS J(USA) KRE
13203	REGY ATA(ARG) REG1 ALG ARS CYP(G) D EGY G GIB KEN ROU TUR TUR(USA) URS YUG REG2 ALS ARG ATN HWA JON MEX USA REG3 AUS HKG J(USA) PNG
13206	REGY ATA(ARG) REG1 ALG ARS CYP(G) D G GIB ISL KEN ROU SUI TUR TUR(USA) URS REG2 ALS ARG ATN GRL HWA JON MEX USA REG3 AUS HKG J(USA) NZL
13209	REG1 CYP(G) G GIB MLT MNG URS REG3 HKG J
13212	REGY ATA(ARG) REG1 ARS(USA) AZR CAF CME COG D(USA) ETH GRC IRL MDG SEN TCH TUR(USA) URS REG2 ALS ARG BER(USA) CAN CUB GRL HWA JON PNR PTR USA REG3 AUS BGD CHN GUM J J(USA) MRL NZL PAK PHL(USA)

13215	REGY ATA(ARG) REG1 ARS(USA) AZR CAF CME COG D(USA) EGY G MDG OMA SEN TCH TUR(USA) URS REG2 ALS ARG BER(USA) CAN CUB GRL HWA JON MEX PNR PTR USA REG3 AUS BGD CHN GUM J J(USA) MRL NZL PAK PHL(USA)
13218	REG1 CYP(G) G MLT URS REG2 ALS CAN HWA MDW MEX URG USA REG3 AUS HKG J MRL
13221	REG1 ALG BLR CME COG D DJI(F) GRC(USA) MDG MLI REU SEN TCD TGO TUN UKR URS REG2 ALS B CAN HWA MDW PNR PTR URG USA REG3 AUS CHN FJI GUM J(USA) KIR MRL NZL PHL(USA)
13224	REG1 ALG ASC(USA) BLR CME COG CTI D DJI(F) G HNG JOR MDG MLI MNG REU S SEN SEY(USA) TCD TGO TUN UKR URS REG2 ALS B CAN CUB HWA MDW PNR PTR USA REG3 AUS CHN FJI GUM J J(USA) KIR MRL NZL PHL(USA) PNG
13227	REG1 IRL TUR URS REG2 ALS CAN CUB HWA MDW PNR PTR USA REG3 AUS GUM HKG J J(USA) PHL(USA)
13230	REG1 G MLT URS REG2 ALS CAN CUB(USA) HWA MDW PNR PTR USA REG3 GUM J(USA) MRL PHL
13233	REGY ATA(ARG) REG1 AUT AZR CME COG D D(F) DJI(F) F ISL MDG MLI MNG REU SEN TCD TGO TUN URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW MRT PNR PTR USA REG3 CHN GUM J J(USA) MRL NCL OCE PHL(USA)
13236	REGY ATA(ARG) REG1 AUT AZR CME COG CTI D D(F) DJI(F) F G GRC(USA) I(USA) MDG MLI REU SEN TCD TGO TUN URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA MDW MRT PNR PTR USA REG3 AUS CHN GUM J J(USA) MRL NCL NZL OCE PHL(USA)

13239	REG1 AZR G KWT LUX NMB ROU URS REG3 J
13242	REG1 ALG BLR CAF CME COG F G G(USA) MDG POL REU ROU SEN TUN UKR URS REG2 B BER(USA) HWA JON USA REG3 AUS CHN FJI GUM J J(USA) MRL NZL OCE PHL(USA)
13245	REG1 ALG ASC(USA) BLR CAF CME COG G GRC ISR MDG MNG POL REU SEN TUN UKR URS REG2 B BER(USA) CAN HWA JON USA REG3 AUS BRM CHN FJI GUM J J(USA) MRL NZL OCE PHL(USA) VTN
13248	REG1 ALG BLR CYP(G) G G(USA) MLT UKR URS YUG ZAI REG2 USA REG3 AUS HKG J SNG
13251	REGY ATA(ARG) ATA(USA) REG1 AGL ALB AZR BHR(USA) BLR CYP(G) F GRC(USA) I I(USA) MOZ MRC NOR POR STP UKR URS REG2 ALS ARG CAN CUB(USA) HWA JON MDW MEX PNR PTR USA REG3 AUS CHN GUM IND J(USA) NZL PHL(USA) WAK
13254	REGY ATA(ARG) ATA(USA) REG1 AGL AZR BHR(USA) GRC(USA) HOL I I(USA) MNG MOZ MRC NOR POR STP URS REG2 ALS ARG BER(USA) CAN CUB(USA) HWA JON MDW MEX PNR PTR USA REG3 AUS BRM CHN GUM IND J(USA) NZL PHL(USA) WAK
13257	REGY ATA(USA) REG1 BHR(USA) G MRC URS YUG REG2 CAN CUB(USA) HWA JON MDW PTR USA REG3 AUS GUM J(USA) MRL PHL(USA) WAK
15010	REG1 IRL MLT URS REG2 CAN HWA REG3 AUS GUM KRE

15013	REGY ATA(ARG) REG1 D(USA) G GRC MLT TUR(USA) URS REG2 ALS ARG BER(USA) CUB GRL HWA JON PNR USA REG3 GUM J(USA) MRL PHL(USA)
15016	REGY ATA(ARG) REG1 ASC(USA) D(USA) E G ROU TUR(USA) URS REG2 ALS ARG BER(USA) CAN CUB GRL HWA JON PNR PRU USA REG3 AUS CHN GUM J(USA) MRL NZL PHL(USA)
15019	REG1 ARS F MLT ROU UKR URS REG2 ALS CAN GRL URG USA REG3 AUS J
15022	REGY ATA(USA) REG1 AGL ALB ARS BHR(USA) BLR ISL MOZ MRC POR S STP TUR UKR URS REG2 ALS BRB(USA) CAN HWA MDW PNR PTR TRD(USA) URG USA REG3 AUS CHN DGA(USA) GUM IND J(USA) MAC PHL(USA) TMP(POR) WAK
15025	REGY ATA(USA) REG1 AGL ARS BHR(USA) BLR G ISL MLT MOZ MRC OMA POR STP TUR UKR URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) HWA MDW PNR PTR TCA(USA) TRD(USA) USA REG3 AUS FJI GUM IND J(USA) MAC NZL PHL(USA) TMP(POR) WAK
15028	REGY ATA(USA) REG1 ALG BHR(USA) GRC(USA) ISL MLT URS REG2 ALS BRB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS GUM J J(USA) PHL(USA) WAK
15031	REG1 ALG CYP(G) G MLT URS REG2 CAN REG3 AUS J(USA)
15034	REG1 ALG ARS(USA) AZR BLR CME COG D(USA) DJI(F) F G GRC ISR MDG MLI REU SEN TCD TUR(USA) UKR URS REG2 B CAN GRL HWA USA REG3 AUS GUM NZL PHL

15037	REG1 ARS(USA) AZR BLR CME COG CTI D(USA) G MDG MLI REU SEN TCD TUR(USA) UKR URS YUG REG2 ALS B CAN HWA USA REG3 AUS J(USA)
15040	REG1 CYP(G) G GUI URS REG2 USA REG3 AUS J J(USA)
15043	REGY ATA(ARG) REG1 CYP(G) DNK ETH G URS REG2 ALS ARG CUB REG3 AUS BGD FJI J J(USA) PAK
15046	REGY ATA(ARG) REG1 CYP(G) ETH G ISL MLT SUI URS YUG REG2 ALS ARG CUB USA REG3 AUS BGD FJI J NZL PAK PNG
15049	REG1 CYP(G) G GIB URS ZAI REG2 USA REG3 AUS HKG J
15052	REGY ATA(ARG) REG1 BHR(USA) G GRC(USA) I I(USA) MRC NOR URS REG2 ALS ARG BER(USA) HWA MDW PNR PTR TRD(USA) USA REG3 CHN GUM IND J J(USA) MRL NZL PHL(USA) VTN
15055	REGY ATA(ARG) REG1 AFS ALG BHR(USA) G G(USA) GRC(USA) I I(USA) ISL MRC NOR URS REG2 ALS ARG BER(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS CHN GUM IND J J(USA) MRL NZL PHL(USA) VTN
15058	REG1 ALG BHR(USA) G GRC(USA) I(USA) URS REG2 ALS HWA MDW PNR PTR TRD(USA) USA REG3 AUS GUM J J(USA) MRL PHL(USA)
15061	REG1 ALG E F G URS REG2 ALS BRB(USA) CUB(USA) HWA MDW PNR PTR USA REG3 AUS GUM J(USA) MRL PHL(USA)

15064	REG1 AZR CME COG DJI(F) F G GRC ISL MDG MLI MTN REU SEN TCD TGO TUN URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB BRB(USA) CHL CUB(USA) HWA MDW PNR PTR TCA(USA) USA REG3 AUS DGA(USA) GUM J(USA) PHL(USA) PNG
15067	REG1 AZR CME COG CTI DJI(F) F MDG MLI REU SEN TCD TGO TUN URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB BRB(USA) CUB(USA) HWA MDW PNR PTR TCA(USA) USA REG3 AUS GUM J(USA) PHL(USA)
15070	REG1 BHR(USA) TUR URS REG2 ALS HWA JON MDW PNR PTR USA REG3 AUS GUM J J(USA) PHL(USA) WAK
15073	REGY ATA(ARG) REG1 BHR(USA) COG D DJI(F) F GRC(USA) ISL MDG MNG SEN TUN UKR URS REG2 ALS ARG BER(USA) CAN HWA JON MDW PNR PTR USA REG3 AUS CHN GUM IND J J(USA) MRL NCL OCE PHL(USA) WAK
15076	REGY ATA(ARG) REG1 BHR(USA) COG CTI D DJI(F) F G MDG SEN TUN UKR URS REG2 ALS ARG BER(USA) HWA JON MDW PNR PTR USA REG3 AUS CHN GUM IND J J(USA) MRL NCL NZL OCE PHL(USA) WAK
15079	REG1 BDI G KWT ROU URS REG2 PTR USA REG3 J
15082	REG1 BHR(USA) BLR E GRC(USA) I I(USA) MRC POL ROU UKR URS REG2 ALS B BER(USA) BRB(USA) HWA MDW MEX PNR PTR USA REG3 AUS FJI GUM J(USA) KIR NZL PHL(USA)
15085	REG1 BHR(USA) BLR E G GRC(USA) I I(USA) MNG MRC POL UKR URS REG2 ALS B BER(USA) BRB(USA) HWA MDW MEX PNR PTR TRD(USA) USA REG3 AUS CHN FJI GUM J(USA) KIR MRL NZL PHL(USA) PNG

15088	REG1 BHR(USA) BLR URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB(USA) HWA MDW PNR PTR TCA(USA) USA REG3 AUS GUM HKG J(USA) PHL(USA)
15091	REG1 G MLT URS YUG REG2 B MEX USA REG3 AUS HKG J(USA) PHL(USA)
15094	REGY ATA(ARG) REG1 HOL MLT MNG TUR URS REG2 ALS ARG ATN BER(USA) GTM HWA USA REG3 AUS CHN GUM J
15097	REG1 IRL TUR URS REG2 ALS ARG BER(USA) REG3 J
17970	REG1 AFS ALG G KWT MCO URS REG3 PHL
17973	REGY ATA(ARG) REG1 AGL ALG ARS(USA) AZR BLR CYP(G) D F G I MNG MOZ POR ROU STP UKR URS YUG REG2 ALS ARG BER(USA) GRL HWA JON USA REG3 AUS GUM IND J(USA) MAC MRL PHL(USA) TMP(POR)
17976	REG1 D G G(USA) I ROU TUR(USA) URS YUG REG2 GRL URG USA REG3 AUS J
17979	REG1 BHR(USA) CYP(G) G GIB GRC(USA) I I(USA) MRC URS REG2 ALS B BER(USA) CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS BGD GUM HKG J(USA) NZL PAK PHL(USA)
17982	REG1 ARS AZR BHR(USA) CYP(G) EGY G GIB GRC(USA) I I(USA) ISL JOR KEN MLT MRC OMA S UKR URS REG2 ALS B BER(USA) CAN CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS BGD GUM HKG J(USA) MRL NZL PAK PHL(USA) PNG

17985	REG1 BHR(USA) G ISL MNG UKR REG2 ALS BER(USA) CUB(USA) HWA MDW PNR PTR TRD(USA) USA REG3 AUS GUM J(USA) PHL(USA)
17988	REG1 CYP(G) G GIB MLT TUN URS REG3 AUS HKG IND J
17991	REGY ATA(ARG) REG1 AFS CME COG D D(F) DJI(F) F GAB GRC HOL ISL MDG MLI MTN REU SEN TCD TGO TUN URS REG2 ALS ARG BER(USA) GRL HWA JON MRT USA REG3 AUS CHN FJI GUM J J(USA) NCL NZL OCE PHL(USA)
17994	REGY ATA(ARG) REG1 ALG CME COG CTI D D(F) DJI(F) F ISR MDG MLI MNG REU SEN TCD TGO TUN UKR URS REG2 ALS ARG CAN GRL HWA JON MRT USA REG3 AUS CHN FJI GUM J J(USA) NCL NZL OCE PHL(USA)
17997	REG1 ALG CYP(G) G GIB LUX MLT UKR URS REG3 HKG J
18000	REGY ATA(ARG) REG1 ALG BLR G POL TUR UKR URS REG2 ARG CAN MEX USA REG3 AUS BGD J(USA) NZL PAK
18003	REGY ATA(ARG) REG1 ALG BLR CYP(G) G MLT MNG POL TUR UKR URS REG2 ALS ARG MEX USA REG3 AUS J(USA) NZL PHL(USA) PNG
18006	REG1 G MLT URS REG3 AUS J PHL(USA)
18009	REGY ATA(USA) REG1 BHR(USA) CME COG CYP(G) D DJI(F) F G GRC(USA) I I(USA) ISL MDG MLI MLT MRC REU ROU SEN TCD TGO TUN URS REG2 ALS ATG(USA) BAH(USA) BER(USA) BRB BRB(USA) CAN CUB(USA) HWA MDW PNR PTR TCA(USA) USA REG3 AUS CHN FJI GUM J J(USA) MRL NZL PHL(USA)

18012	REGY ATA(USA) REG1 BHR(USA) CME COG CTI D DJI(F) F G GRC(USA) I I(USA) MDG MLI MRC MTN REU ROU SEN TCD TGO TUN URS REG2 ALS BER(USA) BRB(USA) CAN CHL CUB(USA) HWA MDW PNR PTR USA REG3 CHN FJI GUM J J(USA) MRL NZL PHL(USA)
18015	REGY ATA(USA) REG1 BHR(USA) E F G GRC(USA) I(USA) MNG MRC UKR URS REG2 ALS BRB(USA) CAN CUB(USA) HWA MDW PNR PTR USA REG3 AUS CHN GUM HKG J(USA) PHL(USA)
18018	REG1 ASC(USA) G G(USA) UKR URS YUG REG2 CAN REG3 AUS HKG J J(USA) PHL(USA)
18021	REG1 BLR G GHA GRC OMA UKR URS REG2 B BER(USA) USA REG3 GUM J
18024	REG1 BLR G MNG MOZ POR S SUI TUR UKR URS REG2 B BER(USA) CAN GRL USA REG3 AUS FJI J
18027	REG1 G NMB TUR URS REG2 CAN USA REG3 AUS KRE

Kingdom of Morocco

PROPOSED MODIFICATIONS TO DT/35

The following **considerings** are proposed to be added to the draft Resolution contained in Document DT/35:

- d) that similar action carried out by the IFRB in application of Resolution Nos. 8 and 9 of the World Administrative Radio Conference, Geneva, 1979, did not produce the expected results;
 - e) that developing countries may require special assistance in replacing their displaced assignments with appropriate protection;
 - f) that procedures exist already in Article 12 of the Radio Regulations that may be used to this effect.
-

WORKING GROUP 5C

DRAFT

RESOLUTION

RELATING TO TERRESTRIAL DIGITAL SOUND BROADCASTING

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that advances in technology have made available digital sound broadcasting systems of high quality;
- b) that such a digital sound broadcasting system will offer a considerably higher sound quality as well as additional system characteristics which are not supported by the present FM broadcasting system;
- c) that digital sound broadcasting can, in addition to the properties mentioned above, have a higher frequency efficiency than conventional FM sound broadcasting ;
- d) that digital sound broadcasting systems require less effective radiated power ;
- e) that the bands 87.5 - 108 MHz in Region 1, 88 - 108 MHz in Region 2 and 87 - 108 MHz in Region 3 are generally much used for the high-powered FM sound broadcasting service, except in some countries ;
- f) that several European countries are considering the implementation of digital sound broadcasting on an interim basis in the band 87.5 - 108 MHz or other broadcasting bands ;

resolves to invite the CCIR

in order to accelerate the implementation of digital sound broadcasting;

- 1. to undertake as a matter of urgency, the relevant technical studies associated with introducing terrestrial digital sound broadcasting in the VHF [broadcasting] band [s] ;
- 2. in particular, to consider the system characteristics and propagation in relation to developing compatibility criteria in the same and adjacent bands including protection of the safety services;

resolves further

to request the Secretary General to bring this Resolution to the notice of the Administrative Council and the next full Plenipotentiary Conference for consideration of placing on the agenda of a competent Administrative Radio Conference the subject of terrestrial digital sound broadcasting;

invites administrations

to contribute actively to the CCIR studies in this respect .

J. F. BROERE

Chairman

WORKING GROUP 5C

Source: Document DT/37

DRAFT RESOLUTION

Relating to Terrestrial Digital Sound Broadcasting

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that advances in technology have made available digital sound broadcasting systems of high quality;
- b) that such a digital sound broadcasting system will offer a considerably higher sound quality as well as additional system characteristics which are not supported by the present FM broadcasting system;
- c) that digital sound broadcasting can, in addition to the properties mentioned above, have a higher frequency efficiency than conventional FM sound broadcasting;
- d) that digital sound broadcasting systems require less effective radiated power;
- e) that the bands 87.5 - 108 MHz in Region 1, 88 - 108 MHz in Region 2 and 87 - 108 MHz in Region 3 are generally much used for the high-powered FM sound broadcasting service;
- f) that several European countries are considering the implementation of digital sound broadcasting on an interim basis in the band 87.5 - 108 MHz or other broadcasting bands,

resolves

to invite the Administrative Council to consider, when technical system characteristics and compatibility criteria are available, to place on the agenda of a competent administrative radio conference the subject of the introduction of terrestrial digital sound broadcasting,

invites the CCIR

as a matter of urgency, to undertake the relevant studies to determine the required technical parameters, propagation characteristics and compatibility criteria for terrestrial digital sound broadcasting systems, for the same and adjacent bands,

invites Administrations

to contribute actively to the CCIR in this respect,

instructs the Secretary-General

to bring this Resolution to the attention of a forthcoming session of the Administrative Council.

J.F. BROERE
Chairman

LIST OF DOCUMENTS

(Documents 101 to 150)

No.	Origin	Title	Destination
101	TUR	Proposals for the work of the Conference	C4, C5
102	C4	Summary Record of the first meeting of Committee 4	C4
103	C5	Summary Record of the first meeting of Committee 5	C5
104(Rev.1)	C4	Summary Record of the second meeting of Committee 4	C4
105	C5	Summary Record of the second meeting of Committee 5	C5
106	C3	Summary Record of the first meeting of Committee 3	C3
107	C2	Summary Record of the first meeting of Committee 2	C2
108(Rev.1)	C6	Summary Record of the first meeting of Committee 6	C6
109(Rev.2)	ALG, B, BFA, CME CPV, CAF, CLM, COG CTI, EQA, ETH, GAB GMB, KEN, LBN, MLA, MWI,MLI, MRC, MTN, MEX, NGR, NIG, SEN, TZA, TCD, TGO	Use of tropical zone bands for extending the HF bands exclusively allocated to the HFBC	C4
110	ARG	Proposals for the work of the Conference	WG 4A
111	BEN	Proposals for the work of the Conference	C4, C5,
112	PL	Minutes of the Second Plenary Meeting	PL
113	C5	Summary Record of the third meeting of Committee 5	C5
114	SG	Transfer of Powers - Principality of Liechtenstein / Confederation of Switzerland	PL
115	BEL, LUX	Proposals for the work of the Conference	C4
116	C4	Note by the Chairman of Committee 4 to the Chairman of Committee 5	C5
117	IRN	Proposals for the work of the Conference	C4, C5

No.	Origin	Title	Destination
118	SG	Transfer of Powers - Lebanon / Kingdom of Morocco	PL
119	ALG, BHR, EGY, JOR, KWT, LBN, MTN, MRC, OMA, QAT, ARS, SYR, TUN, UAE, YEM	The Use of the band 2 500 - 2 690 MHz	C4
120	CAN	Notes on Appendix item 2.4	WG 5B
121	C5	Note by the Chairman of Committee 5 to the Chairman of the Working Group to the Plenary	WG PL
122	C5	Note by the Chairman of Committee 5 to the Chairman of Committee 4	C4
123	MRC	Simplified procedure for the replacement of frequency assignments in the HF bands	C5
124	MRC	Appendix 26	C5
125	SG	Transfer of Powers - Republic of Latvia / Republic of Lithuania	PL
126 + Corr. 1	BGD	Proposals for the work of the Conference	C4, C5
127 + Corr. 1	WG 5A	First report of the Chairman of Working group 5A to Committee 5	C5
128	GAB	Proposals for the work of the Conference	C4
129	AIR	Information document - International Association of Broadcasting	C4
130	GRC	Proposals for the work of the Conference	C4
131 + Add. 1	LBY	Proposals for the work of the Conference	C4
132	WG 5C	First Report of the Chairman of Working Group 5C to Committee 5	C5
133	NIG	Proposal for Additional Mobile-Satellite Service Spectrum below 3 GHz	C4
134	-	Minutes of the Official Opening Ceremony	-
135	CVA	Proposals for the work of the Conference	C4
136	WG PL	First report to the Plenary from the Working Group to the Plenary - Draft Recommendation on Wind Profiler Radars	PL

No.	Origin	Title	Destination
137	WG 2A	First report of Working Group 2A to Committee 2	C2
138	WG 4A	First report of Working Group 4A to Committee 4	C4
139(Rev.1)	C4	Allocation of proposals concerning Resolutions and Recommendations	WG 4A, 4B, 4C
140	HNG	Proposals for the work of the Conference	C4
141	WG PL	First series of texts from the Working Group to the Plenary to the Editorial Committee	C6
142	E	Proposals for the work of the Conference	C4
143	YUG	Proposals for the work of the Conference	C4
144	VTN	Information paper from the Administration of Viet Nam	C4
145	MRC	Proposals for the work of the Conference	C5
146	WG 5B	First report of Working Group 5B to Committee 5	C5
147	WG 5B	Second report of Working Group 5B to Committee 5	C5
148	MRC	Proposed modifications to DT/35	SWG 5C1
149	WG 5C	Draft Resolution relating to Terrestrial Digital Sound Broadcasting	WG 5C
150	SG	List of documents (100 - 150)	-

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 5

Source: Document DT/47

THIRD REPORT OF WORKING GROUP 5B TO COMMITTEE 5

1. Further to Document DT/30, Working Group 5B examined the text of Annex 4 to Document 5. The text as approved by the Working Group is enclosed.
2. The Delegation of the Kingdom of Morocco reserved its position with respect to the enclosed text.

J.P. LUCIANI

Chairman of Working Group 5B

Annex: 1

ANNEX

DRAFT NEW RESOLUTION No. COM5/[2]

**Transfer of Frequency Assignments of Aeronautical Stations
Operating in the Frequency Bands Allocated Exclusively to
the Aeronautical Mobile (OR) Service Between
3 025 kHz and 18 030 kHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the frequency spectrum available;
- b) that the Administrations will need to change the frequencies of their aeronautical and aircraft stations to bring them into conformity with the new Frequency Allotment Plan, as contained in Appendix 26(Rev.), and to notify such transfers, where appropriate, to the Board,

resolves

- 1. that, within 90 days from the date on which this Conference ends, the Board shall send to each Administration a list of assignments to stations of the aeronautical mobile (OR) service entered on its behalf in the Master Register in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz;
- 2. that, in the above list, the Board shall indicate, for each frequency assignment, a replacement frequency(-ies) which fulfils the conditions of Appendix 26(Rev.) and which is intended to replace the frequency of the assignment concerned;
- 3. that, after the receipt of the above list, the Administrations shall take all the necessary measures to modify the characteristics of their assignments, so as to bring them in conformity with the provisions of Appendix 26(Rev.), as early as possible and in any event, by 15 December 1997 at the latest; any modification which has been implemented shall be notified to the Board in accordance with RR 1214;
- 4. that the frequency assignments notified by Administrations under paragraph 3 above shall be examined by the Board under the relevant provisions of Sub-Section IIC and Section III of Article 12 of the Radio Regulations, as modified by this Conference;
- 5. that the assignments existing in the Master Register on 15 December 1997 which are not in conformity with the conditions of Appendix 26(Rev.) shall be treated as follows:
 - 5.1 within 60 days from 15 December 1997, the Board shall send relevant extracts of the Master Register to the Administrations concerned advising them that, in accordance with the terms of the present Resolution, the assignments in question are to be modified, within a period of 90 days, so as to conform with the conditions of Appendix 26(Rev.);
 - 5.2 if an Administration fails to notify the Board of the modifications within the prescribed period, the original entry will be retained in the Master Register for information only, without a date in Column 2, without a finding in Column 13A and with a suitable remark in the Remarks column. The Administration will be advised of this action.

MÁLAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 5

Source: DT/34

SECOND REPORT OF THE CHAIRMAN OF WORKING GROUP 5A
TO COMMITTEE 5

1.0 Introduction:

This Report is a result of consideration given to Article 55 by Working Group 5A. The conclusion is based on proposals submitted to the Conference by twenty Administrations in documents: 9, 12, 20, 23, 26, 27, 30, 31, 44, 52, 57, 61, 62, 63, 65, 74, 75, 79, 101 and 126. Three information papers from IMO (Doc. 11), ICS (Doc. 83) and ITF (Doc. 87) were also considered.

2.0 Background Material:

Texts from IMO Resolution A.703(17) on training of radio personnel in the GMDSS, IMO Resolution A.702 (17) on guide-lines for ensuring availability of radio equipment and Resolution No. 5 of the IMO GMDSS Conference (London, 1988) on Regulation IV/15.7 on maintenance requirements were considered by the Working Group.

3.0 Conclusions:

A number of substantial modifications to Article 55 had been proposed concerning the number of certificates issued to personnel of ship stations and ship earth stations using the frequencies and techniques prescribed in Chapter N IX. However, having noted the decisions taken by IMO at its 17th Assembly in November 1991 (Resolutions A.702 (17) and A.703 (17) refer) the Group came to the conclusion that no change to Article 55 is required to harmonize this Article of the Radio Regulations with relevant IMO texts (see Annex 1 attached).

The Working Group was also of the view that the Editorial Committee should ensure the alignment of the French text in RR 3873 with the English text particularly as it relates to the use of the word "name".

The date of entry into force of the amendments to Articles 55 and 56, as drafted and agreed by Working Group, was discussed. The Group was of the view that the Radio Regulations (Articles 55 and 56) should be aligned with the SOLAS Convention of IMO as soon as possible, and requested that the ITU Secretariat provide advice to Committee 5 concerning the necessity for any further action by the Conference in this regard.

Annex: 1

Robert C. McIntyre
Chairman, Working Group 5A

ANNEX 1

ARTICLE 55

NOC Mob-87
**Certificates for Personnel of
Ship Stations and Ship Earth Stations**

NOC
Section I. General Provisions

NOC 3860
Mob-87
to
3877A
Mob-87

NOC Mob-87
**Section II. Categories of Certificates for Operators of Ship Stations and Ship Earth Stations
Using the Frequencies and Techniques Prescribed in Chapter IX and for Public Correspondence**

NOC 3878
to
3890

NOC Mob-87
**Section IIA. Categories of Certificates for Personnel of Ship Stations and Ship Earth Stations
Using the Frequencies and Techniques Prescribed in Chapter N IX and for Public
Correspondence**

NOC 3890A
Mob-87
to
3890F
Mob-87

NOC Mob-87
**Section III. Conditions for the Issue of Certificates for Operators of Ship Stations and Ship
Earth Stations Using the Frequencies and Techniques Prescribed in Chapter IX and for Public
Correspondence**

NOC 3891
to
3949

NOC Mob-87
**Section IIIA. Conditions for the Issue of Certificates for Personnel of Ship Stations and Ship
Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX and for Public
Correspondence**

NOC 3949A
Mob-87
to
3949DE
Mob-87

NOC
Section IV. Qualifying Service

NOC 3950
to
3953

3954
to
3978
NOT allocated.

COMMITTEES 4.5

NOTE BY THE CHAIRMAN OF COMMITTEE 3
TO THE CHAIRMEN OF COMMITTEES 4 AND 5

Under its terms of reference, the Budget Control Committee is requested to report to the Plenary Meeting the estimated costs entailed by the execution of the decisions of the Conference and to consider and identify the financial implications of the decisions of the Conference in accordance with Article 80 of the International Telecommunication Convention and Resolution 48 of the Plenipotentiary Conference (Nairobi, 1982).

To enable me to provide the plenary meeting with the necessary information, I should be grateful if you would supply me, as soon as possible but not later than 25 February 1992, reports on the decisions taken together with an explanation of their financial implications.

In this respect, I would like to draw your attention in particular to the fact that the expenditure limit for the WARC 92 Conference established by the Nice Conference, 1989, at 5,100,000 Swiss francs, shows a margin of 1,100,000 Swiss francs and that it is imperative that the available margin of 1,100,000 Swiss francs should not be exceeded.

S. AL BASHEER
Chairman of Committee 3

COMMITTEE 4

Colombia. Cuba. Ecuador. Honduras. Panama

AGENDA ITEMS 2.2.4a AND 2.2.4d

LOW-ORBIT SATELLITES

With respect to the proposals to allocate frequency bands for the operation of low-orbit satellite systems, the above Administrations consider that, before any allocation is made, an analysis should be conducted of the regulatory, technical, coordination and sharing principles to be applied to those systems, as well as their economic implications for the different Administrations.

It should first be plainly established that each country has full and sovereign control over the use of the frequencies which the system uses within its own territory, as well as over the services which may be provided through that medium. That principle constitutes the foundation of all agreements and regulations concluded within the framework of the ITU, as established in the preamble thereto and enshrined in the Nice Constitution and Convention.

Bearing in mind universal coverage and the very limited number of systems that could co-exist, an inter-governmental authority should be established which, with the participation of the Administrations, would assume responsibility for such systems and determine, on a basis of equity for all countries, who should install and operate such systems, and subject to what requirements, as well as the technical, economic and legal conditions for providing services in countries which expressly manifest an interest in them.

Secondly, some low-orbit satellite systems, especially those operating above 1 GHz, would be entitled to provide basic services at both the national and the international levels. Since basic international services in many countries generate a very high percentage of all telecommunication sector revenues, careful consideration should be given to the tariff aspects and service provision arrangements on the basis of which they could operate without harming the financial situation of the sector in each country; under the present system whereby accounting rates are equitably distributed, the system generates the revenues needed for their growth and permits the extension of basic telecommunication services to economically less protected sectors, as well as to rural and isolated areas in our countries.

PLENARY MEETING

Note by the Secretary-General

TRANSFER OF POWERS

BELIZE - COMMONWEALTH OF THE BAHAMAS

The Government of Belize has informed me that it cannot send a delegation to the Conference.

In pursuance of 391 of the Convention, it has given the Delegation of the Commonwealth of the Bahamas powers to represent it.

The instrument for the transfer of powers has been deposited with the Secretariat of the Credentials Committee.

Pekka TARJANNE
Secretary-General

COMMITTEE 5

Source: Document DT/38(Rev.1)

NOTE BY THE CHAIRMAN OF THE WORKING GROUP TO THE PLENARY
TO THE CHAIRMAN OF COMMITTEE 5

The Working Group to the Plenary have carefully considered the proposed modification to the definition of "geostationary satellite", RR 181, as given in Document 132 being considered by Committee 5.

The proposed modification to RR 181 would be acceptable from a technical viewpoint only if the definition of the "geostationary-satellite orbit", RR 182, is also modified. The reason for this is that in the Radio Regulations the location of the geostationary-satellite orbit is assumed to lie in the plane of the Earth's equator and is used as a reference point for the application of certain Radio Regulations (RR 2502, RR 2503 in Article 27, for example).

For the above reason, a clear definition of the "geostationary-satellite orbit", RR 182, is required and the Working Group to the Plenary offers the following appropriate text.

"Geostationary-satellite orbit: The orbit of a geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth's equator."

M. MUROTANI
Chairman, Working Group to the Plenary

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 157-E
14 February 1992
Original: English

COMMITTEE 5

Source: Document DT/31 (Rev.1)

NOTE BY THE CHAIRMAN OF THE WORKING GROUP TO THE PLENARY
TO THE CHAIRMAN OF COMMITTEE 5

At the request of the Chairman of Committee 5 (see Document 121), the Working Group to the Plenary has examined possible values of power-flux density of BSS (HDTV) systems as proposed in Section III of the annex to proposal EUR/20/59, and confirms these values assuming that they relate to the power-flux density which would be obtained under assumed free-space propagation conditions.

M. MUROTANI
Chairman, Working Group to the Plenary

COMMITTEE 6

SECOND SERIES OF TEXTS FROM THE WORKING GROUP
TO THE PLENARY TO THE EDITORIAL COMMITTEE

The Working Group to the Plenary has approved the annexed text to be submitted to the Editorial Committee for consideration and subsequent transmission to the Plenary Session:

- Recommendation GT-PLN/A (Agenda item 2.7).

M. MUROTANI
Chairman, Working Group to the Plenary

RECOMMENDATION GT-PLN/A

**Relating to Implementation of Wind Profiler Radars at
Frequencies near 50 MHz, 400 MHz and 1 GHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

having noted

a request to the ITU from the Secretary-General of the World Meteorological Organization, in May 1989, for advice and assistance in the identification of appropriate frequencies near 50 MHz, 400 MHz and 1 GHz in order to accommodate allocations and assignments for wind profiler radars,

considering

- a) that wind profiler radars are important meteorological systems used to measure wind direction and speed as a function of altitude;
- b) that in order to measure wind velocities up to a height of 30 kilometres it is necessary to allocate frequency bands for these radars in the general vicinity of 50 MHz (3 to 30 km), 400 MHz (500 m to about 10 km) and 1 000 MHz (100 m to 3 km), respectively;
- c) that many Administrations plan to deploy wind profiler radars in operational networks in order to improve meteorological predictions, support studies of the climate, and enhance the safety of navigation;
- d) that it is highly desirable to use wind profiler radars in frequency bands which have been generally agreed, preferably on a worldwide basis;
- e) that the CCIR is studying various proposals for these wind profiler radars at frequencies around 50 MHz, 400 MHz and 1 GHz and that frequencies in the 400 MHz region may be preferred for measurements of winds at altitudes that are of the greatest general interest;
- f) that it is essential in the interest of safety to protect the COSPAS-SARSAT system and other safety services from harmful interference which may be caused by wind profiler radars;
- g) that studies have already shown that wind profiler radars operating in the vicinity of 400 MHz must be sufficiently separated in frequency from the COSPAS-SARSAT system centred on 406.025 MHz;
- h) that in the interest of efficient spectrum utilization it is necessary to include technical characteristics and sharing criteria in future studies,

invites the CCIR

to continue as a matter of urgency its studies of the characteristics and requirements of wind profiler radars and make Recommendations as to the technically suitable frequency bands and associated standards and frequency sharing criteria necessary for compatibility with the services that may be affected, and to provide a report to the Conference referred to in **invites the Administrative Council**,

recommends

1. that Administrations authorizing experiments with or the operational use of such radars should take all necessary actions to ensure protection from harmful interference to the COSPAS-SARSAT system, particularly by avoiding assignments in the band 402 - 406 MHz, and to other services;
2. that Administrations and international organizations concerned with wind profiler radars, particularly ICAO, IMO, WMO and COSPAS-SARSAT should be invited to contribute to the CCIR studies,

invites the Administrative Council

to consider the inclusion in the agenda for the next competent WARC of the question of appropriate frequency allocations for the operational use of wind profiler radars,

requests the Secretary-General

to bring this Recommendation to the attention of the World Meteorological Organization, the International Civil Aviation Organization, and the International Maritime Organization.

WORKING GROUP 4B

France

PROPOSAL FOR THE WORK OF THE CONFERENCE

FREQUENCY BAND FOR SPACE OPERATION OF MANNED SPACE VEHICLES

Agenda item 2.2.1

It is proposed to use the band 433.75 - 434.25 MHz in the Earth-to-space direction in the French Overseas Departments in Region 2. Having regard to current Footnote 663, this proposal takes the form of an amendment to that provision, as follows:

F/159/1

MOD 663

Additional allocation: in Brazil, ~~France and the French Overseas~~ Departments in Region 2, and India, the band 433.75 - 434.25 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis ~~until 1 January 1990, subject to agreement obtained under the procedure set forth in Article 14. After 1 January 1990, the band 433.75 - 434.25 MHz will be allocated in the same countries to the same service on a secondary basis.~~ In France, the band is allocated to the same service on a secondary basis.

COMMITTEE 4

Republic of Guinea

PROPOSALS FOR THE WORK OF THE CONFERENCE

The World Administrative Radio Conference (WARC-92), Malaga-Torremolinos, 1992, is to study frequency allocations in certain parts of the spectrum, within the framework of the provisions of Article 8 of the Radio Regulations.

With this in mind, the Administration of the Republic of Guinea, like all the other Administrations and in particular those of the developing countries, pins great hopes on the success of the Conference.

It sincerely wishes that the work of WARC-92 should be based on the principle of equality and equitable access for all countries to rational use of the frequency spectrum.

To this end, the Administration of the Republic of Guinea submits the following proposals for consideration by the Conference.

The proposals relate to the different agenda items.

2.1 Definitions for certain new space applications and review of the relevant provisions of Article 1

The Delegation of the Republic of Guinea believes that definitions for certain new space applications should be studied within the ITU Voluntary Group of Experts.

2.2 Review of the provisions of Article 8, with a view to considering:

2.2.1 Possible allocation of frequency bands above 20 GHz to the new space service applications

As Guinea does not use this part of the spectrum at present, it is unable to take a position on this item. Nevertheless, it considers that the space services need to be properly defined and to be allocated appropriate frequency bands, since any amendment of Article 8 must take account of the existing services.

2.2.2 Possible extension of the frequency spectrum allocated exclusively to HF broadcasting

The Administration of the Republic of Guinea supports the principle of extending the exclusive allocations to HF broadcasting.

Indeed, in Guinea the fixed service, the land mobile service and the broadcasting service are provided primarily in the HF bands. Moreover, demand continues to increase in the bands below 10 MHz.

Recognizing that the current situation in the HF bands allocated to broadcasting is unsatisfactory, the Guinea Delegation believes that these bands need extending in accordance with Recommendation No. 511 of WARC HFBC-87.

However, these bands should not be extended in the direction of the bands allocated to broadcasting in the Tropical Zone, and any extension must consider what is to be done with the services which previously operated in the bands in question, for which a new allocation has to be found.

Hence, the new allocations must not remove the current protection afforded to services operated in the bands solely reserved for broadcasting in the Tropical Zone.

Guinea will thus oppose any proposal to modify the current provisions relating to use of the HF bands in the Tropical Zone. To that end, it is in favour of retaining Footnote 503 of the Radio Regulations and the associated provisions.

The Republic of Guinea acknowledges the advantages of changing over from DSB to SSB for broadcasting. However, it considers that a sufficient period must be allowed in order to amortize the cost of recently installed transmitting equipment.

2.2.3 Allocation of frequency bands to the broadcasting-satellite service and the associated feeder links

a) For the broadcasting-satellite service (sound) in the range 500 - 3 000 MHz (Resolution No. 520 Orb-88)

Resolution No. 520 (Orb-88) calls for spectrum to be allocated for satellite broadcasting.

It emerges from the CCIR Report to WARC-92 that the required bandwidth for this service varies from 60 MHz to 120 MHz according to whether Advanced Digital System II is adopted, and that the preferred frequency band is around 1.5 GHz. The Report also reveals that considerable geographical spacing will be necessary to protect existing services against interference caused by the broadcasting-satellite service.

In Guinea, the 1.5 GHz band is used for the fixed service and, under our rural development plan, will continue to be used for telecommunication services. It is thus necessary to consider band sharing with frequency spacing. We opt for the 2.5 GHz band (2 570 - 2 620 MHz).

b) HDTV-allocation of frequency bands to the broadcasting-satellite service and the associated feeder links (Resolution No. 521 (Orb-88))

The 20 GHz band is practically unused in the Republic of Guinea. However, the country is subject to heavy rainfall, and the main factor to be taken into account in selecting the frequency band is rain attenuation. Guinea would therefore prefer that lower bands be chosen.

2.2.4 Allocation of frequency bands to the mobile and mobile-satellite services and associated feeder links

a) In the range 1 - 3 GHz (Resolution No. 208 (Mob-87))

The CCIR Report to WARC-92 evaluates the spectrum requirement for the mobile-satellite service at 164.1 MHz (probable requirement) and 88.8 MHz (minimum requirement). This evaluation is based on requirements in areas with the highest traffic density where frequency reuse in adjacent areas is impossible. Such requirements do not correspond to those for a country such as Guinea, and this situation should be reflected in the spectrum allocation.

Guinea therefore considers that:

- 1) any spectrum allocation must be justifiable on a worldwide basis;
- 2) in view of the low density of mobile service traffic in certain areas, this allocation of spectrum to the mobile service could be on a shared basis with the fixed service in the band 1 700 - 2 450 MHz;
- 3) measures have to be taken to reduce the risks of interference with existing services in the vicinity of these bands.

b) Allocation of frequency bands in the range 1 - 3 GHz for a worldwide system of public correspondence with aircraft

For the future worldwide system of public correspondence with aircraft, Guinea supports the allocation of a band of 2 x 5 MHz in the bands 1 670 - 1 675/1 800 - 1 805 MHz (Recommendation No. 408 (Mob-87)).

c) Allocation of frequency bands in the range 1 - 3 GHz for future public land mobile telecommunication systems (Recommendation No. 205 (Mob-87))

The Administration of Guinea, conscious of the impact which FPLMTS will have on personal communications in future, supports:

- allocation of the bands 1 900 - 2 025 MHz and 2 110 - 2 200 MHz to this service on a worldwide basis to facilitate communications with roaming subscribers as well as any arrangements with a view to minimizing equipment costs.

d) Allocation of frequency bands of up to 5 MHz below 1 GHz to low-orbit satellites

The preferred band for low-orbit satellite systems is 137 - 144 MHz. This band is relatively free of assignments in Guinea. A 5 MHz bandwidth in this portion of the spectrum would be quite adequate.

2.2.5 Allocation of the frequency band 14.5 - 14.8 GHz to the fixed-satellite service (Earth-to-space) with due protection of assignments in Appendix 30A of the Radio Regulations

The Republic of Guinea has no objection to allocating this band to the fixed-satellite service, since such an allocation would enable demand for service in band Ku to be met more effectively.

2.2.6 Examination of the frequency bands 2 025 - 2 110 MHz and 2 220 - 2 290 MHz for the space operation and space research services

No objection.

2.2.7 Consideration of footnotes relating to the radiodetermination-satellite service in the frequency range 1.6 - 2.5 GHz

No objection.

2.2.8 Examination of Footnotes RR 635 and RR 797B

Guinea is not affected by these footnotes and has no comments to make on the subject.

2.3 Consideration of the provisions of Articles 55(Rev.) and 56(Rev.)

Guinea believes that these Articles need to be reviewed so as to bring them into line with the texts adopted in IMO (Regulation IV/15 of the SOLAS Convention), in order to satisfy the wishes expressed by the Plenipotentiary Conference in Resolution No. 7.

2.7 New Recommendations and Resolutions concerning the meteorological aids service in frequency bands below 1 000 MHz and services above 20 GHz which were not placed on the agenda (wind profilers)

Guinea considers that the CCIR and WMO should pursue their studies on spectrum requirements and the operation of wind profiler radars.

Other agenda items

The other agenda items will be studied on the basis of Administrations' proposals.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 161(Rev.2)-E

18 February 1992

Original: French

COMMITTEE 3

Note by the Secretary-General

BUDGET OF THE WORLD ADMINISTRATIVE RADIO CONFERENCE (WARC-92)
adjusted at 1 February 1992

The budget of the World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (WARC-92) was approved by the Administrative Council at its 46th session on the basis of the conditions of service in force on 1 January 1991.

As stated at the first meeting of Committee 3, Annex C to Document 71 relating to the Agreement between the Government of Spain and the Secretary-General of the ITU has been updated to take account of the additional costs resulting from the conditions of service in force in the United Nations Common System on 1 February 1992.

Pekka TARJANNE
Secretary-General

Annex: 1

**Additional expenditure occasioned by the holding of the
World Administrative Radio Conference
in Torremolinos**

WARC-92	1992 budget basis 1.1.91*	1992 budget at 1.2.92**	Additional expenditure
<u>Swiss francs</u>			
Subhead I Staff expenses			
Salaries and related expenses	1,532,000	1,648,000	-298,000
Travel (recruitment)	167,000	167,000	-167,000
Insurance	17,000	17,000	-4,000
Staff provided for the Conference	---	----	253,000
	1,716,000	1,832,000	-722,000
Subhead II Premises and equipment			
Premises, furniture, machines	150,000	150,000	
Document production	305,000	305,000	
Supplies and office expenses	50,000	50,000	
PTT	112,000	112,000	
Technical installations	20,000	20,000	
Sundry and unforeseen	20,000	20,000	
	657,000	657,000	-150,000
Subhead III Other expenses			
Conference Final Acts	108,000	108,000	---
Travel expenses for the preparation of the Conference	---	---	10,000
	108,000	108,000	10,000
Subhead IV Post-Conference work of the IFRB	100,000	100,000	---
Subhead V Travel costs away from Geneva			
Per diem	---	---	2,316,000
Travel expenses	---	---	491,000
Transport and dispatch costs	---	---	30,000
	---	---	2,837,000
Total	2,581,000	2,697,000	
Additional cost			1,975,000

* Basis: exchange rate at 1 January 1991: 1 US \$ = 1.27 Swiss francs

** Basis: exchange rate at 1 February 1992: 1 US \$ = 1.43 Swiss francs

COMMITTEE 3

Note by the Secretary-General

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COMMITTEE 3

Note by the Secretary-General

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Secretary-General

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COMMITTEE 5

Argentine Republic

PROPOSALS FOR THE WORK OF THE CONFERENCE

PROPOSED RESOLUTION RELATING TO PERSONNEL OF SHIP STATIONS AND
SHIP-EARTH STATIONS USING THE TECHNIQUES AND FREQUENCIES PRESCRIBED
IN CHAPTER N IX AND FOR PUBLIC CORRESPONDENCE

1. The International Maritime Organization (IMO) intends to amend Regulation IV/15.7 of the SOLAS Convention, revised in 1988, in the light of experience acquired from the full implementation of the Global Maritime Distress and Safety System (GMDSS), as provided for in Resolution No. 5 of the GMDSS-IMO Conference (1988).
2. Accordingly, the Argentine Delegation considers that, with a view to revising the relevant provisions of the Radio Regulations, the Resolution attached in Annex 1 should be included in the Radio Regulations.

Annex: 1

ANNEX

ARG/162/1

RESOLUTION NO. AAA

Relating to the Availability of First- and Second-Class Radio Electronic and General Operator's Certificates for On-Board Radio Stations Using the Techniques and Frequencies Prescribed in Chapter N IX and for Public Correspondence and Sailing Beyond the Range of VHF Coast Stations

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

noting

that the International Maritime Organization (IMO):

- has revised the International Convention for the Safety of Life at Sea (SOLAS), 1974, introducing the GMDSS;
- that the said revision foresees that, as implementation of the GMDSS develops pending its final introduction scheduled on 1 February 1999, the methods for ensuring the availability of on-board equipment are to be revised,

further noting

that the present Conference has revised Article 56 of the Radio Regulations to include under No. 3990 the general operator's certificate, for which the conditions set out in Article 55 of the Radio Regulations do not specify the ability to carry out on-board maintenance,

considering

that the provisions adopted by the present Conference take account of the criteria established by IMO in the revised SOLAS Convention;

that the IMO Maritime Safety Committee is to review, in the light of the experience acquired in the development of the GMDSS, the regulations relating to the methods of ensuring the availability of on-board equipment;

that the safety of human life and property at sea must be guaranteed throughout the duration of the aforesaid review,

resolves

to recommend that a future competent world administrative radio conference should determine whether Article 56 of the Radio Regulations needs revising, in accordance with such provisions as the IMO may adopt with regard to the methods of ensuring the availability of on-board equipment,

invites the Administrative Council

to place this item on the agenda of the next competent world administrative radio conference,

instructs the Secretary-General

to bring the present Resolution to the attention of the International Maritime Organization (IMO).

COMMITTEE 5

Argentine Republic

PROPOSALS FOR THE WORK OF THE CONFERENCE

PROPOSED RESOLUTION RELATING TO PERSONNEL OF SHIP STATIONS AND
SHIP-EARTH STATIONS USING THE TECHNIQUES AND FREQUENCIES PRESCRIBED
IN CHAPTER N IX AND FOR PUBLIC CORRESPONDENCE

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ARG/162/1

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considering

that the provisions adopted by the present Conference take account of the criteria established by IMO in the revised SOLAS Convention;

that the IMO Maritime Safety Committee is to review, in the light of the experience acquired in the development of the GMDSS, the regulations relating to the methods of ensuring the availability of on-board equipment;

that the safety of human life and property at sea must be guaranteed throughout the duration of the aforesaid review,

resolves

to recommend that a future competent world administrative radio conference should determine whether Article 56 of the Radio Regulations needs revising, in accordance with such provisions as the IMO may adopt with regard to the methods of ensuring the availability of on-board equipment,

invites the Administrative Council

to place this item on the agenda of the next competent world administrative radio conference,

instructs the Secretary-General

to bring the present Resolution to the attention of the International Maritime Organization (IMO).

COMMITTEE 5

Spain

PROPOSED AMENDMENT TO DOCUMENT DT/40

RESOLUTION No. 9 OF THE PLENIPOTENTIARY CONFERENCE
(NICE, 1989)

Document DT/40 contains the list of allotments resulting from application of the IFRB procedure. Having considered the document in question, the Spanish Administration has detected the following anomaly affecting it:

- Four allotments for Spain (3 098 kHz, 3 101 kHz, 6 745 kHz and 9 019 kHz) which appear in Document DT/40 are also allocated to a neighbouring geographical area, which will give rise to incompatibility in the use of the those frequencies.
-

SEANCE PLENIERE
PLENARY MEETING
SESION PLENARIA

Procès-verbal de la troisième Séance plénière
Minutes of the Third Plenary Meeting
Acta de la tercera sesión plenaria

Page 2, paragraphe 2.5, lire les cinquième et sixième phrases comme suit:

"Ce Groupe avait pour tâche d'examiner et d'élaborer, entre autres, les procédures concernant la coordination des réseaux à satellite non géostationnaire. Le DT/50, émanant du Président du Groupe de travail 5B, a depuis lors été élaboré sur cette question."

On page 2, paragraph 2.5, the fifth and sixth sentences should read:

"Its terms of reference were to consider and develop inter alia procedures for the coordination of non-geostationary-satellite networks. Document DT/50 from the Chairman of Working Group 5B had meanwhile been prepared on this issue."

En la página 4, punto 2.5, léanse las quinta y sexta frases como sigue:

"Este Grupo tenía el cometido de examinar y elaborar, inter alia, procedimientos relativos a la coordinación de las redes de satélite no geoestacionario. Entre tanto, el Presidente del Grupo de Trabajo 5B ha preparado el Documento DT/50 sobre este tema."

PLENARY MEETING

MINUTES
OF THE
THIRD PLENARY MEETING
Friday, 14 February 1992, at 1200 hours

Chairman: Mr. J. BARRIONUEVO PEÑA (Spain)

Subjects discussed

Documents

- | | | |
|----|---|----|
| 1. | Approval of the summary record of the first Plenary Meeting | 96 |
| 2. | Oral reports by the Chairmen of the Committees and the Working Group of the Plenary | - |
| 3. | Statement by the delegate of Germany | - |

1. Approval of the summary record of the first Plenary Meeting (Document 96)

- 1.1 The delegate of Indonesia, referring to paragraph 13.2 on page 5 of Document 96, requested the deletion of the words "with its headquarters or" in the penultimate sentence, the end of which would thus read: "... had not been able to communicate with its members".
- 1.2 With the modification proposed by the delegate of Indonesia, Document 96 was approved.

2. Oral reports by the Chairmen of the Committees and the Working Group of the Plenary

2.1 Before giving the floor to the Chairmen of the various Committees, the Chairman informed delegates of a remark that had been made during the latest meeting of the Steering Committee to the effect that the work of the Committees and the Working Groups should be speeded up as much as possible so that the decisions were not all left to the last few days of the Conference. He hoped that at the next Plenary Meetings scheduled for Wednesday, 19 and Friday, 21 February, decisions could be taken rapidly.

2.2 The Chairman of Committee 2 said that the Working Group set up by Committee 2 had met to examine the credentials that had been submitted. The Government of the Republic of Latvia, which had been unable to send a delegation to the Conference, had authorized the Delegation of the Republic of Lithuania to represent it. The instrument for the transfer of powers had been deposited with the Secretariat of the Conference.

2.3 In the absence of the Chairman, the Vice-Chairman of Committee 3 noted that Committee 3 had not met that week; its next meeting was scheduled for Wednesday, 19 February.

2.4 The Chairman of Committee 4 said that Committee 4 had not met, so that all its time could be devoted to meetings of the Working Groups, Sub-Working Groups and Drafting Groups. Progress had been satisfactory, but in his view work should be speeded up and conducted in a spirit of compromise. Several issues had also been taken up outside the scheduled meetings, at small informal gatherings, but it would be difficult to meet the deadlines.

2.5 The Chairman of Committee 5 pointed out that since the last Plenary Meeting, the Committee had held a meeting at which it had considered issues relating to Appendix 26 and Article 12 of the Radio Regulations. Decisions had been taken by consensus and the Committee and Working Groups would be able to continue their activities. The new approach proposed by the IFRB had met with almost unanimous support, being opposed only by the Delegation of Morocco. Early in the following week, the Committee would examine the results of the Working Groups; Working Group 5A had almost completed its task and Working Group 5B had made good progress. Its terms of reference were to consider and develop procedures for the coordination of geostationary- and non-geostationary-satellite networks. Those procedures had been thoroughly studied and the Chairman of Working Group 5B had submitted Document DT/50. With regard to procedures for HDTV and satellite sound broadcasting, the decisions of Committee 4 would have to be awaited. In conclusion, he said that Working Group 5B would complete its business by the end of the following week, while Working Group 5C had made satisfactory progress and would be able to conclude its task by the middle of that week.

2.6 The Chairman of Committee 6 stated that Committee 6 had not yet begun its work but hoped to be able to do so early in the following week. For the time being, the Committee had received only one text from the Working Group of the Plenary.

2.7 The Chairman of the Working Group of the Plenary pointed out that the Working Group had met five times in the course of the week and had set up six Drafting Groups, five of which had completed their work. The Group was active in two fields: its primary responsibility consisted in drafting texts, including two Recommendations and two Resolutions. Two of those four texts were ready; the third would be submitted on Friday, 14 February, while the fourth would in all likelihood be submitted on Monday, 17 February. The Group's second task had consisted in identifying 19 issues, nine of which were already being studied. The replies to two of them would be sent to Committee 5 on Friday, 14 February, and should be available the following Monday. The subjects were, respectively, satellite HDTV and the definition of geostationary satellites. Work was proceeding on the seven other issues, with a new deadline set for the end of the third week that the Working Group would attempt to meet.

2.8 The Chairman replied that he had no worries on that score and felt certain that the reports of the Working Group of the Plenary would be drafted with all the usual care and precision. Following the study of the documents undertaken so far, the Conference was about to embark upon a second very important phase which he believed could be approached with confidence, in the spirit of solidarity and cooperation that had always characterized the ITU.

3. Statement by the delegate of Germany

3.1 The delegate of Germany made the following statement:

"With the unification of Germany on 3 October 1990, the Federal Republic of Germany has entered into the rights and obligations formerly accruing to the German Democratic Republic, in those footnotes of Article 8 of the Radio Regulations where the GDR is included."

The meeting rose at 1230 hours.

The Secretary-General:

P. TARJANNE

The Chairman:

J. BARRIONUEVO PEÑA

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

GRUPE DE TRAVAIL 4B

Rapport du Président du Sous-Groupe de travail 4B-1
au Président du Groupe de travail 4B

Supprimer la section 6 et l'Annexe de la section 5.

WORKING GROUP 4B

Report of the Chairman of Sub-Working Group 4B-1
to the Chairman of Working Group 4B

Delete section 6 and Annex to section 5.

GRUPO DE TRABAJO 4B

Informe del Presidente del Subgrupo de Trabajo 4B-1
al Presidente del Grupo de Trabajo 4B

Suprímase la sección 6 y el Anexo de la sección 5.

K. KOSAKA
Président/Chairman/Presidente

WORKING GROUP 4B

REPORT OF THE CHAIRMAN OF SUB-WORKING GROUP 4B1
TO THE CHAIRMAN OF WORKING GROUP 4B

The terms of reference of Sub-Working Group 4B1 included the following items in the frequency band from 137 MHz to 1 GHz:

- Mobile-satellite service (mainly LEO systems);
- Space research service;
- Mobile service;
- Footnote 635;
- Other changes to footnotes.

Coordinators for main issues were:

- | | |
|--|-----------------|
| - Mobile-satellite service: | A. AMIR (INS); |
| - Mobile service (942 - 960 MHz): | V. RAWAT (CAN); |
| - Space research service (400.15 - 401 MHz): | M. ALONSO (F). |

The following conclusions of Sub-Working Group 4B1 are presented for consideration at Working Group 4B.

The text of RR 635 as approved by Sub-Working Group 4B1 is presented for Working Group 4B.

MOD 635

Alternative allocation: in Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, and Zambia, and Zimbabwe, the bands 223 - 238 MHz and 246 - 254 MHz are allocated to the broadcasting service on a primary basis subject to agreement obtained under the procedure set forth in Article 14.

2. **Proposal on EVA (Extra Vehicle Activity) in 410 - 420 MHz as approved by the Sub-Working Group**

MHz 410 - 420		
Allocation to Services		
Region 1	Region 2	Region 3
410 - 420	FIXED MOBILE except aeronautical mobile <u>Space Research (space-to-space) 651A</u>	

651A Use of the band 410 - 420 MHz by the space research service is limited to communication links within 5 km of an orbiting, manned space vehicle.

3. **Allocation of frequency band 400.15 - 401 MHz to the space research service and frequency band 942 - 960 MHz to MS below 1 GHz**

The modification to the Table of Frequency Allocations together with associated text of RR 647A as approved by Sub-Working Group 4B1 are put forward for consideration in Working Group 4B.

It should be noted that the allocation of the frequency band 400.15 - 401 MHz may be combined with the allocation to the LEO systems, if so decided.

MHz 400.15 - 401		
Allocation to Services		
Region 1	Region 2	Region 3
MOD 400.15 - 401	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) <u>647A</u> Space Operation (space-to-Earth) 647	

ADD 647A The band 400.15 - 401 MHz is also allocated to the space research service in the space-to-space direction for communication with manned space vehicles. In this application, the space research service will not be regarded as a safety service.

MHz
942 - 960

	Allocation to Services		
	Region 1	Region 2	Region 3
MOD	942 - 960 FIXED MOBILE except aeronautical mobile BROADCASTING 703 704	942 - 960 FIXED Mobile <u>MOBILE</u> 708	942 - 960 FIXED MOBILE BROADCASTING 701

SUP 708

4. Following is the result of considerations on proposed changes of footnotes which are not related to LEO systems, mobile service, communication with manned space vehicles and Footnote 635.

4.1 Modifications and suppressions approved by 4B1

MOD 596 Different category of service: in Afghanistan, Saudi Arabia, Bahrain, Brunei, China, the United Arab Emirates, India, Indonesia, Iran, Iraq, Kuwait, Malaysia, Oman, Pakistan, Qatar, Singapore, and Thailand, ~~Yemen A.R. and Yemen (P.D.R. of)~~, the allocation of the band 137 - 138 MHz to the fixed and mobile, except aeronautical mobile (R), services is on a primary basis (see No. 425).

MOD 604 Additional allocation: in Ethiopia, Finland, Kenya, Malta, Somalia, Sudan, Tanzania, ~~Yemen A.R.~~ and Yugoslavia, the band 138 - 144 MHz is also allocated to the fixed service on a primary basis.

SUP 614

MOD 621 Additional allocation: in the Federal Republic of Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Monaco, Norway, the Netherlands, the United Kingdom, Sweden, and Switzerland ~~and Yemen (P.D.R. of)~~, the band 174 - 223 MHz is also allocated to the land mobile service on a permitted basis. However, the stations of the land mobile service shall not cause harmful interference to, nor claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.

MOD	622	Different category of service: in the Federal Republic of Germany, Austria, Belgium, Denmark, Spain, Finland, France, Israel, Italy, Liechtenstein, Luxembourg, Monaco, Norway, the Netherlands, Portugal, the United Kingdom, Sweden, <u>and Switzerland</u> and Yemen (P.D.R. of) , the band 223 - 230 MHz is allocated to the land mobile service on a permitted basis (see No. 425). However, the stations of the land mobile service shall not cause harmful interference to, nor claim protection from, broadcasting stations, existing or planned, in countries other than those listed in this footnote.
SUP	633	
SUP	634	
MOD	675	Different category of service: in Chile, Colombia, Ecuador, the United States, Guyana and Jamaica <u>and Mexico</u> , the allocation of the bands 470 - 512 MHz and 614 - 806 MHz to the fixed and mobile services is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.
MOD	676	Additional allocation: in Burundi, Cameroon, the Congo, Ethiopia, Israel, Kenya, Libya, Senegal, Sudan, <u>and Syria</u> , and Yemen (P.D.R. of) , the band 470 - 582 MHz is also allocated to the fixed service on a secondary basis.
MOD	678	Additional allocation: in Costa Rica, El Salvador, Ecuador, the United States, Guatemala, Guyana, Honduras, Jamaica, <u>Mexico</u> and Venezuela, the band 512 - 608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.
SUP	682	

4.2 ~~Proposals~~ considered to be dealt with by Working Group 4B

4.2.1

KRE/152

MOD 653

Reasons: There was no delegate of the Democratic People's Republic of Korea participating in SWG 4B1, and also there was no support of the proposal.

4.2.2

B/30/11

SUP 536

B/30/19

MOD 663

E/25/11
MOD 703

Reasons: One Administration objected to pick up these proposals without specific guidance by the Conference, and another Administration expressed its intention to submit a new proposal to modify Footnote 663.

5. Possible allocations of frequency bands below 1 GHz to low-orbiting mobile satellite systems on the basis of appropriate sharing criteria

Down-link Allocations

MHz
137 - 138

Allocation to Services		
Region 1	Region 2	Region 3
137 - 138 <u>137.025</u>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) <u>MOBILE SATELLITE (space-to-Earth)</u> Fixed Mobile except aeronautical mobile (R) 596 597 598 599 <u>599A</u>	
137 <u>137.025 - 138</u> <u>137.175</u>	SPACE OPERATION (space-to-Earth) METEOROLOGICAL SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) <u>Mobile Satellite (space-to-Earth)</u> Fixed Mobile <u>except aeronautical mobile (R)</u> 596 597 598 599 <u>599A</u>	

MHz
137 - 138

Allocation to Services		
Region 1	Region 2	Region 3
137 137.175 - 138 137.825	SPACE OPERATION (space-to-Earth) METEOROLOGICAL SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) <u>MOBILE SATELLITE (space-to-Earth)</u> Fixed Mobile except aeronautical mobile (R) 596 597 598 599 <u>599A</u>	
137 137.825 - 138	SPACE OPERATION (space-to-Earth) METEOROLOGICAL SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) <u>Mobile Satellite (space-to-Earth)</u> Fixed Mobile except aeronautical mobile (R) 596 597 598 599 <u>599A</u>	

ADD

599A

Coordination of mobile satellite systems will be in accordance with the provisions [of Resolution] The mobile-satellite service will be limited to a power flux-density of -120 dBW/m²/4 kHz, at the surface of the Earth. This power flux-density limit shall not be exceeded for more than 1% of the time. The mobile-satellite service will limit out-of-band emissions in the band 150.05 - 153 MHz to [-223 dB(W/m²/4 kHz)].

MHz
400.15 - 401

Allocation to Services		
Region 1	Region 2	Region 3
400.15 - 401	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Space Operation (space-to-Earth) <u>MOBILE SATELLITE (space-to-Earth)</u> 647 <u>647X</u>	

ADD

647X

Coordination of mobile satellite systems will be in accordance with the provision of [Resolution]. The mobile-satellite service will be limited to a **power flux-density** of -120 dBW/m²/4 kHz at the surface of the Earth. This **power flux-density limit** shall not be exceeded for more than 1% of the time. The **mobile-satellite service will** limit out-of-band emissions in the band 406.1 - 410 MHz to [-223 dB(W/m²/4 kHz)].

Up-link Allocations

MHz
148 - 150.05

Allocation to Services		
Region 1	Region 2	Region 3
148 - 149.9 FIXED MOBILE except aeronautical mobile (R) <u>MOBILE SATELLITE</u> <u>(Earth-to-space)</u> 608 608X	148 - 149.9 FIXED MOBILE <u>MOBILE SATELLITE (Earth-to-space)</u> 608 608X	
149.9 - 150.05	RADIONAVIGATION-SATELLITE <u>MOBILE SATELLITE (Earth-to-space)</u> <u>608Y 609 609A 609B</u>	

ADD	608X	The mobile-satellite service shall not constrain the development and use of fixed, mobile and space operations services in this allocation. MSS mobile earth station transmitters will not cause a power flux-density in excess of -150 dBW/m ² /4 kHz outside of national boundaries more than 1% of any 1 hour period.
ADD	609B	The mobile-satellite service shall be secondary in this allocation until 1 January 1997.
ADD	608Y	The mobile-satellite service shall not constrain the development and use of the band 149.9 - 150.5 MHz by the radionavigation satellite service. Mobile earth station transmitters shall not exceed a power flux-density of -150 dBW/m ² /4 kHz outside of national boundaries.

6. Notes

6.1 It was also indicated by one delegation that while there is no material objection to add certain countries in existing footnotes, it would nevertheless be highly desirable that from the point of view of the work of the VGE, the necessity of the respective footnotes as a whole should be critically reviewed. It would be very helpful if such footnotes could be deleted.

6.2 The United States objected to taking up the footnote changes proposed by Brazil, Yemen, Spain and the Democratic People's Republic of Korea without specific guidance by the Conference.

6.3 The United States voices its strong objection to the inclusion of a specific protection criteria for the radio astronomy service in Article 8.

ANNEX TO SECTION 5

Record of Drafting Group Discussions

1. Introduction

This report gives the results of discussions with respect to proposals presented to WARC-92 for new allocations to the mobile-satellite service (MSS) in the 137 - 138 MHz, 148 - 149.9 MHz, 149.9 - 150.05 MHz and 400.15 - 401 MHz bands. The Conference received proposals for MSS allocations in these bands from a number of Administrations. In addition, other countries expressed strong support for some or all of the proposals.

In addition, a number of countries have expressed concern that the proposed service will cause interference to the existing systems, and wanted to have assurances that their systems would not receive any unacceptable interference from new systems in the proposed MSS operating in the same bands.

The CCIR/JIWP Report to the Conference addresses this service in the proposed bands and gives guidance as to the characteristics of the systems and the sharing criteria to existing systems in the same bands (Tables II and III). Notes to these tables give indications of the frequency allocations in the CCIR study. The allocations indicated above are in agreement with those assumed by the CCIR.

This report discusses:

- 1) the expressed concerns;
- 2) the sharing criteria and techniques to protect the existing systems; and
- 3) the proposed allocation, for both down-link and up-link allocations. A description of the requirement for the services is also provided.

2. Service objective

This new service to be provided at VHF/UHF, will use non-geostationary space stations to provide basic message communications to millions of people who have no reliable radio service. These services can fill service and geographic gaps in the existing worldwide telecommunications network. A constellation of LEO satellites could provide time continuous coverage either geographical or nearly globally. LEO systems have the ability to provide one or two-way data communications and position location to terminals which are small and lightweight. These pocket-sized terminals could be in wide demand for purposes such as emergency alerting, data collection, paging, position location and short message transmission, and limited digital data transfer, using store and forward techniques to unserved areas to support economic development.

3. Down-link proposed allocations

The proposed down links for the MSS are 137 - 138 MHz and 400.15 - 401 MHz.

3.1 Concerns

The following concerns were expressed by different Administrations:

- India and the United Kingdom expressed concern about out-of-band emissions which could cause unacceptable interference to a radio astronomy site operating at 150 MHz if spread spectrum modulation is used in these allocations;

- the United Kingdom and Canada expressed concern about interference to radio astronomy in the 406.1 - 410 MHz band for the same reason;
- Australia expressed concern about sharing with television;
- Kenya, the United Kingdom, with other European countries, and a number of other Administrations expressed concern about sharing with fixed and mobile services;
- the Russian Federation expressed the view that there would not be compatibility with existing mobile services, specifically the aeronautical-mobile service;
- the WMO expressed concern about sharing with the METSAT service.

3.2 Sharing Considerations

Sharing with other space services with primary allocations in this band will be accomplished either by channel and geographic separation (existing space services use narrow-band carriers) or by a reduction in power flux-density below -150 dBW/m²/4 kHz. Sharing with fixed and mobile services in the 137 - 138 MHz band will be accomplished by an MSS power flux-density limitation of -120 dBW/m²/4 kHz. This is a value comparable to the transmissions from existing and planned meteorological satellites using this band.

It was the conclusion of the Drafting Party that it would be better to use another approach (e.g. by Committee 5) than Article 14 to provide for the necessary coordination, since in the past it may have unnecessarily inhibited the introduction of beneficial new systems. It was also noted that Article 14 is a candidate for suppression by the VGE.

4. Proposed up-link allocations

4.1 Concerns

- a number of Administrations expressed concern with respect to ensuring that the transmissions of MSS earth stations would not cause interference to their existing fixed and mobile systems in the band 148 - 149.9 MHz;
- Canada and India expressed concern that their existing high power transmitters could cause interference to the MSS satellite, particularly if spread spectrum techniques were used by the MSS systems;
- the United Kingdom expressed the concern that their existing and planned high density land mobile systems could cause interference to the MSS satellites;
- concern was also expressed that the MSS should not put constraints on the development of fixed and mobile systems;
- the Russian Federation expressed the view that there would not be compatibility with existing service in the bands 148 - 149.9 MHz and 149.9 - 150.05 MHz. The latter band is exclusively allocated to radionavigation-satellite service;
- concern was also expressed about the potential for interference across national boundaries.

4.2 Sharing

There were presentations by **proposed LEO** system operators on the specific technical characteristics of their systems with respect to **how sharing** would take place with existing systems. **The techniques are described below.**

One technique is called dynamic channel **assignment**. With this technique the satellite first **scans the** entire up-link band. The power level in each **potential channel** is recorded by the satellite. The channels are then prioritized according to the potential for interference, and **stored on-board the satellite**. This information is **updated continuously** (i.e. every few seconds). When a user **desires to transmit**, the satellite commands it to **the appropriate frequency**.

Dynamic channel assignment, combined with the statistics of MSS mobile earth station transmissions, avoid harmful interference to fixed and mobile services. Analyses indicate that during any period of time the power flux-density (pfd) at a terrestrial station receiver from all MSS earth station transmissions will not be exceeded more than 1% of the time. The CCIR Working Party on mobile satellites is in the process of developing a Recommendation on calculation methods to precisely determine the protection of fixed and mobile receivers.

Another proposed sharing technique is spread spectrum modulation which lowers the e.i.r.p. density of the satellite and ground station terminal transmissions by spreading the signal across on megahertz of bandwidth. The result of this technique is to produce power flux-density levels at ground level which are well below the allowable limits for the fixed and mobile services receivers. The same spreading technique inherently rejects interference from the narrow channel transmissions of the fixed and mobile service transmitters. In addition, the very short burst (approximately 100 milliseconds) transmission technique of the spread spectrum system in most cases will not be perceptible to the average fixed or mobile system receiver. This very short time of message transmission allows the LEO MSS system to operate at very high levels of capacity and still not exceed the 1% duty cycle rate.

In general, the proposed MSS systems below 1 GHz are for domestic use. Each country can refuse to authorize the use of these frequencies for MSS up links. Each territory can control the use of the up-link frequencies assigned through its own domestic control station. Normal regulatory provisions can be used to control cross-border interference problems.

6. Consideration of other proposals

6.1 The Russian Federation proposal for LEO MSS in the bands 312 - 315 MHz and 387 - 390 MHz

- The United Kingdom and Switzerland, speaking for Europe, expressed concerns regarding interference to existing services.
- The United States stated that it has multiple services in the bands proposed in the United States as well as other countries, and had concerns regarding interference to those services by giving primary allocation.
- No other countries supported the Russian Federation proposal.

6.2 Discussion of the Ecuadorian proposal for LEO MSS in bands 420 - 422 MHz and 928 - 930 MHz

- The United States expressed concerns for the protection of Amateur Radio in the bands proposed as coordination would be extremely difficult.
- The United Kingdom and Canada also expressed concerns for existing services in the bands proposed.
- No other countries supported the Russian proposal.

6.3 Discussion of the Tanzania proposal for LEO MSS in the band 428 - 430 MHz was similar to item 6.2 with no support received.

6.4 Discussion of the Russian Federation proposal for LEO MSS in bands 806 - 890 MHz, 942 - 950 MHz, and 934 - 939 MHz per Document 7.

- The United Kingdom expressed concern for use of all the bands mentioned above.
- The United States said that some MSS was allocated in the bands requested but they had not been implemented, and that the bands were not good for MSS due to frequency difficulties.

6.5 Israel and Kenya requested a footnote for secondary use of the 148 - 149.9 MHz band in Israel. Israel expressed support for LEO MSS in general, but desires the table to contain the footnote requested.

COMMISSION 4

COMPTE RENDU

DE LA

TROISIEME SEANCE DE LA COMMISSION 4

(ATTRIBUTION DE FREQUENCES)

Lire/Read/Léase § 5.7 comme suit/as follows/como sigue:

5.7 Le délégué de la Fédération russe ne partage pas l'opinion selon laquelle la suppression ou l'adjonction du nom d'un pays d'un renvoi pourrait être considérée comme une modification de pure forme, car ces suppressions ou ces adjonctions pourraient fort bien avoir des incidences sur les Actes finals de la Conférence.

5.7 The delegate of the Russian Federation did not agree that the deletion or addition of the name of a country from a footnote could be regarded as a purely editorial amendment, since such deletions or additions might well have implications for the Final Acts of the Conference.

5.7 El delegado de la Federación Rusa no está de acuerdo en que la supresión o adición del nombre de un país en una nota sea una enmienda puramente formal, puesto que tales supresiones o adiciones pueden tener también consecuencias para las Actas Finales de la Conferencia.

COMMITTEE 4

SUMMARY RECORD
OF THE
THIRD MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATIONS)

Friday, 14 February 1992, at 1505 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subjects discussed

Documents

- | | | |
|----|---|-----|
| 1. | Reports on the work of Working Groups 4A, 4B and 4C | 138 |
| 2. | Allocation of Resolutions and Recommendations to Working Groups | 139 |
| 3. | Note from the Chairman of Committee 5 | 122 |
| 4. | Approval of the summary record of the second meeting of Committee 4 | 104 |
| 5. | Treatment of proposals relating to footnotes | - |

1. Reports on the work of Working Groups 4A, 4B and 4C (Document 138)

1.1 The Chairman invited the Committee, in the absence of the Chairman of Working Group 4A, to consider the first report of that Working Group in Document 138. He drew attention to a minor editorial amendment to paragraph 5 of the English text.

1.2 The Committee took note of Document 138.

1.3 The Chairman of Working Group 4B said that his Group, whose terms of reference were to address all relevant services between roughly 137 MHz and 3 GHz, had held six meetings to date. It had established a Sub-Working Group to deal with issues relating to allocations below 1 GHz, and three Drafting Groups to analyse and tabulate written proposals concerning allocations between 1 and 3 GHz. The work of the Groups had largely been completed, except in regard to space research and space operations services in the 2 GHz band. Despite the complexity of the task, good progress had been made and agreement reached on a number of important issues.

1.4 The Chairman noted that Working Group 4B's work was to be completed by 20 February.

1.5 The Chairman of Working Group 4C said that the Group, whose terms of reference included consideration of all proposals relating to allocations above 3 GHz, had thus far held six meetings. It had set up several groups to deal with specific questions, a Sub-Working Group on HDTV, an ad hoc Working Group on space issues in the bands above 20 GHz, another on frequency allocations between 14.5 and 14.8 GHz and two Drafting Groups - one on the general-satellite service and the other on beacons for the fixed-satellite service. A further group might be established to consider questions relating to HDTV feeder links. Satisfactory progress had been made on all topics, and the Working Group expected to complete its tasks by 18 February.

1.6 The Chairman thanked the Chairmen of the Working Groups for their reports.

2. Allocation of Resolutions and Recommendations to Working Groups (Document 139)

2.1 The delegate of Spain said that the proposals contained in Document 139 should include proposal E/25/12 to delete Recommendation No. 511 (HFBC-87).

2.2 The Chairman said that the proposal would be included and allocated to Working Group 4A.

3. Note from the Chairman of Committee 5 (Document 122)

3.1 The Committee took note of Document 122.

4. Approval of the summary record of the second meeting of Committee 4 (Document 104)

4.1 The delegates of Mexico, Ecuador, Cuba, Tanzania, China and Tunisia, having requested corrections to Document 104, were invited by the Chairman to submit their alterations in writing for the purpose of issuing a corrigendum. This was so agreed.

4.2 In response to an observation by the delegate of the United Kingdom, the Chairman confirmed that paragraphs 1.23 and 1.24 of the summary record both related to the statement by the delegate of Cameroon.

4.3 Subject to the corrections to be notified, Document 104 was approved.

5. Treatment of proposals relating to footnotes

5.1 The Chairman, recalling the discussion on footnotes which had taken place during the meeting of Working Group 4A earlier that day, invited comments and suggestions on how proposals relating to footnotes should be handled by the Committee.

5.2 The delegate of Saudi Arabia, referring to the discussion of Footnote 530 in Working Group 4A, reiterated the view that the text could be amended to meet the stated requirements, thereby obviating the need to draft an additional footnote.

5.3 The delegate of the United Kingdom recalled the concern expressed by a number of delegates with regard to the treatment of footnotes which were not considered as being within the scope of the Conference agenda. In his view, there were three basic categories of proposals relating to footnotes which should be addressed by the Conference and which the Committee might wish to bear in mind when deciding on its treatment of footnotes. The first two were proposals relating, respectively, to footnotes which were to be examined under an agenda item and to footnotes which would have to be considered as a consequence of decisions adopted. The third category comprised proposals relating to footnotes that were not clearly within the scope of the Conference agenda but concerned purely editorial amendments. Such proposals should be dealt with by the Conference on condition that they did not give rise to discussion on matters of substance.

5.4 The delegate of the Russian Federation said that, in order to avoid complicating its work any further, the Committee should consider only those proposals relating to footnotes which were relevant to the agenda of the Conference.

5.5 The delegate of Brazil endorsed the comments of the United Kingdom delegate since the three categories he had mentioned appeared to cover all the proposals relating to footnotes submitted to date.

5.6 The Chairman, having regard to the comments made during the discussion, suggested that the Working Groups should examine in the normal fashion, proposals relating to footnotes which were relevant to the agenda of the Conference, or consequential to the decisions thereof. They should also be permitted to discuss proposals for purely editorial amendments to footnotes. For example, the deletion of a country's name could be regarded as an editorial amendment, whereas the addition of such a name might entail a change in coordination requirements at geographic boundaries and therefore lead to substantive discussion, for instance on sharing conditions. Consideration of such cases should be referred to the Committee. Moreover, should any doubts be raised within a Working Group concerning the substance of an amendment to a footnote, and should the country submitting the proposal wish to pursue the matter, the proposal should also be referred to the Committee, where all such footnotes could be dealt with on a consistent basis. The Committee would need to consider the agenda of the Conference in its discussion.

5.7 The delegate of the Russian Federation did not agree that the deletion of the name of a country from a footnote could be regarded as a purely editorial amendment, since such deletions might well have implications for the Final Acts of the Conference.

5.8 Replying to comments by the delegate of Spain, the Chairman confirmed that proposals for amendments to footnotes relating to Agenda item 2.9.1 would be considered by the Working Groups since they fell into the category of consequential amendments.

5.9 The delegate of the United Kingdom, referring to the Chairman's suggested guidelines, observed that the question of whether a proposed amendment was purely editorial might well give rise to substantial debate. It was clear that the addition of a country's name might have unforeseen implications and could not be regarded as a straightforward editorial matter. Perhaps the criterion for deciding whether to continue discussion of a proposal relating to a footnote should be the reaction it elicited within the Working Group concerned. Where a proposal proved controversial, the Working Group would be ill advised to expend further effort on discussing an issue which clearly went beyond the scope of the Conference agenda.

5.10 The Chairman suggested that the Working Group Chairmen should follow the United Kingdom delegate's suggestions for dealing with proposals relating to footnotes, referring any proposals giving rise to controversy to the full Committee for discussion in due course.

5.11 It was so agreed.

The meeting rose at 1550 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

COMMITTEE 5

SUMMARY RECORD
OF THE
FOURTH MEETING OF COMMITTEE 5
(REGULATORY MATTERS)

Monday, 17 February 1992, at 1500 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

Documents

- | | | |
|----|---|-------------------|
| 1. | Approval of the summary records of the first, second and third meetings | 103, 105, 113 |
| 2. | Report of the Chairman of Working Group 5A | 127 + Corr.1, 152 |
| 3. | Report of the Chairman of Working Group 5B | 146, 151 |
| 4. | Report of the Chairman of Working Group 5C | 132 |
| 5. | Note by the Chairman of the Working Group of the Plenary to Committee 5 | 156, 157, 171 |
| 6. | Note by the Chairman of Committee 3 to Committee 5 | 153 |

1. Approval of the summary records of the first, second and third meetings (Documents 103, 105, 113)

1.1 The summary record of the first meeting (Document 103) was approved subject to amendments requested by the delegate of Morocco (paragraph 1.3), the member of the IFRB (paragraph 2.8), the delegate of the United States (paragraph 2.22) and the delegate of Mali (paragraph 2.37).

1.2 With reference to the summary record of the second meeting (Document 105), the delegate of Mexico said that her Administration would let the Secretariat have a short text to be added to paragraph 1.9, and the delegate of the Islamic Republic of Iran asked for an amendment to paragraph 2.2.

1.3 Subject to those corrections, Document 105 was approved.

1.4 With reference to the summary record of the third meeting (Document 113), the delegate of Morocco requested an amendment to paragraph 2.34 and said that he would let the Secretariat have a new text for paragraph 2.36.

1.5 Subject to those modifications, Document 113 was approved.

2. Report of the Chairman of Working Group 5A (Documents 127 + Corr.1, 152)

2.1 The Chairman of Working Group 5A reported that his Group had been able to complete its work in accordance with the terms of reference in Document 82. It had considered the decisions of WARC MOB-87, together with Resolution No. 5 of the GMDSS Conference and Resolutions Nos. 702 and 703 of the XVIIth IMO Assembly. It had also studied specific proposals from administrations on Nos. 3990 - 3992 of the Radio Regulations. The Group had reached a consensus on general principles, which had been referred to a Drafting Group.

2.2 The observer for the International Transport Workers' Federation (ITF), speaking on behalf of hundreds of thousands of seamen, expressed dissatisfaction with the results of Working Group 5A's work. He drew attention to the many shortcomings of the GMDSS, which was far from being a worldwide service, only a third of the countries belonging to IMO having provided details of the coastal infrastructure they had established or intended to establish by 1995. The result was a loss of confidence in the system, further aggravated by the increase in the number of false alarms. The members of the ITF considered that for safety's sake what was needed was not operators recruited at the lowest level, but certificated electronic radiocommunication personnel. For the first time in 86 years, the seamen felt they had been let down by the ITU.

2.3 The Chairman invited delegations to consider the first report of the Chairman of Working Group 5A (Document 127 + Corr.1), the annex to which contained the Group's recommendations on Article 56.

2.4 The delegate of France asked for the text of the first line of No. 3992 to be aligned on No. 3990. The change only affected the French text.

2.5 Subject to that comment, the modifications to Article 56 given in Annex 2 to Document 127 were approved.

2.6 The Chairman of Working Group 5A, introducing his second report (Document 152), said there was no modification to be made to Article 55. He then referred to the question of the provisional application of Articles 55 and 56 pending the entry into force of the revised Regulations. In view of the fact that some administrations saw discrepancies between the Regulations and the SOLAS Convention, the Working Group had asked the Secretariat to give its opinion on the question of harmonizing those texts.

2.7 Article 55 as contained in Annex 1 to Document 152 was approved.

2.8 The Chairman asked a representative of the ITU General Secretariat to comment on the question of entry into force.

- 2.9 The representative of the Legal Service considered that the legal aspect of the question was relatively simple: all the Conference had to do was adopt a Resolution providing for Article 55 and modified Article 56 to be applicable provisionally from a certain date and until the final entry into force of the Final Acts as a whole. There were precedents, e.g. from WARC ORB-85 and ORB-88.
- 2.10 The Chairman asked whether delegates could agree in principle that the provisions of modified Article 56 should enter into force as soon as possible after the Conference.
- 2.11 The delegate of Mexico thought that the Article should not be applied any earlier than the Final Acts.
- 2.12 The delegate of Argentina supported that view. The provisions in question should come into force on the date of the entry into force of the Final Acts.
- 2.13 The delegate of Cuba pointed out that many developing countries were not ready for prompt application of those texts, which should take effect at the same time as the Final Acts came into force.
- 2.14 The delegate of Morocco considered that the question could be dealt with by a Resolution on the provisional application of Article 56.
- 2.15 The delegate of Mexico said that for safety reasons it had to be asked whether provisional application of the texts would have the expected results. It was not just a question of the safety of cargos or ships, but of human lives. The solution was quite simple legally, but deserved careful thought; a period of time should be allowed which would be realistic for all countries, not just those with big fleets.
- 2.16 The delegate of Israel supported the proposal by Mexico.
- 2.17 The delegate of Germany considered that safety at sea was essentially IMO's business and not ITU's. Since it was essential to harmonize the Radio Regulations and the SOLAS Convention, he would like to see Article 56 applied as soon as possible, without waiting for the entry into force of the Final Acts, so as to take full advantage of the flexibility of the GMDSS.
- 2.18 The delegate of Japan supported the German proposal, considering that prompt application of Articles 55 and 56 was necessary for the purposes of harmonizing the Regulations and the SOLAS Convention.
- 2.19 The delegate of Finland shared the German delegate's view, namely, that the question of safety at sea was primarily a matter for IMO and should be regulated by the SOLAS Convention and other relevant IMO Conventions. Early application would give administrations more room to manoeuvre, which could be an advantage.
- 2.20 The delegate of the United Kingdom supported the position taken by the last three speakers. The Radio Regulations were inconsistent with the SOLAS Convention and should be modified as quickly as possible.
- 2.21 The delegates of Pakistan, Brazil and Indonesia supported the Mexican proposal.
- 2.22 The delegates of the Republic of Korea, the United States, Norway, Portugal, Australia, Greece, Sweden, New Zealand, Denmark, Ireland, the Netherlands, Luxembourg and Papua New Guinea endorsed the position taken by the delegate of Germany.
- 2.23 The delegate of Senegal thought that the question of safety was not one on which the Committee should divide into separate camps. It should rather reflect on the consequences that a decision taken by a majority of developed countries could have for a minority of developing countries which could not apply the texts for economic reasons. Everyone was agreed on the need to harmonize the texts, but if the harmonization was to be effective, it would require a transitional period. He supported the viewpoint expressed by Mexico.
- 2.24 The Deputy Secretary-General explained, in the hope of clarifying the situation, that the draft Resolution suggested by the ITU Legal Service was intended to introduce greater flexibility and that it would not be binding on countries.

2.25 The representative of the Legal Service pointed out that the question at issue was the provisional application of Articles 55 and modified 56, and not their entry into force. The distinction was a fundamental one, because entry into force would make them binding on all Members of the Union, which provisional application would not. Members which already had the GMDSS would be able to apply the Articles in question immediately, while other administrations could wait for the Final Acts of the Conference to come into force.

2.26 The Chairman proposed that an ad hoc Group should be set up under the chairmanship of the Chairman of Working Group 5A.

2.27 It was decided that the delegates of Argentina, Germany, Japan, Mexico, Norway, Papua New Guinea and Senegal should be members of ad hoc Group 1, which would meet the following day to prepare a draft Resolution.

2.28 The delegate of Mexico, supported by the delegate of Argentina, said that she was not in favour of that procedure and that her reason for participating in the ad hoc Group was simply to get a better idea of the scope of the draft Resolution and the timetable for its application.

2.29 The Chairman congratulated Working Group 5A for the effective way it had dealt with important questions and pointed out that the actual provisions of modified Article 56 had been approved unanimously.

3. Report of the Chairman of Working Group 5B (Documents 146, 151)

3.1 The Chairman of Working Group 5B said that since the Committee's last meeting Working Group 5B had met four times. At its first meeting, it had considered contributions on the measures taken by the IFRB to propose a new version of the Allotment Plan. In order to speed up the work, a Sub-Working Group 5B2 had been set up to review and revise the texts relating to Article 12 and Appendix 26, to prepare a Resolution dealing with the updating of the Plan and to decide on the implementation of the new Plan, if necessary establishing a timetable.

3.2 At its second meeting, the Group had considered the reports of Sub-Working Group 5B2 contained in Documents DT/44 and DT/47. Those reports as approved by Working Group 5B were to be found in Documents 146 and 151. The Kingdom of Morocco had expressed reservations on the two documents.

3.3 At its third meeting, the Group had approved Document DT/52 and considered documents dealing with coordination and notification procedures for non-geostationary satellite networks. It had decided to set up a Sub-Working Group 5B3 to review and revise the draft contained in Document DT/50 and prepare any additional text that might be required. The procedures described in Document DT/50 and Document 93 submitted by the Administrations of Lebanon and Morocco would be harmonized and merged into a single proposal by a small group of experts, which would submit that proposal to the Sub-Working Group.

3.4 At the fourth meeting, the participants had considered Document DT/55, ~~together with Document DT/56, which had been approved and would be the subject of a report to the Committee.~~ The Group had also examined ~~proposals submitted by the administrations members of CEPT. As a result of that debate, it had been decided to set up~~ a Sub-Working Group 5B4 to consider, ~~firstly, proposals relating to the broadcasting satellite service (HDTV) and, secondly, those relating to satellite sound broadcasting and then prepare any further text that might be needed.~~

3.5 The ~~delegate of Morocco pointed out~~ that Document DT/50 ~~simply combined three proposals which~~ had been coordinated by a group with the assistance of the IFRB. Document 93 submitted by Lebanon and Morocco had been set aside and had ~~not been~~ taken into consideration in preparing the working document. That was why it had to be considered ~~separately~~.

3.6 The Chairman said that the document ~~had not been set aside deliberately but that work had been started on the matter well before it had been issued.~~

3.7 He ~~proposed that delegates should consider the three annexes to the first report of Working Group 5B (Document 146).~~

3.8 Annex 1 was approved.

- 3.9 Annex 2 was approved, with the exception of Part III, which was dealt with in Document DT/40.
- 3.10 Annex 3 was approved, with a slight drafting change in **recognizing b)**, of the draft Resolution.
- 3.11 The Chairman invited delegates to consider the third report of Working Group 5B (Document 151).
- 3.12 Document 151 was approved.

4. Report of the Chairman of Working Group 5C (Document 132)

4.1 The Chairman of Working Group 5C informed the Committee that his Group was no longer making such good progress as at the beginning because it was considering draft Resolutions on digital sound broadcasting and on the implementation of changes in frequency allocations in the HF band. Two Sub-Groups (5C1 and 5C2) and a Drafting Group (5C3) had been set up. Despite certain difficulties, the Group hoped to complete its work by 18 February. He added that Document 132 contained the results of the Group's work on Articles 1, 61 and 69 and noted that the addition of a new definition and modification of the definition of geostationary satellites had been the subject of reservations by some administrations, although most participants had been in favour of them.

4.2 The Chairman proposed that delegates should consider the modifications to Article 1 as contained in the annex to Document 132.

NOC 3, 4, 7

4.3 Approved.

ADD 22A

4.4 Following a proposal by the Chairman to keep the square brackets in No. 22A until Committee 4 decided whether or not to allocate frequencies to the service, the delegate of France said he thought there was no point in introducing the definition for a general-satellite service, in view of the fact that the applications envisaged could function in the bands allocated simultaneously to the fixed-satellite service and the mobile-satellite service. What was really involved, in his view, was a redefinition of radiocommunication services, a matter which had been entrusted to the Voluntary Group of Experts.

4.5 The delegate of Japan thought it would be preferable to keep the square brackets at that stage. The introduction of the word "applications" in 3.3A made the text ambiguous.

4.6 The delegate of the Russian Federation agreed with the previous speakers. He doubted whether the new definition was necessary, whatever decision might be taken on the subject by Committee 4.

4.7 The delegate of Canada thought it would be preferable to define the general-satellite service, in case Committee 4 needed such a definition.

4.8 The delegate of the United States pointed out that Committee 4 had made progress in its **work on** the matter of determining possible allocation options. She proposed that the square brackets should be retained, pending a decision by Committee 4 on the allocation possibilities.

4.9 The delegate of Nigeria saw no point in the new definition of the general-satellite service, which would merely complicate matters.

4.10 The Chairman proposed once again, in order to avoid wasting time, that the definition should be kept in square brackets pending the outcome of Committee 4's work.

4.11 The delegate of the Russian Federation considered that the Committee could wait for a decision by Committee 4 while informing it of its own opinion, that the definition of the general-satellite service was not specific enough and was ambiguous in places. In his view, it was not essential to add a new service.

4.12 The member of the IFRB pointed out that if Committee 4 was going to decide on new allocations, Committee 5 would have to provide a definition. The problem with the proposed new definition was that it combined elements belonging to the fixed-satellite service and the mobile-satellite service. To overcome that problem he proposed that the definition should be worded as follows: "Radiocommunication service between space stations and mobile earth stations and/or earth stations at specific fixed points".

4.13 The delegate of France did not agree with the member of the IFRB. It did not seem to him to be necessary to have a definition of general-satellite service for Committee 4 to be able to make allocations.

4.14 The delegate of the United Kingdom fully shared the Chairman's view and considered that the Committee should wait for a decision from Committee 4. Like the delegate of France, he disagreed with the delegate of Canada and the member of the IFRB. The Conference's aim was to simplify the Radio Regulations, and the addition of the new definition would not be helpful.

4.15 The member of the IFRB stressed that if Committee 4 made an allocation, it would be necessary to define the service.

4.16 The delegate of Mexico fully agreed with the Chairman. She wished, however, to draw delegates' attention to the fact that the definition related to a nonexistent service and stated that her delegation had made a proposal concerning addition 22A (3.3A) in Document 63.

4.17 The delegate of Canada supported the Chairman's suggestion to keep the square brackets, in view of the fact that the Conference had only a limited time to consider all the items on its agenda. It therefore had to proceed in a rational way and not waste time on details.

4.18 The delegate of Japan also shared the Chairman's view. He supported what the member of the IFRB had just said and thought that to make 3.3A clearer all that was needed was to replace the word "applications" by "services".

4.19 The delegate of the United States agreed with the Chairman and the delegate of Mexico that the square brackets should be kept pending a decision on allocations by Committee 4.

4.20 The delegate of the Russian Federation shared the view expressed by the United Kingdom delegate. The question was not just one of terminology, but one of substance as it would have to be made clear what provisions of the Radio Regulations would apply to this new service, and the Chairman of Committee 4 ought to be consulted before the definitions were considered any further.

4.21 The delegate of the United Kingdom could agree to the Chairman's proposal to defer consideration of the definitions on condition that the delegates who were in favour of the addition defined the services in question precisely, which would certainly not be easy.

4.22 It was decided to keep addition 22A in square brackets.

MOD 24

4.23 The delegate of Brazil observed that his delegation had already expressed its concern over the provision, since it related to an existing service and the modification would entirely change the nature of that service. As things stood, it was a service which would provide links not just between artificial earth satellites, but also with satellites of other planets, such as Mars. It was perhaps unnecessary to do anything about the matter for the time being. If the modification was adopted, there would certainly be technical difficulties, and a careful study would have to be made, because what it involved was in fact allocations to an entirely new activity.

4.24 The delegate of Canada thought that the delegate of Brazil was completely right. His own delegation had already raised objections on the point. Working Group 4C had, it seemed, already envisaged adding a footnote concerning the allocation to that service, which showed there was a problem. In his view, the definition was a broad one and such a footnote would be necessary.

4.25 The delegate of the Russian Federation considered that the situation was a complicated one, because the definition of the service was entirely changed. It would now be a space research service responsible for providing links between artificial earth satellites and artificial satellites of other planets, and the introduction of new elements could lead to an increase in interference between artificial earth satellites. With limited transmitter power, a much wider frequency band was needed.

4.26 The delegate of the United States said that the idea behind the proposal to delete the word "earth", had been to cover communications between satellites used for exploration of the Moon or other planets. As the technology available for such communications was rather limited, any fear that such a modification would involve the use of new frequency bands was perhaps unfounded.

4.27 The Chairman of Working Group 5C observed that during the discussion of the matter, only four countries had opposed the modification, whereas very many had been in favour of it.

4.28 The delegate of the United States urged the Committee to adopt the modification, which would enable proper inter-satellite communication to be established.

4.29 The Chairman suggested that the Committee should take note of the statements by the delegates of Brazil, Canada and the Russian Federation, delete the square brackets and send MOD 24 to the Editorial Committee with the reservations that had been expressed.

4.30 It was so decided.

NOC 26 and NOC 36

4.31 Approved.

ADD 46A

4.32 The Chairman of Working Group 5C said that the addition had been approved pending decisions by Committee 4. If no allocation was made, the definition would not be necessary.

4.33 It was decided to keep the square brackets.

MOD 48, NOC 110, 111, 112, 117 and NOC 163

4.34 Approved.

MOD 181

4.35 The Chairman said that the Working Group to the Plenary had given thorough consideration to the proposal to modify the expression "geostationary satellite" and had sent Document 156 to the Chairman of Committee 5. He suggested deferring consideration of the proposal until Working Group 5C had taken a decision on the question of modifying No. 182 of the Regulations.

4.36 The delegate of Morocco said that, not having been able to attend all the Working Group and Sub-Working Group meetings, he had not been able to put forward his Administration's position. He could not accept the proposed definition of "geostationary satellite", which was much too loose.

4.37 The member of the IFRB pointed out that the question had already been raised at a meeting of Working Group 5B in connection with Article 29. It was not yet known what the maximum permitted inclination for a geostationary satellite would be.

4.38 It was decided to refer the question of MOD 181 to Working Group 5B.

4.39 In answer to a comment by the delegate of Spain, the Chairman explained that the Editorial Committee would harmonize the English, French and Spanish texts.

5. Notes by the Chairman of the Working Group of the Plenary to Committee 5 (Documents 156, 157, 171)

5.1 The Chairman said that Document 156 would be considered by Working Group 5C and that Document 157 would be referred to Group 5B.

5.2 The Committee took note of Document 171.

6. Note of the Chairman of Committee 3 to Committee 5 (Document 153)

6.1 The Chairman proposed that the IFRB should be asked to study the financial implications of the decisions taken by Committee 5 and report on the matter to Committee 3.

6.2 It was so decided.

The meeting rose at 1800 hours.

The Secretary:

J. LEWIS

The Chairman:

E. GEORGE

COMMITTEE 4

SUMMARY RECORD

OF THE

FOURTH MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATION)

Tuesday, 18 February 1992, at 0930 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subjects discussed

Documents

1.	First report of Working Group 4C	169
2.	Note by the Chairman of Committee 3	153
3.	Note by the Chairman of the Working Group of the Plenary	171
4.	Approval of the summary record of the first meeting of Committee 4	102

1. First report of Working Group 4C (Document 169)

1.1 The Chairman of Working Group 4C introduced its first report to the Committee (Document 169) dealing with the provision of a means for up-link power control in the fixed-satellite service near 30 GHz. Several administrations had made proposals and a small group had been set up to consider them. The results of its work would be found in the Annex to the report. A correction should be made in ADD 881B, where the figure "29.900 GHz" should read "29.999 GHz".

1.2 The Chairman noted that there was no change in the proposed table; only the footnotes were new.

1.3 The delegate of the Russian Federation pointed out that only services relating to Agenda item 2.2.1 were dealt with in the Annex to Document 169, whereas other services in the same band would be taken up under other items. Was it the intention to consider all such services separately and to introduce any necessary modifications or amendments at a later stage?

1.4 The Chairman drew attention to the note at the top of the Annex concerning consequential amendments.

1.5 The Chairman of Working Group 4C confirmed that other items to be considered by the Working Group might affect the table. In that event, Committee 4 would be consulted again. However, Footnotes 881A and 881B could be approved immediately.

1.6 The delegate of the Russian Federation suggested that, once all proposals relating to the matter had been dealt with, Committee 4 should consider the changes to the Table as a whole.

1.7 The Chairman said he took it that the Committee wished to approve Footnotes 881A and 881B and to return to the matter once the table had been completed.

1.8 It was so agreed.

2. Note by the Chairman of Committee 3 (Document 153)

2.1 The Chairman drew attention to the note by the Chairman of Committee 3 (Document 153) calling upon the Chairmen of Committees 4 and 5 to supply him with reports on decisions taken and their financial implications by 25 February 1992. He would respond to that request as appropriate.

2.2 The Committee noted Document 153.

3. Note by the Chairman of the Working Group of the Plenary (Document 171)

3.1 The Chairman drew attention to the note by the Chairman of the Working Group of the Plenary (Document 171) outlining the procedure to be followed for the transmission of a request for study.

3.2 The Committee noted Document 171.

4. Approval of the summary record of the first meeting of Committee 4 (Document 102)

4.1 The delegate of the United States said he would submit corrections to paragraphs 1.18 and 2.12.

4.2 In response to a comment by the delegate of Brazil, the Chairman said that the references to Documents DL/3 and 4 would be replaced by the appropriate conference document references.

4.3 Subject to these corrections, Document 102 was approved.

The meeting rose at 0950 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 169-E
17 February 1992
Original: English

COMMITTEE 4

FIRST REPORT OF WORKING GROUP 4C TO COMMITTEE 4

Working Group 4C considered proposals from several Administrations to provide a means for up-link power control in the fixed-satellite service near 30 GHz. The Working Group agreed to propose an allocation for this purpose as shown in the annex.

H.G. KIMBALL
Chairman of Working Group 4C

Annex: 1

ANNEX

Proposed draft text for Agenda item 2.2.1

Note - If the FSS allocation in the band 29.5 - 30 GHz is changed, consequential amendments to the footnotes 881A and 881B may be required.

GHz 27.5 - 30			
Allocation to Services			
	Region 1	Region 2	Region 3
MOD	27.5 - 29.5	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE <u>881A 881B</u>	
MOD	29.5 - 30	FIXED-SATELLITE (Earth-to-space) Mobile-Satellite (Earth-to-space) <u>881A 881B</u> 882 883	

ADD 881A Additional allocation: the bands 27.500 - 27.501 GHz and 29.999 - 30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions for the purpose of up-link power control.

Such space-to-Earth transmissions shall not exceed an effective isotropic radiated power (e.i.r.p.) of +10 dBW in the direction of adjacent satellites on the geostationary-satellite orbit, and shall not produce a power flux-density in excess of the values in No. 2578 on the Earth's surface in the band 27.500 - 27.501 GHz.

ADD 881B Additional allocation: the band 27.501 - 29.900 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions for the purpose of up-link power control.

Source : DT/35 (Rev-1)

DRAFT

RESOLUTION

RELATING TO IMPLEMENTATION OF CHANGES IN FREQUENCY ALLOCATIONS

BETWEEN [4000 KHZ AND 20000 KHZ]

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that parts of the frequency bands between [4 000 kHz and 20 000 kHz] which were previously allocated on an exclusive or shared basis to the fixed and mobile services have been re-allocated to the broadcasting service ;
- b) that some existing fixed and mobile assignments may need to be removed progressively from those re-allocated bands to make way for the broadcasting [or amateur] services ;
- c) that the assignments to be removed, termed "displaced assignments", must be re-accommodated in other appropriate frequency bands ;
- d) that developing countries may require special assistance from the IFRB in replacing the displaced assignments with appropriate protection ;
- e) that procedures exist already in Article 12 of the Radio Regulations that may be used to this effect ;

recognizing

the difficulties that might face administrations and the IFRB during the period of transition from the previous allocations to those made by this Conference ;

resolves that

1. The duration of the transition period shall be from [1.4.1992] to [1.1.2007] ;
2. Administrations should no longer notify any frequency assignments to stations of the fixed and mobile services in the reallocated bands as of [1.4.1992] . Assignments notified in these bands after the date [1.4.1992] , shall bear a symbol to indicate that they will be deleted from the Master International Frequency Register on [1.1.2007] ;
3. As of [1.4.1992] , the IFRB shall undertake a continuing action to review the Master International Frequency Register with the help of the administrations. In this respect the IFRB shall periodically consult the administrations for the frequency assignments for links for which another satisfactory means of

telecommunication exists; with a view to either downgrading assignments of class of operation A or deleting such assignments ;

4. Administrations shall, for assignments of class of operation A in the reallocated bands , either notify the IFRB the replacement frequencies or request the IFRB assistance in selecting the replacement frequencies in application of RR1218 and Resolution No.103 ;

5. The IFRB shall develop in due time a draft procedure to be used for the replacement of remaining frequency assignments and shall consult administrations in accordance with RR 1001.1 ;

6. The IFRB should modify the draft procedures taking account to the extent practicable of comments received from administrations and propose replacement assignments at the latest 3 years before [1.1.2007]. In so doing, the IFRB shall request administrations to take appropriate action in relation to their assignments to be in conformity with the Table of Frequency Allocations by the due date ;

7. A replacement frequency assignment whose basic characteristics with, the exception of the assigned frequency, have not been modified in the above process, shall keep its original date in accordance with RR1445 - RR1449 . However, if these basic characteristics of a replacement frequency assignment are different from those of the displaced assignment, the replacement assignment shall be treated in accordance with RR1376 - RR1380 ;

invites administrations

When seeking re-accommodation of the displaced assignments for their fixed and mobile services in the bands between [4 000 kHz and 20 000 kHz] which have been re-allocated to the broadcasting [or amateur] services, to make every effort to find replacement assignments in the bands allocated to the fixed and mobile services concerned .

J.F. BROERE

CHAIRMAN

MÁLAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 4
COMMITTEE 5

NOTE BY THE CHAIRMAN OF THE WORKING GROUP TO THE PLENARY
TO THE CHAIRMEN OF COMMITTEES 4 AND 5

(Transmission of a request for study)

In order to facilitate the transmission of a request for study from Committees 4 and 5 to the Working Group to the Plenary, the following procedure is proposed.

1. From the standpoint of the Working Group to the Plenary, such request does not necessarily require the decision of the Committee. The decision of the Working Group is sufficient. If necessary, the decision of the Sub-Working Group is also sufficient.
2. A memo (a handwritten one is acceptable) should be prepared giving the following information:
 - subject of the study and its outline
 - relevant proposals
 - any other relevant information
 - reporting date
 - contact person, box number.
3. The memo should be signed by the Chairman of the concerned Committee. (Later publication of a white document from the Committee Chairman to the Working Group to the Plenary will be appreciated.)
4. A representative is requested to directly contact the Chairman of the Working Group to the Plenary (Room 315, third floor, telephone 315) and explain the situation.
5. In general, the contact person should be prepared to participate in the meetings of the Working Group to the Plenary.

The Working Group to the Plenary will make the best effort to return a quick reply.

M. MUROTANI
Chairman, Working Group to the Plenary

PLENARY MEETING

**FIRST PROGRESS REPORT TO THE PLENARY
ON THE WORK OF THE WORKING GROUP TO THE PLENARY**

1. Introduction

The Working Group to the Plenary was established by Document 66 containing the terms of reference which included four items. The Working Group has the primary responsibility to produce texts to be included in the Final Acts, in response to the first three items.

Out of a huge number of contributions from administrations, the Working Group has identified some 65 proposals, which may be relevant to its work. They have been classified into the following three categories:

- Category A: to be considered by the Working Group to the Plenary in order to prepare texts for inclusion in the Final Acts
- Category B: to be considered by the Working Group to the Plenary in order to send its findings to the Committee with primary responsibility
- Category C: may be considered by the Working Group to the Plenary at a later stage if requested by the Committee with primary responsibility.

The first meeting of the Working Group on 6 February 1992 was devoted to preparing a list of proposals showing the scope of work for the Working Group. A few days later, it was confirmed that there are four issues in Category A, nine issues in Category B and ten issues in Category C. Document DT/5 dated 5 February 1992 shows the initial status of input documents relating to the Working Group. It has been constantly updated every day, and Document DT/5 (Rev. 2) dated 13 February 1992 reflects the most recent situation.

2. Work in Category A (texts to be submitted to the Plenary)

The Working Group gave a priority to the consideration of documents in Category A. As a result, the following three texts have been approved by the Working Group and have been sent to the Editorial Committee:

- Resolution GT-PLN/1, relating to primary service requirements for earth exploration-satellite and meteorological-satellite services in the bands 401-403 MHz (Document 141)
- Recommendation GT-PLN/A, relating to implementation of wind profiler radars at frequencies near 50 MHz, 400 MHz and 1 GHz (Document 158)

- Recommendation 66 (Rev. WARC-92), relating to studies of the maximum permitted levels of spurious emissions (Document 141)

Resolution GT-PLN/1 recognizes the importance of the band 401-403 MHz (now secondary) in the earth exploration-satellite and meteorological-satellite services and resolves that the next competent WARC raise the allocation status to primary. This is based on proposals from the United States, Japan, India, Pakistan, China, Mexico and Bangladesh and on the CCIR Report.

Recommendation GT-PLN/A recommends that administrations authorizing experiments with or the operational use of wind profiler radars should take all necessary actions to ensure protection from harmful interference to the COSPAS-SARSAT system, particularly by avoiding assignments in the band 402-406 MHz, and to other services, and invites the Administrative Council to consider the inclusion in the agenda for the next competent WARC of the question of appropriate frequency allocations for the operational use of wind profiler radars. This is based on the proposals from the United States, Papua New Guinea, Australia, India, Pakistan, Europe and Bangladesh, and on the CCIR Report.

Recommendation 66 (Rev. WARC-92) urges the CCIR to speed up the work of developing an improved Recommendation on the maximum permitted levels of spurious emissions. This is based on the proposal from Australia, and on the CCIR Report.

It should be acknowledged that the CCIR Report to the WARC-92 gave a sound technical basis for the work in the Working Group to the Plenary in developing the above texts.

The Working Group is now considering the proposal from the Drafting Group on the following text:

- Resolution 703 (Rev. WARC-92), relating to the calculation methods and interference criteria recommended by the CCIR for sharing frequency bands between space radiocommunication and terrestrial radiocommunication services or between space radiocommunication services (Document DT/46)

On 12 February 1992, the Chairman of Committee 4 transferred a proposal on draft Resolution to the Working Group to the Plenary. Work is proceeding on this proposal.

3. Work in Category B (texts to be submitted to other Committees)

So far, the Working Group to the Plenary has been dealing with ten issues in Category B. Conclusions have been sent to the relevant Committees on the following issues:

- power flux-density limits of HDTV broadcasting satellites (Document 156)
- definition of "geostationary satellite" (Document 157)

Studies on other issues are continuing and early transmission of relevant conclusions can be expected.

The Working Group to the Plenary has established GT-PLN Ad-hoc (chaired by the Chairman of the Working Group to the Plenary), so that quick replies can be developed in response to any requests which may come from other Committees at a later stage. Additional requests are coming every day.

4. Working method

In order to speedily arrive at conclusions on a variety of diversified issues on the agenda, the Working Group to the Plenary has been operating through nine meetings without creating any Sub-Working Groups. Up to now, the following seven drafting groups have been formed which directly report to the Working Group:

- | | |
|-------------------|---|
| Drafting Group 1: | "wind profiler radars" chaired by Mr. C. Van Diepenbeek (Netherlands) |
| Drafting Group 2: | "earth exploration-satellite and meteorological-satellite services"
chaired by Mr. A.C. Latker (United States) |
| Drafting Group 3: | Recommendation 66, chaired by Mr. R. Sinha (India) |
| Drafting Group 4: | Resolution 703, chaired by Mr. P. Panduro (Spain) |
| Drafting Group 5: | definition of "geostationary satellite", chaired by Mr. C.J. Cheeseman
(United Kingdom) |
| Drafting Group 6: | "sharing criteria for the inter-satellite service above 20 GHz", chaired
by Mr. A. Rinker (United States) |
| Drafting Group 7: | "further work by the CCIR concerning BSS (sound)", chaired by
Mr. H. Mazar (Israel) |

Drafting Groups 1, 2, 3 and 5 have finished their work.

In addition, GT-PLEN Ad-hoc is considering all other technical issues concerning frequency sharing criteria.

5. Review of the existing Resolutions and Recommendations

With reference to the Agenda item 2.9 of the Conference, the Working Group to the Plenary has made a preliminary review of the existing Resolutions and Recommendations to which no proposals have been submitted from administrations and has found that more than 30 texts could be deleted without causing any inconveniences because the effective date has expired, all the necessary work has been accomplished or the text is too obsolete.

The Plenary is requested to confirm that such reviewing work is within the terms of reference of the Working Group to the Plenary. If confirmed, the Working Group will continue the reviewing work with utmost care which is expected to result in a draft Resolution proposing the abrogation of certain existing Resolutions and Recommendations in due course.

M. MUROTANI
Chairman, Working Group to the Plenary

J.C. ALBERNAZ
Vice-Chairman, Working Group to the Plenary

MALAGA-TORREMOLINOS, FEBRERO/MARZO 1992

COMISION 4
COMISION 5

Ghana. Federal Republic of Nigeria and Republic of Zambia
Ghana. République fédérale du Nigéria et République de Zambie
Ghana. República Federal de Nigeria y República de Zambia

This corrigendum does not concern the English text.

Ce corrigendum ne concerne pas le texte français.

En el título del texto español, léase:

Ghana. República Federal de Nigeria y República de Zambia

Ghana, Federal Republic of Nigeria and Republic of Zambia

PROPOSALS FOR THE WORK OF THE CONFERENCE

Introduction

As recognized by Resolution No. 640 (WARC-79), the amateur service is playing a leading role in providing disaster communications in many countries around the world. In addition to this, the educational, experimental, and other aspects of the amateur service justify its requirements for adequate access to the radio spectrum, preferably on a uniform worldwide basis.

The CCIR Report to WARC-92, section 5.2.1, and Resolution No. 641 (Rev. HFBC-87), establish that the sharing of frequency bands between the amateur and broadcasting service is undesirable because of system incompatibility.

In Document 85, the International Amateur Radio Union notes and believes that any modification to the 7 MHz broadcasting service allocation should correct the long-standing problems resulting from the allocation of the band 7 100 - 7 300 kHz to the broadcasting service in Regions 1 and 3, and the amateur service in Region 2. It endorses the proposals made by certain Administrations for an exclusive worldwide 300 kHz allocation for the amateur service in the vicinity of 7 MHz.

The amateur service is growing at a rate of 7% annually worldwide, and the rate is substantially higher in those developing countries that support and encourage the amateur service as a part of their technical development activities. By the year 2000 the number of amateur stations is expected to grow to more than five million.

Recognizing the requirements of the amateur service, but noting the extreme congestion in the bands below 10 MHz and the requirement of the fixed and mobile services, the above-named Administrations propose the following modifications to Article 8 of the Radio Regulations:

ARTICLE 8

Frequency Allocations

Section IV. Table of Frequency Allocations

kHz 6 765 - 7 300			
Allocation to Services			
	Region 1	Region 2	Region 3
NIG/ZMB/ 173/1 <u>NOC</u>	6 765 - 7 000	FIXED Land Mobile 525 524	
NIG/ZMB/ 173/2 <u>NOC</u>	7 000 - 7 100	AMATEUR 510 AMATEUR-SATELLITE 526 527	
NIG/ZMB/ 173/3 MOD	7 100 - 7 300 7 200 BROADCASTING <u>AMATEUR 510</u>	7 100 - 7 300 7 200 AMATEUR 510 528	7 100 - 7 300 7 200 BROADCASTING <u>AMATEUR 510</u>
NIG/ZMB/ 173/4 MOD	7 100 7 200 - 7 300 BROADCASTING	7 100 7 200 - 7 300 AMATEUR 510 <u>BROADCASTING</u> 528	7 100 7 200 - 7 300 BROADCASTING

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 174-E
17 February 1992
Original: French

PLENARY MEETING

Note by the Secretary-General

TRANSFER OF POWERS

Republic of Cape Verde - Republic of Senegal

The Delegation of Cape Verde has announced that it has to leave the Conference on 18 February 1992.

Pursuant to No. 392 of the Convention of Nairobi (1982), the Delegation of Cape Verde has given to the Delegation of the Republic of Senegal a mandate to exercise its right of vote at the present Conference.

Pekka TARJANNE
Secretary-General

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUMDocument 175-E
17 February 1992MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

B.1

PLENARY MEETINGFIRST SERIES OF TEXTS SUBMITTED BY THE
EDITORIAL COMMITTEE TO THE PLENARY MEETINGThe following texts are submitted to the Plenary Meeting for first reading:

<u>Source</u>	<u>Document</u>	<u>Title</u>
WG PL	141	Resolution GT-PLEN/1
		Recommendation No. 66 (Rev.WARC-92)
	158	Recommendation GT-PLEN/A

P. ABOUDARHAM
Chairman of Committee 6Annex: 5 pages

RESOLUTION GT-PLN/1

**Primary Service Requirements for the Earth Exploration-Satellite
and Meteorological-Satellite Services in the Bands 401 - 403 MHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that many administrations use frequencies in the bands 401 - 402 MHz and 402 - 403 MHz for reporting to satellites from airborne, land-based and maritime data collection platforms;
- b) that the CCIR has conducted studies of the characteristics, requirements and sharing criteria necessary for compatibility with the services sharing the bands with these systems, the results of which are reported in CCIR Report 541 and Recommendation No. 514;
- c) that the meteorological-satellite and earth exploration-satellite services in the bands 401 - 402 MHz and 402 - 403 MHz are secondary to other services in these bands and that, in order for continuous reliable observations to be made, it is essential that transmission of the data be achieved without harmful interference,

resolves

that the next competent world administrative radio conference should examine the allocation to the meteorological-satellite and earth exploration-satellite services in the bands 401 - 402 MHz and 402 - 403 MHz with the intent of raising the allocation status to primary,

invites the Administrative Council

to take the necessary action to place this matter on the agenda of the next competent world administrative radio conference.

MOD

RECOMMENDATION No. 66 (Rev.WARC-92)

(MOD)

**Studies of the Maximum
Permitted Levels of Spurious Emissions**

MOD

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

NOC

a) that Appendix 8 to the Radio Regulations specifies the maximum permitted levels of spurious emissions, in terms of the mean power level of any spurious component supplied by a transmitter to the antenna transmission line, for the frequency bands below 17.7 GHz;

NOC

b) that the principal objective of Appendix 8 is to specify the maximum permitted levels of spurious emissions that, while being achievable, provide protection against harmful interference;

NOC

c) that excessive levels of spurious emissions may give rise to harmful interference;

NOC

d) that while Appendix 8 applies only to the mean power of the transmitter and the spurious emissions, there are a variety of emissions where the interpretation of the term "mean power" and its consequential measurement are difficult;

NOC

e) that whilst the CCIR is studying this problem, it has not yet furnished adequate Recommendations pertaining to Appendix 8 for frequency bands above 960 MHz;

NOC

f) that spurious emissions from transmitters operating in space stations may cause harmful interference, particularly in regard to intermodulation components from wide-band amplifiers which cannot be adjusted after launch;

ADD

g) that spurious emissions can cause harmful interference to passive services including the radio astronomy service in bands above 17.7 GHz;

(MOD)

~~gh~~ that spurious emissions from earth stations also require particular study;

MOD

~~hi~~ that no information is available from the CCIR regarding spurious emissions from stations employing digital modulation techniques;

ADD

j) that transmitters operating in space stations are increasingly employing spread-spectrum and other wideband digital modulation techniques that can produce out-of-band and spurious emissions at frequencies far removed from the carrier frequency,

SUP

noting

recommends that the CCIR

NOC

1. study as a matter of urgency the question of spurious emissions resulting from space services transmissions, and, on the basis of those studies, develop Recommendations for maximum permitted levels of spurious emissions in terms of mean power of spurious components supplied by the transmitter to the antenna transmission line;

- NOC** 2. continue the study of spurious emission levels in all frequency bands, emphasizing the study of those frequency bands, services and modulation techniques not presently covered by Appendix 8;
- NOC** 3. establish appropriate measurement techniques for spurious emissions, including the determination of reference levels for wideband transmissions as well as the applicability of reference measurement bandwidths;
- NOC** 4. study the categorizing of emissions and spurious emissions in terms of "mean power" and develop appropriate Recommendations to facilitate the interpretation and measurement of "mean power" as it applies to the various classes of emissions;
- ADD** 5. submit a report to the next competent conference on the results of its studies with a view to reviewing and including spurious and out-of-band emission limits in Appendix 8 of the Radio Regulations principally for the protection of the radio astronomy and other passive services.

RECOMMENDATION GT-PLN/A

**Implementation of Wind Profiler Radars at
Frequencies near 50 MHz, 400 MHz and 1 000 MHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

having noted

a request to the ITU from the Secretary-General of the World Meteorological Organization (WMO), in May 1989, for advice and assistance in the identification of appropriate frequencies near 50 MHz, 400 MHz and 1 000 MHz in order to accommodate allocations and assignments for wind profiler radars,

considering

- a) that wind profiler radars are important meteorological systems used to measure wind direction and speed as a function of altitude;
- b) that in order to conduct such measurements up to a height of 30 kilometres it is necessary to allocate frequency bands for these radars in the general vicinity of 50 MHz (3 to 30 km), 400 MHz (500 m to about 10 km) and 1 000 MHz (100 m to 3 km), respectively;
- c) that many administrations plan to deploy wind profiler radars in operational networks in order to improve meteorological predictions, support studies of the climate and enhance the safety of navigation;
- d) that it is highly desirable to use wind profiler radars in frequency bands which have been generally agreed, preferably on a worldwide basis;
- e) that the CCIR is studying various proposals for these wind profiler radars at frequencies around 50 MHz, 400 MHz and 1 000 MHz and that frequencies in the 400 MHz region may be preferred for measurements of winds at altitudes that are of the greatest general interest;
- f) that it is essential in the interest of safety to protect the COSPAS-SARSAT system and other safety services from harmful interference which may be caused by wind profiler radars;
- g) that studies have already shown that wind profiler radars operating in the vicinity of 400 MHz must be sufficiently separated in frequency from the COSPAS-SARSAT system centred on 406.025 MHz;
- h) that in the interest of efficient spectrum utilization it is necessary to include technical characteristics and sharing criteria in future studies,

invites the CCIR

to continue as a matter of urgency its studies of the characteristics and requirements of wind profiler radars, to make Recommendations as to the technically suitable frequency bands, associated standards and frequency sharing criteria necessary for compatibility with the services that may be affected, and to submit a report to the Conference referred to in **invites the Administrative Council**,

recommends

1. that administrations authorizing experiments with or the operational use of such radars should take all necessary actions to ensure protection from harmful interference to the COSPAS-SARSAT system, particularly by avoiding assignments in the band 402 - 406 MHz, and to other services;
2. that administrations and international organizations concerned with wind profiler radars, particularly the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), the World Meteorological Organization (WMO) and COSPAS-SARSAT, should contribute to the CCIR studies,

invites the Administrative Council

to consider including on the agenda of the next competent WARC the question of appropriate frequency allocations for the operational use of wind profiler radars,

instructs the Secretary-General

to bring this Recommendation to the attention of the WMO, ICAO, and IMO.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
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MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

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17 February 1992
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COMMITTEE 3

Note by the Secretary-General

SITUATION OF THE ACCOUNTS OF THE CONFERENCE
AS AT 17 FEBRUARY 1992

I have the honour to submit herewith for examination by the Budget Control Committee an estimate of the expenditures of the Conference as at 17 February 1992.

The situation as at 17 February 1992 shows that the estimated expenditure of the Conference remains unchanged in relation to the budget approved by the Administrative Council and adjusted to allow for changes in salaries and allowances under the common system. This situation may of course alter with regard to Subhead I - Staff expenditures - depending on the Conference workload up to 3 March 1992.

Pekka TARJANNE
Secretary-General

Estimate of expenditure for WARC-92, Torremolinos							17.2.1992
Recapitulation	Budget value 1/1/91	Adjusted budget 1/2/92	Actual expenditure 17/2/92	Committed and estimated expenditure	Total expenditure charged to reg. budget		Total expenditure charged to Host Admin.
				Swiss francs			
Salaries and related expenses							
- Meeting staff	1.532.000	1.648.000	298.000	1.350.000	1.648.000		-298.000
- Travel expenses (recruitment)	167.000	167.000	167.000		167.000		-167.000
- Insurance	17.000	17.000	4.000	13.000	17.000		-4.000
Sub-total I	1.716.000	1.832.000	469.000	1.363.000	1.832.000		-469.000
Cost of travel outside Geneva							
- Subsistence allowance							2.316.000
- Travel expenses							353.000
- Transport and dispatch costs							75.000
- Travel for the preparation of the Conf.							35.000
Sub-total II							2.779.000
Premises and equipment							
- Premises, furniture, machines	150.000	150.000	150.000		150.000		-150.000
- Document production	305.000	305.000	26.850	278.150	305.000		
- Supplies and office expenses	50.000	50.000		50.000	50.000		
- PTT	112.000	112.000	3.358	108.642	112.000		
- Technical installations	20.000	20.000		20.000	20.000		
- Sundry and unforeseen	20.000	20.000		20.000	20.000		
Sub-total III	657.000	657.000	180.208	476.792	657.000		-150.000
Finals Acts of the Conference	108.000	108.000		108.000	108.000		
Post Conference work of the IFRB	100.000	100.000		100.000	100.000		
TOTAL	2.581.000	2.697.000	649.208	2.047.792	2.697.000		2.160.000
Less : Staff made available to the WARC-92							-253.000
TOTAL	2.581.000	2.697.000	649.208	2.047.792	2.697.000		1.907.000

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

Document 177-E
17 February 1992
Original: English

WORKING GROUP OF
THE PLENARY

Note by the Chairman of Working Group 4C to the Working Group of the Plenary

Working Group 4C requests the technical advice of the Working Group of the Plenary concerning proposal J/27/65 (ADD 881B) appearing in J/27/63 proposal.

The proposed footnote deals with a power flux-density limit at the Earth's surface in the territory of Japan in the frequency band 25.25 - 27.0 GHz for the inter-satellite service in that frequency band.

H.G. KIMBALL
Chairman

COMMITTEE 6

Source: Document 127(+ Corr.1)
Document 152

FIRST SERIES OF TEXTS FROM COMMITTEE 5
TO THE EDITORIAL COMMITTEE

Committee 5 has approved the annexed texts to be submitted to the Editorial Committee for consideration and subsequent transmission to the Plenary Session:

- Article 55,
- Article 56.

Committee 5 is of the view that the Editorial Committee should ensure the alignment of the French text in RR 3873 with the English text particularly as it relates to the use of the word "name".

E. GEORGE
Chairman of Committee 5

NOC

ARTICLE 55

ARTICLE 56

NOC

Mob-87

**Personnel of Stations in the Maritime Mobile
and the Maritime Mobile-Satellite Service**

NOC

Mob-87

**Section I. Personnel of Coast Stations
and Coast Earth Stations**

NOC

3979
Mob-87

§ 1. Administrations shall ensure that the staff on duty in coast stations and in coast earth stations are adequately qualified to operate the stations efficiently.

NOC

Mob-87

**Section II. Class and Minimum Number of
Operators of Ship Stations and Ship Earth Stations
Using the Frequencies and Techniques Prescribed in
Chapter IX and for Public Correspondence**

NOC

3980

§ 2. In the public correspondence service, each government shall take the necessary steps to ensure that stations on board ships of its own nationality have personnel adequate to perform efficient service.

NOC

3981

§ 3. The personnel of ship stations in the public correspondence service shall, having regard to the provisions of Article 55, include at least:

NOC

3982

a) ship stations of the first category, except in the case provided for in No. 3986: a chief operator holding a radiocommunication operator's general certificate or a first-class radiotelegraph operator's certificate;

NOC

3983

b) ship stations of the second and third categories, except in the case provided for in No. 3986: a chief operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate;

NOC

3984

c) ship stations of the fourth category, except in the cases provided for in Nos. 3985 and 3986: one operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate;

NOC

3985

d) ship stations in which a radiotelegraph installation is provided but not prescribed by international agreements: one operator holding a radiocommunication operator's general certificate or a first- or second-class radiotelegraph operator's certificate, or a radiotelegraph operator's special certificate;

NOC

3986

e) ship stations equipped with a radiotelephone installation only: one operator holding either a radiotelephone operator's certificate or a radiotelegraph operator's certificate.

NOC Mob-87

**Section III. Class and Minimum Number of
Personnel for Ship Stations and Ship Earth Stations
Using the Frequencies and Techniques Prescribed in
Chapter N IX and for Public Correspondence**

- NOC 3987 Mob-87 § 4. Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to enable efficient operation of the station, and shall take steps to ensure the operational availability and maintenance of equipment for distress and safety communications in accordance with the relevant international agreements.
- NOC 3988 Mob-87 § 5. An adequately qualified person shall be available to act as a dedicated communications operator in cases of distress.
- MOD 3989 Mob-87 § 6. The personnel of ship stations and ship earth stations for which a radio installation is compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall, with respect to the provisions of Article 55, include at least:
- MOD 3990 Mob-87 a) for stations on board ships which sail beyond the range of MF-VHF coast stations, taking into account the provisions of the Convention for the Safety of Life at Sea: a holder of a first- or second-class radio electronic certificate or a general operator's certificate;
- SUP 3991 Mob-87
- MOD 3992 Mob-87 e)b) for ~~ship~~ stations on board ships which sail within the range of VHF coast stations, taking into account the provisions of the Convention for the Safety of Life at Sea: a holder of a first- or second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.
- MOD 3993 Mob-87 § 7. The personnel of ship stations and ship earth stations for which a radio installation is not compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall be adequately qualified and certificated in accordance with the administration's requirements.
- NOC 3994 to 4011 NOT allocated.
-

COMMITTEE 6

Source: Documents 146, 151

SECOND SERIES OF TEXTS FROM COMMITTEE 5
TO THE EDITORIAL COMMITTEE

Committee 5 has approved the annexed texts to be submitted to the Editorial Committee for consideration and subsequent transmission to the Plenary Session:

- modifications to Article 12;
- Appendix 26(Rev.) to the Radio Regulations;
- Resolution COM5/1;
- Resolution COM5/2.

The Delegation of the Kingdom of Morocco reserved its position with respect to these texts.

E. GEORGE
Chairman of Committee 5

**Modifications to Article 12 of the Radio Regulations as a Result
of Actions Taken With Regard to Appendix 26, as Indicated
in Resolution No. 9 of the Plenipotentiary Conference
(Nice, 1989) (Formerly Resolution No. PL-B/2)**

1. Draft modifications to Sub-Section IIC (paragraph 27)

NOC	1343	§ 27. (1) Examination of Notices Concerning Frequency Assignments to Aeronautical Stations in the Aeronautical Mobile (OR) Service in the Bands Allocated Exclusively to that Service Between 3 025 kHz and 18 030 kHz (see No. 1239).
NOC	1344	(2) The Board shall examine each notice covered by No. 1343 to determine whether:
MOD	1344A Mob-87	(a) the notice is in conformity with the provisions of No. 1240 <u>and those contained in Part II of Appendix 26(Rev.)</u> ;
MOD	1345	(b) the assignment is in conformity with the primary <u>an</u> allotments in the Allotment Plan for the aeronautical mobile (OR) service and the conditions specified in Appendix 26 (Parts III and IV) <u>contained in Part III of Appendix 26(Rev.)</u> ;
SUP	1346	
SUP	1347	
SUP	1348	
(MOD)	1348A Mob-87	(3A) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.
ADD	1348B	(4) Any frequency assignment for which the finding is favourable with respect to Nos. 1344A and 1345 shall be recorded in the Master Register. The date to be entered in Column 2a shall be that determined in accordance with the relevant provisions of Section III of this Article.
ADD	1348C	(5) A notice which is in conformity with the provisions of No. 1344A, but not with those of No. 1345, shall be examined with respect to the allotments in the Plan and to assignments already recorded with a favourable finding with respect to this present provision. In so doing, the Board shall apply the technical criteria specified in Part IV of Appendix 26(Rev.). The date to be entered in Column 2a or 2b shall be that determined in accordance with the relevant provisions of Section III of this Article.

SUP 1349
Mob-87

2. Draft modifications to Section III

NOC 1406 § 45. (1) Frequency Bands Allocated Exclusively to the Aeronautical Mobile (OR) Service Between 3 025 kHz and 18 030 kHz.

MOD 1407 (2) If the finding is favourable with respect to Nos. 1344A and 1345, the date of ~~3 December 1991~~ 15 December 1992 shall be entered in Column 2a.

MOD 1408 (3) If the finding is favourable with respect to No. ~~4346~~ 1348C, the date of ~~3 December 1991~~ 15 December 1992 shall be entered in Column ~~2b~~ 2a.

SUP 1409

MOD 1410 ~~(5)~~ (4) In all other cases covered by No. 1343, the date of ~~receipt of the notice by the Board~~ 16 December 1992 shall be entered in Column 2b.

(MOD) 1411 ~~(6)~~ (5) For assignments to stations other than aeronautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).

APPENDIX 26(Rev.)
to the Radio Regulations

**Provisions and Associated Frequency Allotment Plan
for the Aeronautical Mobile (OR) Service
in the Bands Allocated Exclusively to that Service
Between 3 025 kHz and 18 030 kHz**

(see Article 50 of the Radio Regulations)

PART I: General Provisions, Definitions

26/1 The provisions of this Appendix shall apply to the aeronautical mobile (OR) service in the following frequency bands:

3 025 - 3 155 kHz
3 900 - 3 950 kHz (Region 1 only),
4 700 - 4 750 kHz
5 680 - 5 730 kHz
6 685 - 6 765 kHz
8 965 - 9 040 kHz
11 175 - 11 275 kHz
13 200 - 13 260 kHz
15 010 - 15 100 kHz
17 970 - 18 030 kHz

26/2 For the purpose of this Appendix, the terms used comprise the following:

26/2.1 Frequency Allotment Plan : The Plan for the aeronautical mobile (OR) service, contained in Part III of this Appendix.

26/2.2 Allotment in the aeronautical mobile (OR) service: A frequency allotment in the aeronautical mobile (OR) service which comprises:

- a frequency channel from the channels appearing in the channelling arrangement in No. 26/3;
- a bandwidth of up to 2.8 kHz, situated wholly within the frequency channel concerned;
- a power within the limits laid down in No. 26/4.4 and/or against the allotted frequency channel;
- an allotment area which is the area in which the aeronautical station can be situated and which coincides with the territory of the country, or the geographical area, or with a part of the territory, as indicated against the frequency channel concerned in the Frequency Allotment Plan.

**PART II: Technical Bases Used for the Establishment of the
Frequency Allotment Plan for the Aeronautical Mobile (OR) Service
in the Exclusive Bands Between 3 025 kHz and 18 030 kHz**

26/3 Channelling arrangement

26/3.1 The channelling arrangement for the frequencies to be used by aeronautical stations in the aeronautical mobile (OR) service in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz is indicated in Table 1 below:

TABLE 1

Frequency band 3 025 - 3 155 kHz: 43 + 1 channel

3 023 ¹⁾	3 026	3 029	3 032	3 035	3 038	3 041	3 044	3 047	3 050
3 053	3 056	3 059	3 062	3 065	3 068	3 071	3 074	3 077	3 080
3 083	3 086	3 089	3 092	3 095	3 098	3 101	3 104	3 107	3 110
3 113	3 116	3 119	3 122	3 125	3 128	3 131	3 134	3 137	3 140
3 143	3 146	3 149	3 152						

Frequency band 3 900 - 3 950 kHz (Region 1 only): 16 channels

3 900	3 903	3 906	3 909	3 912	3 915	3 918	3 921	3 924	3 927
3 930	3 933	3 936	3 939	3 942	3 945				

Frequency band 4 700 - 4 750 kHz: 16 channels

4 700	4 703	4 706	4 709	4 712	4 715	4 718	4 721	4 724	4 727
4 730	4 733	4 736	4 739	4 742	4 745				

Frequency band 5 680 - 5 730 kHz: 15 + 1 channels

5 680 ¹⁾	5 684	5 687	5 690	5 693	5 696	5 699	5 702	5 705	5 708
5 711	5 714	5 717	5 720	5 723	5 726				

Frequency band 6 685 - 6 765 kHz: 26 channels

6 685	6 688	6 691	6 694	6 697	6 700	6 703	6 706	6 709	6 712
6 715	6 718	6 721	6 724	6 727	6 730	6 733	6 736	6 739	6 742
6 745	6 748	6 751	6 754	6 757	6 760				

Frequency band 8 965 - 9 040 kHz: 25 channels

8 965	8 968	8 971	8 974	8 977	8 980	8 983	8 986	8 989	8 992
8 995	8 998	9 001	9 004	9 007	9 010	9 013	9 016	9 019	9 022
9 025	9 028	9 031	9 034	9 037					

Frequency band 11 175 - 11 275 kHz: 33 channels

11 175	11 178	11 181	11 184	11 187	11 190	11 193	11 196	11 199	11 202
11 205	11 208	11 211	11 214	11 217	11 220	11 223	11 226	11 229	11 232
11 235	11 238	11 241	11 244	11 247	11 250	11 253	11 256	11 259	11 262
11 265	11 268	11 271							

1) For use of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz see No. 26/3.4

Frequency band 13 200 - 13 260 kHz: 20 channels

13 200	13 203	13 206	13 209	13 212	13 215	13 218	13 221	13 224	13 227
13 230	13 233	13 236	13 239	13 242	13 245	13 248	13 251	13 254	13 257

Frequency band 15 010 - 15 100 kHz: 30 channels

15 010	15 013	15 016	15 019	15 022	15 025	15 028	15 031	15 034	15 037
15 040	15 043	15 046	15 049	15 052	15 055	15 058	15 061	15 064	15 067
15 070	15 073	15 076	15 079	15 082	15 085	15 088	15 091	15 094	15 097

Frequency band 17 970 - 18 030 kHz: 20 channels

17 970	17 973	17 976	17 979	17 982	17 985	17 988	17 991	17 994	17 997
18 000	18 003	18 006	18 009	18 012	18 015	18 018	18 021	18 024	18 027

26/3.2 The frequencies indicated in No. 26/3.1 are the carrier (reference) frequencies.

26/3.3 With the exception of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz (see 26/3.4 below), one or more frequencies from Table 1 may be assigned to any aeronautical station and/or aircraft station, in accordance with the Frequency Allotment Plan, as contained in Part III of this Appendix.

26/3.4 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz are provided for worldwide common use (see also Nos. 27/208 to 27/214).

26/3.5 The aeronautical radiotelephone stations shall use only single-sideband emissions (J3E). The upper sideband mode shall be employed, and the assigned frequency (see No. RR142) shall be 1 400 Hz higher than the carrier (reference) frequency.

26/3.6 The channelling arrangement established in No. 26/3.1 does not prejudice the rights of administrations to establish, and to notify assignments to stations in the aeronautical mobile (OR) service other than those using radiotelephony, provided that

- the occupied bandwidth does not exceed 2 800 Hz and is situated wholly within one frequency channel (see also Resolution No. AER-1);
- the limits of unwanted emission are met (see No. 27/66C).

26/4 Classes of emission and power

26/4.1 In the aeronautical mobile (OR) service, in the bands governed by this Appendix, the use of the emissions listed below is permissible; additionally the use of other emissions is also permissible, subject to compliance with No. 26/3.6

26/4.2 Telephony :

- J3E (single-sideband, suppressed carrier).

26/4.3 Telegraphy (including automatic data transmission):

- A1A, A1B, F1B;
- (A,H)2(A,B);
- (R,J)2(A,B,D);
- J(7,9)(B,D,X).

26/4.4 Unless otherwise specified in Part III of this Appendix, the following transmitter power limits (i.e. power supplied to the antenna), shall be respected:

Class of emission	Power limit values (Peak envelope power supplied to the antenna)	
	Aeronautical station	Aircraft station
J3E	36 dBW (PX)	23 dBW (PX)
A1A, A1B	30 dBW (PX)	17 dBW (PX)
F1B	30 dBW (PX)	17 dBW (PX)
A2A, A2B	32 dBW (PX)	19 dBW (PX)
H2A, H2B	33 dBW (PX)	20 dBW (PX)
(R,J)2(A,B,D)	36 dBW (PX)	23 dBW (PX)
J(7,9)(B,D,X)	36 dBW (PX)	23 dBW (PX)

26/4.5 On the assumption that no antenna gain is involved, the transmitter powers, specified in No. 26/4.4 above, will result in a mean effective radiated power of 1 kW (for the aeronautical stations) and 50 W (for the aircraft stations) used as the basis for the establishment of the Plan contained in Part III of this Appendix.

PART IV: Criteria for Compatibility Assessment

26/6 For assessment of the sharing possibilities between the allotments contained in Part III of this Appendix, and any new assignment which is not covered by an appropriate allotment, the following criteria shall be used:

26/6.1 A new station, not covered by an allotment, which uses the standardized transmission characteristics (J3E, 36 dBW PX), shall be considered compatible with the Plan, if it fulfils the criterion of being separated from any point of any allotment area, indicated in the Plan on the given channel, by the half-repetition distance, determined for the given conditions of operation (frequency band used, geographical position of the station, direction of propagation), which are given below:

Frequency band (kHz)	Half-repetition distances (in km)			
	Northern hemisphere		Southern hemisphere	
	North-South	East-West	North-South	East-West
3 025 - 3 155	550	600	550	600
3 900 - 3 950	650	650	650	650
4 700 - 4 750	725	775	725	775
5 680 - 5 730	1 175	1 325	1 150	1 300
6 685 - 6 765	1 350	1 600	1 225	1 425
8 965 - 9 040	2 525	3 525	2 225	3 075
11 175 - 11 275	3 375	5 575	2 675	3 925
13 200 - 13 260	4 550	6 650	3 475	5 625
15 010 - 15 100	5 050	7 450	4 800	7 100
17 970 - 18 030	5 750	8 250	5 675	7 475

26/6.2 The relevant value of the half-repetition distance, for paths which are situated partially in the northern hemisphere and partially in the southern hemisphere, shall be corrected using the linear interpolation procedure. The linear interpolation procedure shall be used for calculation of the correction due to the azimuth of the propagation path with respect to the true North.

26/6.3 The relevant value of the half-repetition distance, obtained in accordance with No. 26/6.2, shall be corrected, where necessary, to take into account the difference in the radiated power of the assignment with respect to the reference radiated power (30 dBW, mean radiated power), on the basis that a variation of 1 dB in the radiated power corresponds to a variation of 4% in the repetition distance.

PART V: Procedure for Modification and for Maintenance of the Plan

26/7 The Plan will be updated, by the Board, in accordance with the following procedure:

26/7.1 a) when a country, which has no allotment in the Plan, requests an allotment, the Board shall select an appropriate allotment on a priority basis and shall enter it in the Plan;

26/7.2 b) when a notice, which is submitted under Article 12 of the Radio Regulations and which is not covered by appropriate allotment, receives a favourable finding with respect to the provisions of No. 1348C, the corresponding allotment shall be entered in the Plan;

26/7.3 c) when a country informs the Board that it renounces the use of an allotment, the Board shall cancel the allotment concerned from the Plan;

26/7.4 d) when no notification, under Article 12 of the Radio Regulation, is received within a period of two years following the entry of the allotment in the Plan, the Board shall consult the Administration concerned within the next six months about the deletion of that allotment from the Plan: if the Administration so wishes an extension of a period not exceeding twelve months may be granted: if, thereafter, no notification is received the allotment shall be deleted.

26/8 The Board shall maintain an up-to-date master copy of the Plan, taking account of the application of the procedure specified in this appendix; and shall periodically, but no less frequently than once a year, prepare recapitulative documents listing all amendments made to the Plan since its last publication.

26/9 The Secretary-General shall publish an up-to-date version of the Plan in an appropriate form no later than once every four years.

RESOLUTION COM5/[1]

**RELATING TO THE IMPLEMENTATION OF THE NEW PROVISIONS
APPLICABLE IN THE FREQUENCY BANDS ALLOCATED EXCLUSIVELY TO
THE AERONAUTICAL MOBILE (OR) SERVICE BETWEEN
3 025 KHZ AND 18 030 KHZ**

**The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts
of the Spectrum, Malaga - Torremolinos, 1992,**

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the frequency spectrum available;
- b) that the implementation of the modified conditions of use will require a considerable workload for the administrations since a large number of frequency assignments to both aircraft and aeronautical stations will have to be transferred from existing frequencies to the new frequencies and channels designated by the present Conference;
- c) that the full implementation of the modified provisions for the frequency usage may require considerable investments in replacement of the existing equipment;
- d) that, nevertheless, the full implementation of the modified provisions for the frequency usage should be made as soon as possible so that the advantages of the new arrangement may be realized at the earliest opportunity;
- e) that the changeover to the new conditions of operation should be made with the least possible disruption to the service rendered by each station,

recognizing

- a) that the implementation of the decisions made by the present Conference relating to the new arrangement of the frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3 025 kHz and 18 030 kHz should follow an orderly procedure for the transfer of existing services from the old to the new conditions of operation;
- b) that the transfer procedures of the existing frequency assignments in the aeronautical mobile (OR) service, in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz, are dealt with in Resolution No. COM5/[2] adopted by the present Conference,

resolves

- 1. that the provisions of Appendix 26 (Rev.), as well as the relevant provisions of Article 12 of the Radio Regulations, as modified by the present Conference, shall apply to any new frequency assignment, as from 0001 UTC on 15 December 1992.

2. that administrations shall take all the necessary measures to conform with the new conditions of use of the bands governed by Appendix 26 (Rev.) by not permitting the installations of new equipment whose emissions require a necessary bandwidth exceeding 2 800 Hz as from 15 December 1992;

3. that, until 15 December 1995, the administrations may continue to use their existing assignments in accordance with the characteristics recorded in the Master International Frequency Register; after that date the administrations shall take all necessary measures to modify the characteristics of their assignments so as to bring them in conformity with the provisions of Appendix 26 (Rev.) ;

4. that, not later than 15 December 1997, the Administrations shall discontinue all emissions whose bandwidth exceeds 2 800 Hz,

invites Administrations

to make every effort to eliminate mutual incompatibilities which may occur in the transition period.

NEW RESOLUTION COM5/[2]

**Transfer of Frequency Assignments of Aeronautical Stations
Operating in the Frequency Bands Allocated Exclusively to
the Aeronautical Mobile (OR) Service Between
3 025 kHz and 18 030 kHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the frequency spectrum available;
- b) that the Administrations will need to change the frequencies of their aeronautical and aircraft stations to bring them into conformity with the new Frequency Allotment Plan, as contained in Appendix 26(Rev.), and to notify such transfers, where appropriate, to the Board,

resolves

- 1. that, within 90 days from the date on which this Conference ends, the Board shall send to each Administration a list of assignments to stations of the aeronautical mobile (OR) service entered on its behalf in the Master Register in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz;
- 2. that, in the above list, the Board shall indicate, for each frequency assignment, a replacement frequency(-ies) which fulfils the conditions of Appendix 26(Rev.) and which is intended to replace the frequency of the assignment concerned;
- 3. that, after the receipt of the above list, the Administrations shall take all the necessary measures to modify the characteristics of their assignments, so as to bring them in conformity with the provisions of Appendix 26(Rev.), as early as possible and in any event, by 15 December 1997 at the latest; any modification which has been implemented shall be notified to the Board in accordance with RR 1214;
- 4. that the frequency assignments notified by Administrations under paragraph 3 above shall be examined by the Board under the relevant provisions of Sub-Section IIC and Section III of Article 12 of the Radio Regulations, as modified by this Conference;
- 5. that the assignments existing in the Master Register on 15 December 1997 which are not in conformity with the conditions of Appendix 26(Rev.) shall be treated as follows:
 - 5.1 within 60 days from 15 December 1997, the Board shall send relevant extracts of the Master Register to the Administrations concerned advising them that, in accordance with the terms of the present Resolution, the assignments in question are to be modified, within a period of 90 days, so as to conform with the conditions of Appendix 26(Rev.);
 - 5.2 if an Administration fails to notify the Board of the modifications within the prescribed period, the original entry will be retained in the Master Register for information only, without a date in Column 2, without a finding in Column 13A and with a suitable remark in the Remarks column. The Administration will be advised of this action.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUMDocument 180-E
18 February 1992MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

B.2

PLENARY MEETINGSECOND SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE
TO THE PLENARY MEETINGThe following texts are submitted to the Plenary Meeting for first reading:

<u>Source</u>	<u>Document</u>	<u>Title</u>
COM5	179	Article 12 Appendix 26(Rev.) - (Parts I, II, IV and V) Resolution COM5/1 Resolution COM5/2

Note by Committee 5

The Delegation of the Kingdom of Morocco reserved its position with respect to these texts.

P. ABOUDARHAM
Chairman of Committee 6Annex: 11 pages

ARTICLE 12

NOC		Sub-Section IIC (paragraph 27)
NOC	1343	§ 27. (1) Examination of Notices Concerning Frequency Assignments to Aeronautical Stations in the Aeronautical Mobile (OR) Service in the Bands Allocated Exclusively to that Service Between 3 025 kHz and 18 030 kHz (see No. 1239).
NOC	1344	(2) The Board shall examine each notice covered by No. 1343 to determine whether:
MOD	1344A Mob-87	(a) the notice is in conformity with the provisions of No. 1240 and those contained in Part II of Appendix 26(Rev.);
MOD	1345	(b) the assignment is in conformity with an allotment in the Allotment Plan for the aeronautical mobile (OR) service contained in Part III of Appendix 26(Rev.);
SUP 1346 - 1348		
(MOD)	1348A Mob-87	(3) A notice which is not in conformity with the provisions of No. 1344A shall be examined with respect to Nos. 1267 and 1268. The date to be entered in Column 2b shall be determined in accordance with the relevant provisions of Section III of this Article.
ADD	1348B	(4) Any frequency assignment for which the finding is favourable with respect to Nos. 1344A and 1345 shall be recorded in the Master Register. The date to be entered in Column 2a shall be determined in accordance with the relevant provisions of Section III of this Article.
ADD	1348C	(5) A notice which is in conformity with the provisions of No. 1344A, but not with those of No. 1345, shall be examined with respect to the allotments in the Plan and to assignments already recorded in the Master Register with a favourable finding with respect to this present provision. In so doing, the Board shall apply the technical criteria specified in Part IV of Appendix 26(Rev.). The date to be entered in Column 2a or 2b shall be determined in accordance with the relevant provisions of Section III of this Article.
SUP	1349 Mob-87	

NOC

Section III

- NOC 1406** § 45. (1) Frequency Bands Allocated Exclusively to the Aeronautical Mobile (OR) Service Between 3 025 kHz and 18 030 kHz.
- MOD 1407** (2) If the finding is favourable with respect to Nos. 1344A and 1345, the date of 15 December 1992 shall be entered in Column 2a.
- MOD 1408** (3) If the finding is favourable with respect to No. 1348C, the date of 15 December 1992 shall be entered in Column 2a.
- SUP 1409**
- MOD 1410** (4) In all other cases covered by No. 1343, the date of 16 December 1992 shall be entered in Column 2b.
- (MOD) 1411** (5) For assignments to stations other than aeronautical stations in the aeronautical mobile (OR) service, the relevant date shall be entered in Column 2b (see Nos. 1271 and 1272).

APPENDIX 26(Rev.)
to the WARC-92 Radio Regulations

**Provisions and Associated Frequency Allotment Plan
for the Aeronautical Mobile (OR) Service
in the Bands Allocated Exclusively to that Service
Between 3 025 kHz and 18 030 kHz**

(see Article 50 of the Radio Regulations)

PART I: General Provisions, Definitions

26/1 The provisions of this Appendix shall apply to the aeronautical mobile (OR) service in the following frequency bands:

- 3 025 - 3 155 kHz
- 3 900 - 3 950 kHz (Region 1 only)
- 4 700 - 4 750 kHz
- 5 680 - 5 730 kHz
- 6 685 - 6 765 kHz
- 8 965 - 9 040 kHz
- 11 175 - 11 275 kHz
- 13 200 - 13 260 kHz
- 15 010 - 15 100 kHz
- 17 970 - 18 030 kHz

26/2 For the purpose of this Appendix, the terms used comprise the following:

26/2.1 Frequency Allotment Plan

The Plan for the aeronautical mobile (OR) service contained in Part III of this Appendix.

26/2.2 Allotment in the aeronautical mobile (OR) service

A frequency allotment in the aeronautical mobile (OR) service which comprises:

- a frequency channel from the channels appearing in the channelling arrangement in No. 26/3;
- a bandwidth of up to 2.8 kHz, situated wholly within the frequency channel concerned;
- a power within the limits laid down in No. 26/4.4 and/or specified against the allotted frequency channel;
- an allotment area which is the area in which the aeronautical station can be situated and which coincides with all or part of the territory of the country, or of the geographical area, as indicated against the frequency channel concerned in the Frequency Allotment Plan.

**PART II. Technical Bases Used for the Establishment of the
Frequency Allotment Plan for the Aeronautical Mobile (OR) Service
in the Bands Allocated Exclusively to that Service
Between 3 025 kHz and 18 030 kHz**

26/3 Channelling arrangement

26/3.1 The channelling arrangement for the frequencies to be used by aeronautical stations in the aeronautical mobile (OR) service in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz is indicated in Table 1 below:

TABLE 1

Frequency band 3 025 - 3 155 kHz: 43 + 1 channels

3 023 ¹	3 026	3 029	3 032	3 035	3 038	3 041	3 044	3 047	3 050
3 053	3 056	3 059	3 062	3 065	3 068	3 071	3 074	3 077	3 080
3 083	3 086	3 089	3 092	3 095	3 098	3 101	3 104	3 107	3 110
3 113	3 116	3 119	3 122	3 125	3 128	3 131	3 134	3 137	3 140
3 143	3 146	3 149	3 152						

Frequency band 3 900 - 3 950 kHz (Region 1 only): 16 channels

3 900	3 903	3 906	3 909	3 912	3 915	3 918	3 921	3 924	3 927
3 930	3 933	3 936	3 939	3 942	3 945				

Frequency band 4 700 - 4 750 kHz: 16 channels

4 700	4 703	4 706	4 709	4 712	4 715	4 718	4 721	4 724	4 727
4 730	4 733	4 736	4 739	4 742	4 745				

Frequency band 5 680 - 5 730 kHz: 15 + 1 channels

5 680 ¹	5 684	5 687	5 690	5 693	5 696	5 699	5 702	5 705	5 708
5 711	5 714	5 717	5 720	5 723	5 726				

Frequency band 6 685 - 6 765 kHz: 26 channels

6 685	6 688	6 691	6 694	6 697	6 700	6 703	6 706	6 709	6 712
6 715	6 718	6 721	6 724	6 727	6 730	6 733	6 736	6 739	6 742
6 745	6 748	6 751	6 754	6 757	6 760				

Frequency band 8 965 - 9 040 kHz: 25 channels

8 965	8 968	8 971	8 974	8 977	8 980	8 983	8 986	8 989	8 992
8 995	8 998	9 001	9 004	9 007	9 010	9 013	9 016	9 019	9 022
9 025	9 028	9 031	9 034	9 037					

Frequency band 11 175 - 11 275 kHz: 33 channels

11 175	11 178	11 181	11 184	11 187	11 190	11 193	11 196	11 199	11 202
11 205	11 208	11 211	11 214	11 217	11 220	11 223	11 226	11 229	11 232
11 235	11 238	11 241	11 244	11 247	11 250	11 253	11 256	11 259	11 262
11 265	11 268	11 271							

¹ For use of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz, see No. 26/3.4.

Frequency band 13 200 - 13 260 kHz: 20 channels

13 200	13 203	13 206	13 209	13 212	13 215	13 218	13 221	13 224	13 227
13 230	13 233	13 236	13 239	13 242	13 245	13 248	13 251	13 254	13 257

Frequency band 15 010 - 15 100 kHz: 30 channels

15 010	15 013	15 016	15 019	15 022	15 025	15 028	15 031	15 034	15 037
15 040	15 043	15 046	15 049	15 052	15 055	15 058	15 061	15 064	15 067
15 070	15 073	15 076	15 079	15 082	15 085	15 088	15 091	15 094	15 097

Frequency band 17 970 - 18 030 kHz: 20 channels

17 970	17 973	17 976	17 979	17 982	17 985	17 988	17 991	17 994	17 997
18 000	18 003	18 006	18 009	18 012	18 015	18 018	18 021	18 024	18 027

26/3.2 The frequencies indicated in No. 26/3.1 are the carrier (reference) frequencies.

26/3.3 With the exception of the carrier (reference) frequencies 3 023 kHz and 5 680 kHz (see 26/3.4 below), one or more frequencies from Table 1 may be assigned to any aeronautical station and/or aircraft station, in accordance with the Frequency Allotment Plan, as contained in Part III of this Appendix.

26/3.4 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz are intended for worldwide common use (see also Appendix 27 Aer2 Nos. 27/208 to 27/214).

26/3.5 The aeronautical radiotelephone stations shall use only single-sideband emissions (J3E). The upper sideband shall be employed, and the assigned frequency (see No. 142 of the Radio Regulations) shall be 1 400 Hz higher than the carrier (reference) frequency.

26/3.6 The channelling arrangement specified in No. 26/3.1 does not prejudice the rights of Administrations to establish, and to notify assignments to stations in the aeronautical mobile (OR) service other than those using radiotelephony, provided that:

- the occupied bandwidth does not exceed 2 800 Hz and is situated wholly within one frequency channel (see also Resolution COM5/1);
- the limits of unwanted emission are met (see Appendix 27 Aer2 No. 27/66C).

26/4 Classes of emission and power

26/4.1 In the aeronautical mobile (OR) service, in the bands governed by this Appendix, the use of the emissions listed below is permissible; additionally, the use of other emissions is also permissible, subject to compliance with No. 26/3.6.

26/4.2 Telephony

- J3E (single-sideband, suppressed carrier).

26/4.3 Telegraphy (including automatic data transmission)

- A1A, A1B, F1B;
- (A,H)2(A,B);
- (R,J)2(A,B,D);
- J(7,9)(B,D,X).

26/4.4 Unless otherwise specified in Part II of this Appendix, the following transmitter power limits (i.e., power supplied to the antenna), shall be applied:

Class of emission	Power limit values (peak envelope power supplied to the antenna)	
	Aeronautical station	Aircraft station
J3E	36 dBW (PX)	23 dBW (PX)
A1A, A1B	30 dBW (PX)	17 dBW (PX)
F1B	30 dBW (PX)	17 dBW (PX)
A2A, A2B	32 dBW (PX)	19 dBW (PX)
H2A, H2B	33 dBW (PX)	20 dBW (PX)
(R,J)2(A,B,D)	36 dBW (PX)	23 dBW (PX)
J(7,9)(B,D,X)	36 dBW (PX)	23 dBW (PX)

26/4.5 On the assumption that no antenna gain is involved, the transmitter powers specified in No. 26/4.4 above will result in a mean effective radiated power of 1 kW (for the aeronautical stations) and 50 W (for the aircraft stations), used as the basis for the establishment of the Plan contained in Part II of this Appendix.

PART IV: Criteria for Compatibility Assessment

26/6 For assessment of the possibilities of sharing between the allotments contained in Part III of this Appendix, and any new assignment which is not covered by an appropriate allotment, the following criteria shall be used:

26/6.1 A new station, not covered by an allotment, which uses the standardized transmission characteristics (J3E, 36 dBW PX) shall be considered compatible with the Plan, if it fulfils the criterion of being separated from any point of any allotment area, indicated in the Plan on the given channel, by the repetition half-distance, determined for the given conditions of operation (frequency band used, geographical position of the station, direction of propagation), which are given below:

Frequency band (kHz)	Repetition half-distance (in km)			
	Northern hemisphere		Southern hemisphere	
	North-South	East-West	North-South	East-West
3 025 - 3 155	550	600	550	600
3 900 - 3 950	650	650	650	650
4 700 - 4 750	725	775	725	775
5 680 - 5 730	1 175	1 325	1 150	1 300
6 685 - 6 765	1 350	1 600	1 225	1 425
8 965 - 9 040	2 525	3 525	2 225	3 075
11 175 - 11 275	3 375	5 575	2 675	3 925
13 200 - 13 260	4 550	6 650	3 475	5 625
15 010 - 15 100	5 050	7 450	4 800	7 100
17 970 - 18 030	5 750	8 250	5 675	7 475

26/6.2 The relevant value of the repetition half-distance for paths which are situated partly in the northern hemisphere and partly in the southern hemisphere shall be corrected using the linear interpolation procedure. This procedure shall be used to calculate the correction due to the azimuth of the propagation path with respect to true North.

26/6.3 The relevant value of the repetition half-distance, obtained in accordance with No. 26/6.2, shall be corrected, where necessary, to take into account the difference in the radiated power of the assignment with respect to the reference radiated power (30 dBW, mean radiated power) on the basis that a variation of 1 dB in the radiated power corresponds to a variation of 4% in the repetition distance.

PART V: Procedure for Modification and Maintenance of the Plan

26/7 The Plan will be updated by the Board in accordance with the following procedure:

26/7.1 a) when a country which has no allotment in the Plan requests an allotment, the Board shall select an appropriate allotment on a priority basis and shall enter it in the Plan;

26/7.2 b) when a notice which is submitted under Article 12 of the Radio Regulations and which is not covered by an appropriate allotment receives a favourable finding with respect to the provisions of No. 1348C, the corresponding allotment shall be entered in the Plan;

26/7.3 c) when a country informs the Board that it renounces the use of an allotment, the Board shall cancel the allotment concerned in the Plan;

26/7.4 d) when, under Article 12 of the Radio Regulations, no notice is received within a period of two years following the entry of the allotment in the Plan, the Board shall consult the Administration concerned within the following six months concerning the deletion of that allotment from the Plan; if the Administration so wishes, an extension of the period not exceeding twelve months may be granted; if, thereafter, no notice is received, the allotment shall be deleted.

26/8 The Board shall maintain an up-to-date master copy of the Plan, taking account of the application of the procedure specified in this Appendix; and shall periodically, but no less frequently than once a year, prepare recapitulative documents listing all amendments made to the Plan since its last publication.

26/9 The Secretary-General shall publish an up-to-date version of the Plan in an appropriate form at least once every four years.

RESOLUTION COM5/1

**Implementation of the New Provisions
Applicable in the Frequency Bands Allocated Exclusively to
the Aeronautical Mobile (OR) Service Between
3 025 kHz and 18 030 kHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the available frequency spectrum;
- b) that the implementation of the modified conditions of use will entail a considerable workload for administrations, since a large number of frequency assignments to both aircraft and aeronautical stations will have to be transferred from existing frequencies to the new frequencies and channels designated by this Conference;
- c) that the full implementation of the modified provisions for the frequency usage may require considerable investment for the replacement of the existing equipment;
- d) that, nevertheless, the modified provisions for frequency usage should be implemented fully and as soon as possible so that the advantages of the new arrangement may be realized at the earliest opportunity;
- e) that the changeover to the new conditions of operation should be effected with the least possible disruption to the service rendered by each station,

recognizing

- a) that the implementation of the decisions made by the present Conference relating to the new arrangement of the frequency bands allocated exclusively to the aeronautical mobile (OR) service between 3 025 kHz and 18 030 kHz should follow an orderly procedure for the transfer of existing services from the old to the new conditions of operation;
- b) that the procedures for the transfer of the existing frequency assignments in the aeronautical mobile (OR) service, in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz, are specified in Resolution COM5/2 adopted by this Conference,

resolves

- 1. that the provisions of Appendix 26(Rev.), as well as the relevant provisions of Article 12 of the Radio Regulations, as modified by this Conference, shall apply to any new frequency assignment, as from 0001 UTC on 15 December 1992;

2. that administrations shall take all the necessary measures to comply with the new conditions of use of the bands governed by Appendix 26(Rev.) by not permitting the installation of new equipment whose emissions occupy a necessary bandwidth exceeding 2 800 Hz as from 15 December 1992;
3. that, until 15 December 1995, administrations may continue to use their existing assignments in accordance with the characteristics recorded in the Master International Frequency Register. After that date administrations shall take all necessary measures to modify the characteristics of their assignments so as to ensure their conformity with the provisions of Appendix 26(Rev.);
4. that, not later than 15 December 1997, administrations shall discontinue all emissions whose bandwidth exceeds 2 800 Hz,

invites Administrations

to make every effort to eliminate incompatibilities which may occur in the transition period.

RESOLUTION COM5/2

**Transfer of Frequency Assignments of Aeronautical Stations
Operating in the Frequency Bands Allocated Exclusively to
the Aeronautical Mobile (OR) Service Between
3 025 kHz and 18 030 kHz**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that the conditions for use of each of the frequency bands between 3 025 kHz and 18 030 kHz allocated exclusively to the aeronautical mobile (OR) service were modified by this Conference so as to enable a more efficient usage of the frequency spectrum available;
- b) that administrations will need to change the frequencies of their aeronautical and aircraft stations to bring them into conformity with the new Frequency Allotment Plan, as contained in Appendix 26(Rev.), and to notify such transfers, where appropriate, to the Board,

resolves

- 1. that, within 90 days from the date on which this Conference ends, the Board shall send each Administration a list of assignments to stations of the aeronautical mobile (OR) service entered on its behalf in the Master Register in the bands allocated exclusively to that service between 3 025 kHz and 18 030 kHz;
- 2. that, in the above list, the Board shall indicate, for each frequency assignment, a replacement frequency(-ies) which fulfil(s) the provisions of Appendix 26(Rev.) and which is(are) intended to replace the frequency of the assignment concerned;
- 3. that, after receipt of the above list, administrations shall take all the necessary measures to modify the characteristics of their assignments, so as to bring them into conformity with the provisions of Appendix 26(Rev.), as early as possible and in any event, not later than 15 December 1997; any modification which has been implemented shall be notified to the Board in accordance with No. 1214 of the Radio Regulations;
- 4. that the frequency assignments notified by administrations under paragraph 3 above shall be examined by the Board under the relevant provisions of Sub-Section IIC and Section III of Article 12 of the Radio Regulations, as modified by this Conference;
- 5. that the assignments existing in the Master Register on 15 December 1997 which are not in conformity with the provisions of Appendix 26(Rev.) shall be treated as follows:
 - 5.1 within 60 days from 15 December 1997, the Board shall send relevant extracts of the Master Register to the administrations concerned advising them that, under this Resolution, the assignments in question are to be modified, within a period of 90 days, so as to meet the provisions of Appendix 26(Rev.);
 - 5.2 if an administration fails to notify the Board of the modifications within the prescribed period, the original entry will be retained in the Master Register for information only, without a date in Column 2, without a finding in Column 13A and with a suitable remark in the Remarks column. The administration will be advised of this action.

INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

Document 181-E
18 February 1992
Original: English

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 5

Source: Document DT/56

FOURTH REPORT OF WORKING GROUP 5B TO COMMITTEE 5

Working Group 5B submits the following text for approval by Committee 5:

Draft Resolution COM5/[3] on the future consideration of the plans for the broadcasting-satellite service in the band 11.7 - 12.5 GHz (Region 1) and the band 11.7 - 12.2 GHz (Region 3) in Appendix 30 and associated feeder-link plans in Appendix 30A.

J.P. LUCIANI
Chairman of Working Group 5B



DRAFT RESOLUTION COM5/[3]

**Future Consideration of the Plans for the Broadcasting-Satellite Service in the
Band 11.7 - 12.5 GHz (Region 1) and the Band 11.7 - 12.2 GHz (Region 3)
in Appendix 30 and Associated Feeder-Link Plans in Appendix 30A**

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that Article 14 of Appendix 30 indicates that the broadcasting-satellite service Plan for Regions 1 and 3 in Appendix 30 provides for requirements until January 1994;
- b) that the WARC ORB-88 in Resolution No. 521, **resolves** 3, stated that "while the Plans for the 11.7 - 12.7 GHz band can already be used for certain types of HDTV, studies should be continued on the long range future suitability of these bands for HDTV without prejudice to the existing plans in this band";
- c) that modernization of the Plans of AP30 associated with Regions 1 and 3, which had their origins in the WARC-77, would be valuable in offering the prospects of more efficient utilization of the spectrum and orbit resources by taking into account technological improvements (e.g. satellite antennas and receiver sensitivity) which could be used to increase the capacity and the flexibility of the Plan without reducing the number of current assignments to each country,

invites the CCIR

to study, as a matter of priority, the technical possibilities for improving the efficiency and flexibility of the Plans for Regions 1 and 3 contained in Appendices 30 and 30A, taking into account the intent of the conference referred to below,

urges administrations

to contribute to the studies of the CCIR and, also, to consider the need for a future competent conference to review and as necessary revise the relevant parts of Appendices 30 and 30A,

resolves

1. that the future conference in revising the Region 1 and 3 parts of Appendices 30 and 30A shall:
 - a) maintain each country's assigned BSS capacity in the Plan, as a minimum;
 - b) provide for the needs of new countries;
 - c) protect existing and notified systems which are in accordance with the Plans;
 - d) take due account, as far as possible, of systems which have been communicated to the IFRB under Article 4 of Appendices 30 and 30A;
2. that once the date of the conference is established, as an exception to the normal requirement of Article 5 of Appendices 30 and 30A, for Regions 1 and 3 only, administrations may notify systems no earlier than 5 years before bringing them into use;

3. that the future conference shall ensure that the integrity of the Region 2 Plans and their associated provisions is preserved, by providing the same protection to the assignments contained in those Plans as they now receive under the relevant provisions of the Radio Regulations and by not requiring more protection from assignments in the Region 2 Plans than that currently provided under the Radio Regulations,

requests the Secretary-General

to bring this Resolution to the attention of the Administrative Council with a view to the establishment of a conference to undertake the review and any necessary revision of the relevant parts of Appendices 30 and 30A and associated provisions of the Radio Regulations, taking account of the latest CCIR studies.

COMMITTEE 5

Source: Document DT/52

FIFTH REPORT OF WORKING GROUP 5B TO COMMITTEE 5

1. Working Group 5B submits the following text for approval by Committee 5:
 - modification to the English version of No. 2613 of the Radio Regulations.
2. Working Group 5B is of the view that Committee 6 should ensure that this revised English text conforms with the French text, which remains unchanged.

J.P. LUCIANI
Chairman of Working Group 5B

Annex: 1

ANNEX

MOD	2613	§ 2. Non-geostationary space stations shall cease or reduce to a negligible level their emissions, and their associated earth stations shall not transmit to them, whenever there is insufficient angular separation between non-geostationary satellites and geostationary satellites <u>resulting in</u> unacceptable interference ¹ to geostationary-satellite space systems in the fixed-satellite service operating in accordance with these Regulations.
NOC	2613	§ 2. Les stations spatiales non géostationnaires doivent cesser leurs émissions ou les réduire à un niveau négligeable, et les stations terriennes qui communiquent avec elles ne doivent plus émettre à leur intention, lorsqu'il n'y a pas une séparation angulaire suffisante entre satellites non géostationnaires et satellites géostationnaires, et que des brouillages inacceptables ¹ sont causés à des systèmes spatiaux à satellites géostationnaires du service fixe par satellite fonctionnant conformément aux dispositions du présent Règlement.
NOC	2613	§ 2. Las estaciones espaciales instaladas a bordo de satélites no geoestacionarios deberán cesar sus emisiones o reducirlas a un nivel despreciable, y las estaciones terrenas que comunican con ellas deberán cesar sus emisiones, cuando sea insuficiente la separación angular entre satélites no geoestacionarios y geoestacionarios y se produzcan interferencias inacceptables ¹ a los sistemas espaciales de satélites geoestacionarios del servicio fijo por satélite explotados de conformidad con las disposiciones del presente Reglamento.

COMMITTEE 6

Source: Document 132

THIRD SERIES OF TEXTS FROM COMMITTEE 5
TO THE EDITORIAL COMMITTEE

Committee 5 has approved the annexed text to be submitted to the Editorial Committee for consideration and subsequent transmission to the Plenary Session:

- Article 1, Terms and Definitions.

Except for the modification to provision No. 24, these texts were adopted unanimously. The delegations of Brazil, Canada and the Russian Federation reserved their position with regard to this provision as modified.

E. GEORGE
Chairman of Committee 5

CHAPTER I

Terminology

ARTICLE 1

Terms and Definitions

Section I. General Terms

NOC 3, 4, 7

Section III. Radio Services

MOD 24 3.5 Inter-Satellite Service: A radiocommunication service providing links between artificial earth-satellites.

NOC 26

NOC 36

MOD 48 3.29 Earth Exploration-Satellite Service: A radiocommunication service between earth stations and one or more space stations, which may include links between space stations, in which:

- information relating to the characteristics of the Earth and its natural phenomena, including data relating to the state of the environment, is obtained from active sensors or passive sensors on earth satellites;
- similar information is collected from airborne or Earth-based platforms;
- such information may be distributed to earth stations within the system concerned;
- platform interrogation may be included.

This service may also include feeder links necessary for its operation.

Section V. Operational Terms

NOC 110, 111,
112, 117

Section VII. Frequency Sharing

NOC 163

MALAGA-TORREMOLINOS, FEVRIER/MARS 1992

COMMISSION 4
COMMISSION 5

Fédération russe/Russian Federation/Federación Rusa

PROPOSITIONS POUR LES TRAVAUX DE LA CONFERENCE
PROPOSALS FOR THE WORK OF THE CONFERENCE
PROPUESTAS PARA LOS TRABAJOS DE LA CONFERENCIA

Lire le premier paragraphe comme suit:

Un certain nombre d'administrations assistant à la présente Conférence ont proposé d'attribuer la bande de fréquences 1 610 - 1 626,5 MHz au SMS (Terre vers espace), à titre primaire. Cette bande de fréquences est attribuée au service de radionavigation aéronautique qui est considéré comme un service de sécurité (Document 3, paragraphe 16.7). Dans son rapport (Document 3) le CCIR indique au paragraphe 8.1.4.3 que "les services de sécurité ne peuvent pas se prêter au partage avec d'autres services car ils revêtent un caractère critique pour la sécurité de l'aviation civile et de la sécurité maritime et nécessitent une protection de fréquence adéquate".

Page 1, read the first paragraph as follows:

A number of administrations at the present Conference proposed to allocate the 1 610 - 1 626.5 MHz frequency band to the MSS (Earth-to-space) on a primary basis. This particular frequency band is allocated to the aeronautical radionavigation service which is defined as a safety service (Document 3, item 16.7). According to the CCIR Report (Document 3, 8.1.4.3) "these services are not sharing candidates, because of their criticality to civil aviation and maritime safety and need adequate frequency protection".

Page 2, read the first paragraph as follows:

For an aircraft flight level (altitude) $H = 10$ km the area from which MSS interference may impact an ANS user is $S \approx 2\,500$ km². This area should be totally free of MSS terminals.

Página 1, léase el primer párrafo como sigue:

Varias administraciones han propuesto en la presente Conferencia atribuir a título primario la banda 1 610 - 1 626,5 MHz al SMS (Tierra-espacio). Esta banda de frecuencias está atribuida al servicio de radionavegación aeronáutica, que se define como un servicio de seguridad (punto 16.7 del Documento 3). Con arreglo al Informe del CCIR (§ 8.1.4.3 del Documento 3) estos servicios "no se consideran como candidatos potenciales a la compartición con servicios móviles por satélite, porque son críticos para la seguridad de la aviación civil y de la navegación marítima y necesitan una adecuada protección de las frecuencias".

Página 2, léase el tercer párrafo como sigue:

En el caso del nivel de vuelo de una aeronave (altitud) $H = 10$ km, la superficie en la cual la interferencia imputable al SMS puede hacerse sentir en un usuario del SRA es $S \approx 2\,500$ km². En esta superficie no debería encontrarse ningún terminal del SMS.

Russian Federation

PROPOSALS FOR THE WORK OF THE CONFERENCE

THE INTERFERENCE IMPACT TO THE AERONAUTICAL RADIONAVIGATION
SERVICE FROM MOBILE-SATELLITE SERVICE EMISSIONS

A number of administrations at the present Conference proposed to allocate the 1 610 - 1 626.5 MHz frequency band to the MSS (Earth-to-space) on a primary basis. This particular frequency band is not allocated to the aeronautical radionavigation service which is defined as a safety service (Document 3, item 16.7). According to the CCIR Report (Document 3, 8.1.4.3) "these services are not sharing candidates, because of their criticality to civil aviation and maritime safety and need adequate frequency protection".

Our Administration has carried out an interference level study for MSS operation in the subject band:

Basic data:

- | | |
|---|----------------------|
| 1) MSS user transmitter power | 8.5 dBW |
| Antenna gain | 1.0 dB |
| Duty Cycle (2.9 ms/69 ms) | -13.2 dB |
| Average e.i.r.p | -3.7 dBW |
| 2) Spreading BW | -67 dB for any 5 MHz |
| 3) Attenuation in the receiver filter
(the signal is in the receiver band) | 0 dB |
| 4) RO receiver information band of 50 Hz | +17 dB |
| 5) Protection required in the information band | +16 dB |
| 6) Wanted signal power | -156 - -161 dBW |

An MSS signal power at the ANS receiver input in the information relay band:

$$-3.7 - 67 + 17, - Lo, \text{ dBW/50 Hz},$$

where:

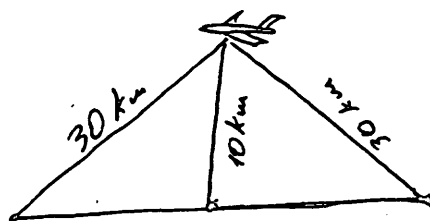
Lo - free space loss

permissible interference level is:

$$-161 - 16 = -177 \text{ dBW/50 Hz}$$

For the above values Lo constitutes 126.3 dB which corresponds to $d \approx 30$ km. This is the minimal distance required between a MSS user and an ANS user.

For an aircraft flight level (altitude) $H = 10$ km the area from which MSS interference may impact an ANS user is $S \approx 2,500$ km². This area should be totally free of MSS terminals.



P. 1

During a flight this area moves along an airplane route. In the vicinity of airports and on board aircraft a MSS user cannot be protected from ANS interference.

Several administrations also proposed to allocate the 1 613.8 - 1 626.5 MHz band to the MSS (space-to-Earth) on a secondary basis. For this case it is proposed to diminish the power flux-density limit at the surface level to -130 dBW/m²/4 kHz.

Due to the fact that this criterion is much higher than the permissible interference level for ANS (-177 dBW/50 Hz) it may cause unacceptable interference.

COMMITTEE 4
COMMITTEE 5

Russian Federation

PROPOSALS FOR THE WORK OF THE CONFERENCE

INFORMATION ON THE USE OF THE 1 610 - 1 626.5 MHz BAND

1. Taking into consideration that the safety of flight is essential in the high-density traffic and highly automated air traffic control environments, the participants in the Xth Air Navigation Conference (Montreal, 5-20 September 1991) approved a concept under which the future communication, navigation, surveillance and air traffic route (GNS/ATRM) system would be based on a global navigation satellite system (GNSS) including the GPS and GLONASS systems.

The ICAO Special Committee on Future Air Navigation Systems concluded that the introduction of a GNSS system would meet the required navigation criteria and in due course it would be the only navigation means en-route, near airports and for landing, its parameters being close to category 1 flights.

2. The GLONASS system uses the frequency band 1 597 - 1 617 MHz. The system testing was completed in 1991.

At present 14 satellites operate in the orbit and their number will increase (21 + 3 standby); 18 satellites are expected to be put into operation late in 1992.

The users will have access to the GLONASS system on a permanent worldwide basis without any limitations. A free-of-charge service will be provided for its terminal users. Following its full deployment it will remain in operation for not less than 15 years.

A modified GLONASS-M system uses the frequency band 1 596.9 - 1 620.6 MHz (it was notified to the ITU on 22 January 1992); it will provide improved accuracy and will ensure better compatibility with the radio astronomy.

3. In preparation for the WARC-92 a number of Administrations proposed to upgrade the radiodetermination service status in Recommendations Nos. 1 and 3 in the frequency band 1 610 - 1 626.5 MHz and to make an allocation for MSS there. It would result in the MSS down-link power flux-density of -120 dBW/m²/4 kHz, i.e. 34 dB higher than that produced by the GLONASS system (RR 2556 and RR 2557). The MSS service would cause harmful interference in the GLONASS up-link line-of-sight.

The CCIR Report (Document 3, item 8.1.4.3) states that "safety-related services in the 1 - 3 GHz bands are not considered as potential candidates for sharing with mobile-satellite services. These services are not sharing candidates because of their criticality to civil aviation and maritime safety, need for adequate frequency protection and/or potential use to satisfy the requirement, identified by the ICAO, for a global navigation satellite system (GNSS) for aviation and similar requirements which are under discussion within the IMO".

Conclusion: Introduction of MSS in the frequency band of 1 610 - 1 626.5 MHz will cause unacceptable interference to the GLONASS-M system and will adversely affect the safety of flights and sea vessels.

MÁLAGA-TORREMOLINOS, FÉVRIER/MARS 1992

COMMITTEE 5

Source: DL/24

Note by the Chairman of Ad Hoc 1 to Committee 5

RESOLUTION COM5/

PROVISIONAL APPLICATION OF ARTICLE 56 TO ENSURE
HARMONIZATION WITH THE INTERNATIONAL CONVENTION FOR THE
SAFETY OF LIFE AT SEA (SOLAS) AS REVISED IN 1988

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Málaga-Torremolinos, 1992),

considering that

- a) the provisions of Article 56 of the Radio Regulations were modified at the World Administrative Radio Conference for the Mobile Services, Geneva, 1987, and were supported by a majority of administrations but were not accepted by all administrations in regard to carriage of personnel certificated for maintenance of shipborne equipment for distress and safety communications;
- b) the 1988 Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974 on the Global Maritime Distress and Safety System (GMDSS) adopted maintenance requirements to ensure equipment availability which were more flexible than those adopted by the World Administrative Radio Conference for Mobile Services, Geneva, 1987;
- c) the resulting inconsistency between the ITU Radio Regulations and IMO SOLAS Convention relating to this matter of standards for maintenance and operation of shipborne GMDSS equipment has significant implications and should be reconciled;
- d) the 45th Session of the Administrative Council, in accordance with Resolution No. 7 of the Plenipotentiary Conference, Nice 1989, included Articles 55 and 56 in the WARC-92 agenda to find an appropriate solution to this problem;

noting

that this Conference took appropriate decisions regarding Articles 55 and 56 to harmonize the provisions of the Radio Regulations with the IMO SOLAS Convention;

recognizing

that administrations desiring to implement the GMDSS should be able to do so without a conflict between the Radio Regulations and the SOLAS Convention;

resolves

that during the period preceding the date of entry into force of the partial revision of the Radio Regulations by WARC-92, administrations may apply Article 56, as contained in the Final Acts of the WARC-92, on a provisional basis.

Robert C. McIntyre
Chairman, Ad Hoc Group 1 to Committee 5

COMMITTEE 4
COMMITTEE 5

Republic of the Niger

PROPOSALS FOR THE WORK OF THE CONFERENCE

The Administration of the Republic of the Niger wishes to be included in Footnote 518 of the Radio Regulations.

NGR/186/1
MOD 518

In Afghanistan, Argentina, Australia, Botswana, China, India, Niger, Swaziland, Chad and the U.S.S.R., in the bands 4 063 - 4 123 kHz, 4 130 - 4 133 kHz and 4 408 - 4 438 kHz, stations of limited power in the fixed service which are situated at least 600 km from the coast may operate on condition that harmful interference is not caused to the maritime mobile service.

Reasons: Niger is situated over 1,000 km from the Atlantic Ocean coast.

WORKING GROUP 4B

Indonesia, Malaysia, Sri Lanka

PROPOSALS FOR THE WORK OF THE CONFERENCE

PHASED INTRODUCTION OF MOBILE-SATELLITE SERVICE (MSS)
ABOVE 1 GHz

1. Introduction

The introduction of MSS (aeronautical, maritime and land) has greatly complemented the shortcomings of the terrestrial fixed and mobile and fixed-satellite services especially for providing services to sparsely populated and remote areas.

The advent of low-Earth orbit (LEO) satellite communication systems would further widen the scope for developing countries to provide services to its remote, presently unserved areas with reliable telecommunication facilities within a short time with economical hand held terminals.

Since it is a personal communication terminal it will be very convenient for anyone anywhere abroad to call his home office from his/her hotel room or from the side of the road in a countryside with non-existent or scarce telecommunication facilities.

2. MSS for generic use

The "generic" benefit of MSS from the point of view of the maritime and aeronautical mobile-satellite services cannot be over-emphasized since this would reduce investment and operational costs.

Likewise, the utilization rates for maritime and aeronautical users, which at present are unattractive, would be reduced correspondingly.

Segmentation of maritime and aeronautical mobile-satellite services from land mobile-satellite services will only hamper its growth from the point of economy of scale and to the detriment of its users.

ICAO information paper Document WARC-92/10, page 18 rightly summarized in accepting some forms of sharing satellite system resources by the mobile-satellite services which could lead to overall savings in implementation costs.

The following proposals also take into account ICAO consideration to initially employ fixed spectrum partitioning for part of the band.

3. Phased introduction of generic MSS

INS/MLA/CLN/187/1

- a) In order for potential organizers/investors to be able to develop MSS including its potential future low-Earth orbit (LEO) satellite systems as soon as possible, it is suggested that the following bands be adopted immediately:

1 616.5 - 1 626.5 MHz¹, for both directions Earth-to-space and space-to-Earth;
1 525 - 1 530 MHz (space-to-Earth) to match with the present allocation of
1 626.5 - 1 631.5 MHz (Earth-to-space),

on a co-primary basis for the three services while ensuring priority to safety navigation and safety services in the relevant service band in the MSS band.

Note 1 - To allow the Global Navigation System to develop in a separate band, 1 559 - 1 616.5 MHz.

INS/MLA/CLN/187/2

- b) From experience gained from the initial implementation the following bands be allocated from the year 2001 for generic MSS:

1 530 - 1 544 MHz (space-to-Earth) current allocation;
1 631.5 - 1 645.5 MHz (Earth-to-space) current allocation.

INS/MLA/CLN/187/3

- c) The next radio conference could look further into the other aeronautic and maritime mobile-satellite bands for future consideration of MSS.

INS/MLA/CLN/187/4

- d) This Conference and subsequent conferences should look for the possibility of future shared bands with terrestrial fixed services, and to introduce a planned phased exemptions of the fixed services if required.

4. Benefit for mankind

As early as 1994/1997 worldwide MSS with A.O. the potential LEO system would already be fully operational.

Public telephones could be easily installed in all villages in developing countries using small terminals, as well as worldwide roaming using PCS (personal communication service) terminals. The existence of national or common gateways would uphold the national authority of receiving or prohibiting telecommunication traffic to and from the LEO system. At the same time the gateways could control national and international traffic flow as well as billing rates according to national requirements.

Hopefully then, the Maitland Recommendation "which is an easy reach for a telephone for all mankind in the beginning of the next century" could be fulfilled.

5. Conclusions

This Conference should agree to allocate immediately for generic use of MSS in the bands mentioned in § 3.a), to be followed by the bands mentioned in § 3.b) for the year 2001.

WORKING GROUP 4B

Philippines

PROPOSAL FOR THE WORK OF THE CONFERENCE

The Philippine Administration wishes to modify the following footnote of Article 8:

PHL/188/1

MOD 596

Different category of service: in Afghanistan, Saudi Arabia, Bahrain, Brunei, China, the United Arab Emirates, India, Indonesia, Iran, Iraq, Kuwait, Malaysia, Oman, Pakistan, Qatar, Singapore, Thailand, Yemen A.R. ~~and~~ Yemen (P.D.R. of), and the Philippines the allocation of the band 137 - 138 MHz to the fixed and mobile, except aeronautical mobile (R), services is on a primary basis (see No. 425).

Reasons: In the Philippines, the band has extensive utilization for fixed and mobile communication.

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

WORKING GROUP 5B

Gabonese Republic

PROPOSAL FOR MODIFICATION OF DOCUMENT DT/40

APPENDIX 26 TO THE RADIO REGULATIONS

Document DT/40 contains a list of the allotments resulting from the application of the formula advocated by the IFRB. After studying this document, the Gabonese Republic has identified the following anomalies, which are unfavourable to it:

- seven frequencies allotted to the Gabonese Republic in Document DT/40 (3 044 kHz, 3 047 kHz, 3 140 kHz, 3 143 kHz, 3 149 kHz, 3 155 kHz, 17 991 kHz) are also allotted to two adjacent countries (CME, COG);
- two frequencies allotted to the Gabonese Republic in Document DT/40 (5 699 kHz, 5 702 kHz) are also allotted to an adjacent country (CME);
- three frequencies allotted to the Gabonese Republic in Document DT/40 (3 056 kHz, 3 059 kHz, 11 214 kHz) are also allotted to an adjacent country (COG).

These anomalies could cause interference to the stations in the aeronautical mobile (OR) service already installed and operating on Gabonese territory in accordance with Appendix 26.

COMMITTEE 4

Canada

PROPOSAL TO ACCOMMODATE FPLMTS AROUND 2 GHz

Introduction

In an attempt to move forward the work on the designation of spectrum for the Future Public Land Mobile Telecommunication System (FPLMTS), Canada is proposing a compromise between the advocates for 230 MHz and the proponents for 60 MHz. This proposal identifies a significant amount of spectrum for FPLMTS including space techniques, while ensuring the operation of space operation/space research/earth exploration-satellite services (SO/SR/EES) and sufficient long-term spectrum for the existing fixed service (FS).

Proposal

CAN/190/1

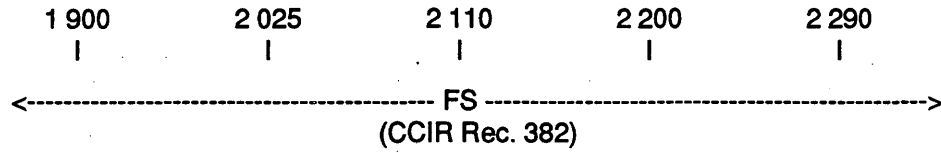
In order to accommodate the existing and continuing needs of the fixed service, recognizing that sharing is possible between the fixed service and the space operation, space research and earth exploration-satellite services in the 2 GHz band segments 2 025 - 2 110 MHz and 2 200 - 2 290 MHz, as well as to satisfy much of the expected demand identified by the CCIR for personal communications, Canada proposes a compromise of a total of 150 MHz be designated worldwide to FPLMTS, including complementary space techniques, in the bands 1 900 - 1 990 MHz and 2 110 - 2 170 MHz, to be made available for such use effective year 2000. As a consequence, the remaining 240 MHz of the spectrum in the 1 900 - 2 290 MHz range can be available for the fixed service in the long-term to provide for a possible new CCIR channelling plan of 2 x 120 MHz for fixed service applications.

A Resolution requesting the CCIR to determine the technical characteristics for operation of FPLMTS with complementary space techniques will be necessary.

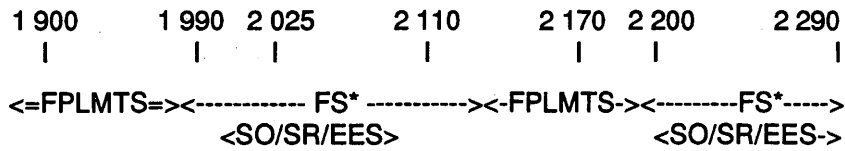
Canada believes that this proposal offers a reasonable solution, which recognizes not only the needs of new services but also the continuing demands of the existing services. A possible new CCIR channelling plan of 2 x 120 MHz also builds on the natural sharing conditions between the fixed service and the space services in much of this **spectrum**.

Figure 1 outlines the existing and proposed future use of the spectrum 1 900 - 2 290 MHz.

Existing



Proposed



* New CCIR channelling plan

FIGURE 1

COMMITTEE 4

Central African Republic

PROPOSAL FOR THE WORK OF THE CONFERENCE

The Central African Republic, which is an enclosed country situated over 600 kilometres from the coast, requests to be included among the countries listed in Footnote 518 of the Radio Regulations.

CAF/191/1

MOD

518

In Afghanistan, Argentina, Australia, Botswana, Central African Republic, China, India, Swaziland, Chad and the U.S.S.R., in the bands 4 063 - 4 123 kHz, 4 130 - 4 133 kHz and 4 408 - 4 438 kHz, stations of limited power in the fixed service which are situated at least 600 km from the coast may operate on condition that harmful interference is not caused to the maritime mobile service.

Source: Document 66

COMMITTEE 5

Working Group 5C

SECOND AND FINAL REPORT OF THE CHAIRMAN OF WORKING GROUP 5C
TO COMMITTEE 5

1. Introduction

Included in this report are the proposed texts of two Resolutions as well as further modifications to Article 1 prepared by Working Group 5C. These texts are based in consideration of proposals submitted to the Conference by 33 administrations in Documents 12 (United States), 20 (Europe), 21 (Germany), 27 (Japan), 32 (Spain), 39 (Mali), 75 (Senegal), 123 (Morocco) and 148 (Morocco).

Three other documents were also considered from CCIR (Document 3) and IFRB (Documents 4 and 33).

2. Summary of proceedings

The Working Group established two Sub-Working Groups and one Drafting Group:

- a) Sub-Working Group 5C-1, under the chairmanship of Mr. V. Rubio Carreton (Spain). This Sub-Working Group had the task to develop a draft Resolution relating to the implementation of changes in frequency allocations in the HF bands;
- b) Sub-Working Group 5C-2, under the chairmanship of Mr. T. Hahkio (Finland). This Sub-Working Group had the task to develop a draft Resolution relating to terrestrial digital sound broadcasting;
- c) Drafting Group 5C-3, with the convenor Mr. T. Jeacock (United Kingdom). The Drafting Group had the task to redraft some text from the draft Resolution relating to terrestrial digital sound broadcasting.

The Working Group held nine meetings in total and has completed its allotted task.

3. Conclusion

With regard to the Resolution relating to the implementation of changes in frequency allocations in the HF bands, the Kingdom of Morocco proposed an additional **considering**, ("that similar action carried out by the IFRB in application of Resolution Nos. 8 and 9 of the World Administrative Radio Conference, Geneva, 1979, did not produce the expected results"). Although it was generally accepted that the statement was not incorrect, the majority of the Working Group did not support the inclusion. The Working Group agreed on the text as given in Annex 1. Some items remained within square brackets. Frequency allocation matters were

considered to be subject to decisions of Committee 4 and the mentioned dates are to be decided by Committee 5. The Delegation of the Russian Federation reserved their position.

With regard to the Resolution relating to the terrestrial digital sound broadcasting, there were some concerns expressed as whether or not the issue was within the terms of reference. After an indepth discussion, the Working Group agreed on the text as given in Annex 2. Because there was no consensus on some items, they remained within square brackets. The United States supported by Mexico and Cuba were of the opinion that the subject matter concerned only Region 1 and certain countries of Region 3. They will raise this matter in Committee 5.

With regard to a proposal from Argentina, to include a synoptic table as an explanatory addition to the "Notes by the General Secretariat", the Working Group agreed to comment it to the Voluntary Group of Experts (VGE) to incorporate it in their deliberations.

With regard to the liaison statement of the Working Group of the Plenary, the Working Group agreed the suggested modification to RR 182. In conformance with the request from Committee 5, the modification to RR 181 was reconsidered. Some delegations preferred NOC, however the Working Group could agree to the compromise that the amended text could be submitted between square brackets to Committee 5. This on the understanding that the Chairman of Working Group 5C should approach the Chairman of the Working Group of the Plenary to find out if they could, during this Conference, determine up to which angle of inclination the orbit in the plane of the equator could be considered as geostationary orbit. If the Working Group of the Plenary could determine such value, the Working Group 5B could be approached for the inclusion of a relevant footnote at an appropriate place in the Radio Regulations.

Annex 3 gives the recommended modifications to Article 1 of the Radio Regulations.

J.F. BROERE
Chairman

Annexes: 3

ANNEX 1

Draft

NEW RESOLUTION COM5/[...]

RELATING TO IMPLEMENTATION OF CHANGES IN FREQUENCY ALLOCATIONS
BETWEEN [4 000 kHz AND 20 000 kHz]

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that parts of the frequency bands between [4 000 kHz and 20 000 kHz] which were previously allocated on an exclusive or shared basis to the fixed and mobile services have been reallocated to the broadcasting service;
- b) that some existing fixed and mobile assignments may need to be removed progressively from those reallocated bands to make way for the broadcasting [or amateur] services;
- c) that the assignments to be removed, termed "displaced assignments", must be reaccommodated in other appropriate frequency bands;
- d) that developing countries may require special assistance from the IFRB in replacing the displaced assignments with appropriate protection;
- e) that procedures exist already in Article 12 of the Radio Regulations that may be used to this effect,

recognizing

the difficulties that might face administrations and the IFRB during the period of transition from the previous allocations to those made by this Conference,

resolves that

- 1. the duration of the transition period shall be from [1 April 1992] to [1 January 2007];
- 2. administrations should no longer notify any frequency assignments to stations of the fixed and mobile services in the reallocated bands as of [1 April 1992]. Assignments notified in these bands after the date [1 April 1992], shall bear a symbol to indicate that they will be deleted from the Master International Frequency Register on [1 January 2007];
- 3. as of [1 April 1992], the IFRB shall undertake a continuing action to review the Master International Frequency Register with the help of the administrations. In this respect the IFRB shall periodically consult the administrations for the frequency assignments for links for which another satisfactory means of telecommunication exists; with a view to either downgrading assignments of class of operation A or deleting such assignments;
- 4. administrations shall, for assignments of class of operation A in the reallocated bands, either notify the IFRB the replacement frequencies or request the IFRB assistance in selecting the replacement frequencies in application of RR 1218 and Resolution No.103;
- 5. the IFRB shall develop in due time a draft procedure to be used for the replacement of remaining frequency assignments and shall consult administrations in accordance with RR 1001.1;

6. the IFRB should modify the draft procedures taking account to the extent practicable of comments received from administrations and propose replacement assignments at the latest three years before [1 January 2007]. In so doing, the IFRB shall request administrations to take appropriate action in relation to their assignments to be in conformity with the Table of Frequency Allocations by the due date;

7. a replacement frequency assignment whose basic characteristics with, the exception of the assigned frequency, have not been modified in the above process, shall keep its original date in accordance with RR 1445 - RR 1449. However, if these basic characteristics of a replacement frequency assignment are different from those of the displaced assignment, the replacement assignment shall be treated in accordance with RR 1376 - RR 1380,

invites Administrations

when seeking reaccommodation of the displaced assignments for their fixed and mobile services in the bands between [4 000 kHz and 20 000 kHz] which have been reallocated to the broadcasting [or amateur] services, to make every effort to find replacement assignments in the bands allocated to the fixed and mobile services concerned.

ANNEX 2

Draft

NEW RESOLUTION COM5/[...]

RELATING TO TERRESTRIAL DIGITAL SOUND BROADCASTING

The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),

considering

- a) that advances in technology have made available digital sound broadcasting systems of high quality;
- b) that such a digital sound broadcasting system will offer a considerably higher sound quality as well as additional system characteristics which are not supported by the present FM broadcasting system;
- c) that digital sound broadcasting can, in addition to the properties mentioned above, have a higher frequency efficiency than conventional FM sound broadcasting;
- d) that extensive studies have been made in the CCIR on digital sound broadcasting between 0.5 and 3.0 GHz;
- e) that digital sound broadcasting systems require less effective radiated power;
- f) that the bands 87.5 - 108 MHz in Region 1, 88 - 108 MHz in Region 2 and 87 - 108 MHz in Region 3 are generally much used for the high-powered FM sound broadcasting service, except in some countries;
- g) that several European countries are considering the implementation of digital sound broadcasting on an interim basis in the band 87.5 - 108 MHz or other broadcasting bands,

resolves to invite the CCIR

in order to harmonize the implementation of digital sound broadcasting;

1. to undertake as a matter of urgency, the relevant technical studies associated with introducing terrestrial digital sound broadcasting in the VHF [broadcasting] band[s];
2. in particular, to consider the system characteristics and propagation in relation to developing compatibility criteria in the same and adjacent bands including protection of the safety services,

resolves further

to request the Secretary-General to bring this Resolution to the notice of the Administrative Council for consideration of placing on the agenda of a competent administrative radio conference the subject of terrestrial digital sound broadcasting,

invites Administrations

to contribute actively to the CCIR studies in this respect.

ANNEX 3

CHAPTER I

Terminology

ARTICLE 1

Terms and Definitions

Section VIII. Technical Terms Relating to Space

- | | | | |
|-----|-----|------|---|
| MOD | 181 | 8.13 | Geostationary Satellite: A geosynchronous satellite whose circular and direct orbit lies in <u>or near</u> the plane of the Earth's equator and which thus remains fixed relative to the Earth; by extension, a satellite which remains approximately fixed relative to the Earth. |
| MOD | 182 | 8.14 | Geostationary-satellite orbit: The orbit in which a satellite must be placed to be a geostationary satellite. <u>of a geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth's equator.</u> |
-

COMMITTEE 5

SUMMARY RECORD
OF THE
FIFTH MEETING OF COMMITTEE 5
(REGULATORY)

Wednesday, 19 February 1992, at 1500 hours

Chairman: Mr. E. GEORGE (Germany)

Subjects discussed

Documents

- | | | |
|----|--|-----|
| 1. | Note by the Chairman of ad hoc Group 1 (Resolution COM5/[4]) | 185 |
| 2. | Fourth report of Working Group 5B (Resolution COM5/[3]) | 181 |
| 3. | Fifth report of Working Group 5B | 182 |

1. Note by the Chairman of ad hoc Group 1 (Resolution COM5/[4]) (Document 185)

1.1 The Chairman of ad hoc Group 1 briefly summarized the work of the Group, which had considered the provisional application of Article 56 to ensure harmonization with the SOLAS Convention. He introduced Document 185, which contained a draft Resolution submitted for Committee 5's consideration.

1.2 The Chairman invited the meeting to consider the text of the draft Resolution.

1.3 The delegate of Senegal, referring to the **recognizing** paragraph, proposed that the words "without a conflict between the Radio Regulations and the SOLAS Convention" should be replaced by "in compliance with the provisions of the Radio Regulations and the SOLAS Convention".

1.4 It was so agreed.

1.5 The delegate of Papua New Guinea proposed the addition of a further **recognizing** paragraph, reading: "that WARC-92 found Article 55 of the Radio Regulations to be in order and made no change, and further accepted Article 55 of the Radio Regulations to be in force accordingly".

1.6 The delegate of Mexico said that such an addition seemed unnecessary since the **noting** paragraph reflected that the Conference had taken appropriate decisions regarding Articles 55 and 56 to harmonize the provisions of the Radio Regulations with the IMO SOLAS Convention.

1.7 Having failed to obtain support, the proposal by the delegation of Papua New Guinea was rejected.

1.8 The delegate of Mexico said that her delegation no longer had any reservations of the type voiced during the meeting of ad hoc Group 1 when the text of the Resolution had been considered.

1.9 Resolution COM5/[4], as amended, was approved.

1.10 The delegate of the United States, speaking on behalf of the International Maritime Organization, requested an editorial addition to the text, and to any future texts which related to IMO, to instruct the Secretary-General to bring the text to IMO's attention.

1.11 It was so agreed.

1.12 The Chairman thanked the Chairman and members of ad hoc Group 1 for their efforts.

2. Fourth report of Working Group 5B (Resolution COM5/[3]) (Document 181)

2.1 In the absence of the Chairman of Working Group 5B, the delegate of the United Kingdom introduced the Group's fourth report (Document 181), observing that the draft Resolution it contained was based on proposals by a number of European countries and Australia.

2.2 The Chairman invited the Committee to consider the draft Resolution section by section.

Title and heading; considering; invites the CCIR; urges administrations

2.3 Approved.

2.4 The delegate of Senegal said that a reference to the actual convening of a future conference should be included, so as to be consistent with the text of **urges administrations**.

2.5 The delegate of Morocco agreed, and proposed the following additional operative paragraph for insertion before the **resolves** section:

"recommends

to the next Plenipotentiary Conference to consider the convening of a regional conference intended to revise the Appendix 30 Plan in the light of the result of the studies carried out by the CCIR."

2.6 The delegate of Mali supported the proposal.

2.7 The delegate of Italy said that he would prefer to keep the text as it stood.

2.8 The delegates of the United States and the United Kingdom said that a reference to a regional conference would create difficulties.

2.9 The delegate of Canada said he shared that concern, particularly since the proposal could involve an issue not raised in the Working Group's deliberations, namely, the effect on Region 2.

2.10 The Chairman said it seemed clear from the preliminary wording of the **resolves** section that only Regions 1 and 3 were affected. He suggested that the proposed text should read:

"recommends

to the next Plenipotentiary Conference to consider the convening of a world administrative radio conference to revise those parts of Appendices 30 and 30A applying to Regions 1 and 3 in the light of the studies carried out by the CCIR."

2.11 The delegate of Canada said that his delegation could accept that suggestion.

2.12 The text of the proposed **recommends** paragraph, as read out by the Chairman, was approved.

resolves 1

2.13 Following a proposal by the delegate of Morocco, **resolves 1** was approved subject to the substitution of "should" for "shall".

resolves 1a)

2.14 The delegate of the United Kingdom, replying to an observation by the delegate of Saudi Arabia, said that the words "as a minimum" had been added to the original wording in order to overcome a difficulty faced by the IFRB in interpreting the word "maintain" with regard to each country's assigned BSS capacity.

2.15 **Resolves 1a)** was approved.

resolves 1b)

2.16 Approved.

resolves 1c)

2.17 The delegate of Morocco, supported by the delegates of the Islamic Republic of Iran, Zimbabwe, Algeria, Mali, Nigeria and Saudi Arabia, proposed that the text should be amended to read: "protect notified systems which are in conformity with Appendices 30 and 30A".

2.18 The delegate of France, supported by the delegate of Germany, proposed that the text should read: "protect existing systems and systems notified in accordance with the Plan".

2.19 Following an exchange of views in which the delegates of Morocco and Spain, the member of the IFRB and the Chairman took part, the amendment proposed by the Moroccan delegation was approved.

2.20 **Resolves 1c)**, as amended, was approved.

resolves 1d)

2.21 The delegate of Senegal said that the phrase "as far as possible" was redundant and should be deleted.

2.22 The delegate of Australia said that the phrase reflected the fact that it was impossible for all administrations' requirements to be fully satisfied.

2.23 The Chairman suggested the deletion of the word "due" from the existing text.

2.24 The delegate of Morocco proposed that the text should be amended to read: "take account, as far as possible, of systems which are being coordinated under Article 4 of Appendices 30 and 30A".

2.25 Following further discussion, the Moroccan proposal was withdrawn in favour of the text as it stood in Document 181, subject only to the deletion of the word "due".

2.26 **Resolves 1d)** was approved on that understanding.

resolves 2

2.27 Following a proposal by the delegate of Senegal, supported by the delegate of Morocco, it was agreed to delete the paragraph.

resolves 3

2.28 Approved, subject to renumbering as **resolves 2**.

2.29 Resolution COM5/[3] as a whole, as amended, was approved.

3. Fifth report of Working Group 5B (Document 182)

3.1 The Chairman invited comments on the text annexed to Document 182, the purpose of which was to align the English-language version of No. 2613 of the Radio Regulations with the French text, which remained unchanged. Replying to an observation by the delegate of Mexico, he said that the Editorial Committee would align any minor discrepancies which remained.

3.2 The member of the IFRB, replying to a question by the delegate of Australia, said that the text under consideration had dispelled the doubt about the interpretation of RR 2613 to which he had drawn attention at Committee 5's first meeting.

3.3 The text annexed to Document 182 was approved.

The meeting rose at 1620 hours.

The Secretary:

J. LEWIS

The Chairman:

E. GEORGE

COMMITTEE 3

SUMMARY RECORD
OF THE
SECOND MEETING OF COMMITTEE 3
(BUDGET CONTROL)

Wednesday, 19 February 1992, at 1500 hours

Chairman: Mr. B. GRACIE (Canada) (Vice-Chairman of the Committee)

Subjects discussed

Documents

- | | | |
|----|---|-------------|
| 1. | Approval of the summary record of the first meeting of Committee 3 | 106 |
| 2. | Budget of the WARC-92 Conference adjusted at 1 February 1992 | 161 (Rev.2) |
| 3. | Position of Conference accounts at 17 February 1992 | 176 |
| 4. | Draft report of the Budget Control Committee to the Plenary Meeting | DT/67 |

1. Approval of the summary record of the first meeting of Committee 3 (Document 106)

1.1 The delegate of the United States said he wished to make two remarks concerning section 5.3 of Document 106. The first concerned the third sentence, which he thought was inaccurate and which should therefore be either amended or deleted. The second concerned the following sentences, which in his view should be deleted, since they concerned the overall budgetary situation of the ITU, a matter which was not within the terms of reference of Committee 3 and which should be dealt with by the Administrative Council.

1.2 The foregoing remarks were noted.

1.3 Document 106 was approved, subject to an amendment requested by the delegate of Spain in section 8.3.

2. Budget of the WARC-92 Conference adjusted at 1 February 1992 (Document 161(Rev.2))

2.1 The Chief of the Finance Department explained that the second column showed the budget approved by the Administrative Council as established in the light of conditions prevailing at 1 January 1991, while the third column showed the same budget adjusted for conditions at 1 February 1992 and the fourth column showed additional expenditure updated in accordance with changes in the exchange rate within the United Nations Common System from 1 February 1992.

2.2 Document 161(Rev.2) was approved.

3. Position of the Conference accounts as at 17 February 1992 (Document 176)

3.1 The Chief of the Finance Department, introducing Document 176, said that, according to the latest estimates, the total expenditure charged to the Spanish Administration was less than estimated in the budget, in fact 1,907,000 francs compared with 1,975,000 francs.

3.2 Document 176 was approved.

4. Draft report of the Budget Control Committee to the Plenary Meeting (Document DT/67)

4.1 The Chairman read out the draft report section by section.

Sections 1, 2 and 3

4.2 Sections 1, 2 and 3 were approved without comment.

Section 4

4.3 The delegate of the United States asked whether the 100,000 Swiss francs allocated to the IFRB were the only funds provided for post-conference work.

4.4 The Chairman said that a note had been prepared for the Chairmen of Committees 4 and 5, asking them, by 25 February, to report on the financial implications of decisions taken by their Committees. Those Committees might consider future tasks which would have the effect of raising the budget for post-conference work.

4.5 The Chief of the Finance Department confirmed that nothing was final pending receipt of the reports of the Chairmen of Committees 4 and 5, which was why section 7 had not been completed.

4.6 In the light of those explanations, section 4 was approved.

Section 5

4.7 The Chief of the Finance Department said that once again the figures had not been entered pending receipt of the latest estimates concerning Conference expenditure and the expenses borne by the host Administration. He pointed out that owing to the amount of work, staff expenses might increase, leading to a rise in Conference expenditure.

4.8 Section 5 was approved.

Section 6

4.9 The delegate of the United States said that the second sentence implied that the Conference had to spend the amount available up to the established ceiling; he thought it inadvisable to imply that the amount was available for post-conference work, which was belied by the following sentence.

4.10 The Chief of the Finance Department said that the figure of 1,100,000 Swiss francs was not a budgeted sum but was the margin available for the current Conference.

4.11 In the light of those explanations, the delegate of the United States suggested the following wording for the first part of the second sentence of section 6: "current estimates of conference costs are 1,100,000 Swiss francs below the ceiling that was set ...".

4.12 The Chief of the Finance Department said that the date "1 April 1991" should be replaced by "1 April 1989".

4.13 Subject to those amendments, section 6 was approved.

Section 8

4.14 The Chief of the Finance Department said that the list of recognized private operating agencies and international organizations contributing to the expenditure of the Conference, which appeared in Annex 4 to the document, would be updated. In reply to a question by the delegate of Spain concerning the contribution of INTELSAT to conference expenditure, he said that the figure would probably be known by the time Committee 3 met again.

4.15 Section 8 was approved.

Annex 1

4.16 Annex 1 was approved without comment.

Annex 2

4.17 It was noted that Annex 2 would be completed in due course.

Annex 3

4.18 In reply to a question by the delegate of the United States regarding the exact meaning of item 8, the Chief of the Finance Department said that it was in fact a margin available for post-conference work, if needed, but did not constitute savings. The amount was unbudgeted.

4.19 The delegate of the United States then proposed deleting that item.

4.20 The Chief of the Finance Department said he was prepared to accept that deletion and suggested that the whole of Annex 3 might be deleted.

4.21 The delegate of Spain was opposed to the deletion of item 8, which referred to section 6 of the report, and to the deletion of Annex 3, in view of its illustrative value.

4.22 The delegate of the United States then suggested that item 8 could be called "difference" or "balance".

4.23 It was so agreed.

4.24 Document DT/67 was approved, subject to those amendments.

The meeting rose at 1550 hours.

The Secretary

A. TAZI-RIFFI

The Chairman

B. GRACIE

PLENARY MEETING

MINUTES OF THE FOURTH PLENARY MEETING

1. On page 3, paragraph 2.8 should be deleted and replaced with the following text:
"The Chairman of the IFRB made the statement annexed to the minutes.

ANNEX 2

Statement by Mr. W.H. Belchambers, Chairman of the IFRB

Mr. Chairman, I must say that I am rather surprised at the intervention of the delegate of Morocco on these matters in this form because while it is true that the IFRB did not follow strictly the Resolution from Nice, there were many reasons why we did not, and I think it should be clear why we did not.

First of all, the IFRB had to do this work within the existing resources and as everyone knows, the IFRB additionally had to take increasing cuts in our resources following the Nice Plenipotentiary Conference, so we had a resource limitation.

The second thing, Mr. Chairman, was that there was a limited time scale for us to do this work and that in itself presented problems. Additionally, to apply the Resolution 325 procedure, which was for a maritime service, to the aeronautical service, was not feasible - not without considerable extra resources being required.

The third aspect of this was that the Allotment Plan had been developed over many years by sharing arrangements between administrations, both formal and informal. In addition, there were many changes in the countries of that Plan. For instance, many of the allotments in that Plan were to countries which formerly had a colonial status and then became independent and that created a big change in the situation. These sharing arrangements had been in place for many years and it included not only the double-sideband channels but also other forms of modulation which if we had tried to transfer from the Allotment Plan into a new allotment arrangement would have created enormous difficulties from an operating point of view. In fact, it would have been a completely new Plan. Now, we were not asked to do that by the Resolution. We were asked to prepare a channelling arrangement based on the 3 kHz channel spacing and that is what we did. We consulted all administrations and the only administration which objected - and we had many countries supporting what we proposed - the only country which objected was Morocco and we informed them of the situation. Now, Mr. Chairman, I think it is important to bear in mind that we had to prepare a channelling arrangement which was to be brought before this Conference, including amendments to Article 12 and so it is for this Conference to determine whether the work of the IFRB is acceptable. You may criticize the IFRB for not following to the letter the instructions from the Nice Plenipotentiary Conference, but as I have said, there were good reasons for that.

Now, Mr. Chairman, the other aspect which was raised was the question of Article 38 of the Convention. Nowhere in Appendix 26 does it refer to the armed forces. This use of a frequency assignment by the military is solely a matter for each administration, it does not involve either the IFRB or the ITU as a whole.

While I admit, Mr. Chairman, that the armed forces of administrations throughout the world make extensive use of the Appendix 26 channels, there is also a great deal of private aviation in most countries. The reference to Article 38 of the Convention by the delegate of Morocco is not appropriate, in that it has no bearing on Appendix 26."

2. On page 4, paragraph 2.28 should read:

"2.28 In order to take account of the point raised by the delegate of Senegal, the Chairman of Committee 5 proposed the following addition to item 1 of the terms of reference of the ad hoc Group:

"and to accommodate, to the extent possible, additional allotments for those countries having already allotments in Appendix 26".

The Chairman of Committee 5 then continued to say that the ad hoc Group would be made up of few delegates, for the sake of efficiency. He suggested it might include France, Morocco, Syria, Mexico and the United States, which had already given their agreement, as well as Nigeria and Australia, from which he had not yet received confirmation."

3. On page 5 the word "ANNEX" should be replaced by "ANNEX 1".

PLENARY MEETING

MINUTES OF THE FOURTH PLENARY MEETING

Section 3 of Document 195-E should be replaced by the following text:

3. Announcement by the delegate of Mexico

3.1 The delegate of Mexico made the following announcement:

"The Under-Secretary for Communications and Technological Development of Mexico informs delegates that the Regional Telecommunication Development Conference, followed by the Americas Telecom Forum and Exhibition, is to be held at Acapulco, Mexico. Given the importance of the event in terms of the state of the art and human communication, Mexico looks forward to welcoming them from 31 March to 11 April 1992."

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

PLENARY MEETING

MINUTES
OF THE
FOURTH PLENARY MEETING

Wednesday, 19 February 1992, at 1630 hours

Chairman: Mr. BARRIONUEVO PEÑA (Spain)

Subjects discussed

Documents

1. First series of texts submitted by the Editorial Committee for the first reading (B.1)
2. Second series of texts submitted by the Editorial Committee for the second reading (B.2)
3. Announcement by the delegate of Mexico

175

180

-

**1. First series of texts submitted by the Editorial Committee for the first reading
(Document 175)**

1.1 Resolution GT-PLN/1

1.1.1 The Chairman of the Editorial Committee said that the title of Resolution GT-PLN/1 should be amended to read as follows: Primary Service Requirements for the Meteorological-Satellite and Earth Exploration-Satellite Services in the Bands 401 - 403 MHz. The English and Spanish versions should be aligned on the French text.

1.1.2 The delegate of Morocco said that the French and English texts differed in the **resolves**. On the grounds that the French text was much too strongly worded and gave instructions to the next conference, he proposed replacing the words "de charger la prochaine Conférence administrative mondiale des radiocommunications compétente d'examiner l'attribution ..." by "que la prochaine Conférence administrative mondiale des radiocommunications compétente devrait examiner l'attribution de fréquences ...".

1.1.3 That amendment was approved.

1.1.4 Resolution GT-PLN/1, thus amended, was approved on first reading.

1.2 Recommendation No. 66(Rev.WARC-92)

1.2.1 Recommendation No. 66(Rev.WARC-92) was approved on first reading.

1.3 Recommendation GT-PLN/A

1.3.1 Referring to the **considering** of the Recommendation, the delegate of the United Arab Emirates said that his delegation had expressed a reservation regarding frequencies in the vicinity of 50 MHz and wished to maintain it.

1.3.2 Recommendation GT-PLN/A was approved on first reading.

1.4 Document 175 was approved on first reading in the light of the various remarks made.

**2. Second series of texts submitted by the Editorial Committee for the first reading
(Document 180)**

2.1 The Chairman of the Editorial Committee said that a number of amendments had been made in Article 12 and that Appendix 26(Rev.1) was entirely new.

2.2 The Chairman proposed considering the amendments to Article 12.

2.3 The delegate of Morocco made the statement annexed to the minutes.

2.4 The delegate of Yemen fully endorsed the statement by the delegate of Morocco and said that his country had difficulties regarding the allotment plan in Appendix 26(Rev.1).

2.5 The delegate of Niger fully agreed with the delegate of Morocco, especially in view of the fact that his country was left without any allotment.

2.6 The delegate of the Central African Republic said his delegation was small and he had not had a chance to intervene in the work of the Working Group which had discussed the question. He recalled, however, that in the old Appendix 26, 46 frequencies had been allocated to his country, whereas it now had only 8 left, a situation which his Administration could not accept.

2.7 The delegate of Lebanon supported the views expressed by the delegate of Morocco and asked for an ad hoc Group to be set up to study an alternative solution as proposed by the delegate of Morocco.

2.8 The Chairman of the IFRB expressed surprise regarding the form of the position adopted by Morocco and recalled the reasons why the Board had not adhered strictly to Resolution No. 9 of the Nice Plenipotentiary Conference, namely, the cut in its resources, the limited time available and the impossibility of applying the procedure of Resolution No. 325 to the aeronautical service without considerable extra resources. It would have been impossible, without running into enormous difficulties, to convert the allotment plan, which included frequencies for double-sideband emissions and other forms of modulation, into a new plan. In fact the IFRB had not been instructed to do so, but to prepare an allotment plan based on a channel spacing of 3 kHz. He also pointed out that Appendix 26 made no reference to the armed forces, as mentioned by the delegate of Morocco.

2.9 The delegate of Morocco recalled that he had asked for an ad hoc Group to be set up to study alternative solutions to Document 180.

2.10 The Chairman asked delegates to give their views on Morocco's proposal.

2.11 The delegates of Saudi Arabia and Nigeria approved the proposal.

2.12 The delegate of Yemen said that his country had not been able to notify the IFRB of its requirements for technical reasons and hoped that the matter would be considered in due course by the ad hoc Group.

2.13 The delegate of Cuba suggested that, considering the very limited time available, the terms of reference of the ad hoc Group should be set out at once.

2.14 The delegate of Lebanon stressed the gravity of the issue raised by Morocco and requested that the Plenary should immediately proceed to set up the Group. The competence of the IFRB had never been questioned, but the problem had to be resolved to everyone's satisfaction.

2.15 The delegate of Zimbabwe agreed with setting up an ad hoc Group.

2.16 The delegates of Swaziland, Tanzania, Syria, Chad, Oman, Guinea, Kuwait, Uganda and Jordan also endorsed the view expressed by the delegate of Morocco.

2.17 The Chairman asked the Chairman of Committee 5 to give his opinion on Morocco's proposal.

2.18 The Chairman of Committee 5 recalled that a compromise solution had been found in the Committee, on the basis of the plan submitted by the IFRB, and that only one country, Morocco, had opposed it. Detailed consideration of the matter had been entrusted to the Working Groups. He was therefore surprised at the objections raised at the current Plenary Meeting, since, at the end of Committee 5's meeting, none of the countries now supporting the delegate of Morocco had done so on that occasion. Very specific terms of reference would be needed for the ad hoc Group.

2.19 The Chairman suggested suspending the meeting to enable the delegate of Morocco, with the help of the Chairman of Committee 5, to submit draft terms of reference in writing.

The meeting was suspended at 1750 hours and resumed at 1810 hours.

2.20 The Chairman of Committee 5 read out the draft terms of reference of the ad hoc Group, which could be as follows:

- 1) to consider alternative solutions for the implementation of Resolution No. 9 (PP - Nice, 1989), including means to designate on a provisional or definitive manner allotments for countries not having allotments in Appendix 26;
- 2) should the conclusions of Committee 5 be retained, to consider means to take account of the requirements of countries not included in Appendix 26 and to resolve cases of incompatibility.

2.21 The delegate of Senegal wanted to know whether the ad hoc Group would take into consideration the new requirements of countries already in Appendix 26.

2.22 The delegate of Libya said that the ad hoc Group should concentrate on countries which had no allotment in Appendix 26. The distribution of allotments did not appear at all equitable.

2.23 The delegate of Cuba asked for explanations regarding the second part of the terms of reference, in particular the words "to take account of the requirements of countries not included in Appendix 26 and to resolve cases of incompatibility", which did not appear in the first part.

2.24 The Chairman of Committee 5 said that the expression was implied in the first part and explicit in the second part and that the terms of reference of the Group were specific enough to enable it to avoid any incompatibility.

2.25 The delegate of Burkina Faso enquired whether the terms of reference took account both of the number of frequencies allocated to each country and of the set of frequencies allocated.

2.26 The delegate of Brunei Darussalam asked for his country to be included in the allotment plan, since the plan dated back some years and his country had been independent only since 1984.

2.27 The delegate of Senegal referred again to the new allotment requirements for countries already in Appendix 26.

2.28 The Chairman of Committee 5 said that the ad hoc Group would be made up of few delegates, for the sake of efficiency. He suggested it might include France, Morocco, Syria, Mexico and the United States, which had already given their agreement, as well as Nigeria and Australia, from which he had not yet received confirmation.

2.29 The delegate of Nigeria agreed to take part in the work of the ad hoc Group. On the other hand, the delegate of Australia was prepared to give up his place to the delegate of another country.

2.30 The delegates of Senegal, Swaziland, Cuba, Congo, Niger, Brunei Darussalam, Israel, the Islamic Republic of Iran and Singapore expressed the wish, for different reasons, to take part in the work of the ad hoc Group.

2.31 The delegate of New Zealand was concerned at the large membership of the ad hoc Group, which needed to finish its work as soon as possible. He was keen to limit the number to eight.

2.32 It was decided that the ad hoc Group, whose terms of reference and composition (F, MRC, SYR, MEX, USA, NIG, SNG, NZL) were approved, would meet the following morning, with Mr. E. George (Federal Republic of Germany) in the Chair.

3. Announcement by the delegate of Mexico

3.1 The delegate of Mexico informed delegates that a regional telecommunication development conference, organized under the aegis of the ITU and to be followed by a Forum and Americas Telecom, would be held in the near future in Acapulco (Mexico).

The meeting rose at 1845 hours.

Secretary-General
P. TARJANNE

Chairman
J. BARRIONUEVO PEÑA

Annex: 1

ANNEX

Statement by the delegate of Morocco

The Moroccan Administration signified to the Administrative Council its disagreement on the procedure followed by the IFRB in the application of Resolution No. 9 of the Plenipotentiary Conference (Nice, 1989); it likewise gave the IFRB timely notice of its main objections to that procedure.

So far as communications in the aeronautical mobile (OR) service are concerned, it is essential to allow the utmost flexibility to administrations under Article 38 of the Constitution, which states that: "Members retain their entire freedom with regard to military radio installations of their army, naval and air forces". Appendix 26 is designed to afford to the national armed forces of the various countries Members of the ITU the possibility of using the HF bands in an orderly manner so as to avoid causing interference to the other services to which these bands are allocated. For this purpose an allotment plan was established, and the allotments which it contains are recorded in the Master Register so as to ensure their protection against any other user. Why allotments rather than assignments? An allotment consists of a frequency and an area in which the administration may assign this frequency to one or more stations; an assignment is a frequency assigned to a particular station. But can a country possibly make use of Article 38 of the Constitution under an assignment plan? Appendix 26 provides the necessary flexibility by granting to each country one or more allotments, within each of which an administration may assign frequencies to one or more stations without being required to notify them. A list of frequencies proposed by Committee 5 restricts the freedom of countries in the application of Article 38 and might, under this same Article, compel them to use other bands at the risk of causing chaos in the HF bands.

Resolution No. 9 had a limited purpose, which was to convert the allotments in double-sideband at 6 kHz into single-sideband allotments at 3 kHz, find allotments for those countries which do not have any in Appendix 26 and, for this purpose, apply the order of priorities indicated in Resolution No. 325. Under the pretext of inadequate financial resources, a much more complex procedure is proposed, leading to the replacement of the allotment plan by a frequency list, thus depriving Appendix 26 of all the flexibility required for national defence system communications. Moreover, many countries, such as Morocco, have had all or part of their allotments deleted by the decision of a permanent organ of the Union. To our knowledge, no conference has ever deleted assignments or allotments from a plan without the agreement of the countries concerned, nor has any conference deleted from a plan assignments or allotments for countries which were not represented at the conference without the countries concerned having received prior notification from the conference to enable them to react. For these reasons and for others which need not be laboured here, the Kingdom of Morocco is unable to approve the conclusions of Committee 5 concerning the implementation of Resolution No. 9.

I turn to the International Frequency Registration Board to point out that it has at its disposal a specialized Secretariat comprising highly capable engineers who have confined their attention to certain technical aspects of the problem; but it is up to the Board to take account of Article 38 of the Constitution and develop a procedure consistent with the instructions which it received from the Plenipotentiary Conference, and not to adopt a system which sets the future of the Union at hazard. Your sole asset resides in the confidence that we place in you; you have wasted part of this asset by putting before the Conference a procedure which is prejudicial to the higher interests of the small countries.

To the Secretary-General, I would say that it is his duty to bring it to the attention of a conference when it departs from its agenda, as is the case with Appendix 26, or when it adopts decisions which may be detrimental to the interests of the Members of the Union, thus jeopardizing the Union's future.

To all delegations, I would say that the law which governs the relations between us is enunciated in the basic Instruments of the Union and, like any other law, it constitutes the strength of the small, whereas the force of the great resides in their observance of the law. I call upon them to ensure that the instructions contained in Resolution No. 9 of the Plenipotentiary Conference are put into effect.

To the developing countries, I would say that our interests reside in a strong and effective Union and in opposing to any decision which compromises its future.

For all the reasons given above, the delegation of Morocco requests the Conference not to accept the conclusions of Committee 5 and to set up an ad hoc Group to consider an alternative solution.

COMMITTEE 4

SUMMARY RECORD
OF THE
FIFTH MEETING OF COMMITTEE 4
(FREQUENCY ALLOCATION)

Wednesday, 19 February 1992, at 2000 hours

Chairman: Mr. I.R. HUTCHINGS (New Zealand)

Subjects discussed

1. Second report of Working Group 4C
2. Statement by the delegate of New Zealand

Documents

207,
DT/64, DT/75

-

1. Second report of Working Group 4C (Documents 207, DT/64, DT/75)

1.1 The Chairman of Working Group 4C reported that different types of Sub-Groups had been set up to deal with the various agenda items assigned to his Group for consideration. Working Group 4C had been unable to conclude discussion of some issues within the deadline set for the completion of its work. As a result, some questions which remained to be resolved were referred to the Committee for further consideration.

1.2 Drawing attention to the section of the Group's second report (Document 207) relating to agenda item 2.2.1, he introduced the eight proposed modifications to Article 8 on which ad hoc Group 1 had reached agreement.

1.3 The proposed modifications were approved.

1.4 The Chairman of Working Group 4C said that further modifications to Article 8 had been agreed provisionally pending advice from the Working Group of the Plenary on certain technical problems. He referred the Committee to the attachment to Document DT/64, which gave details of those modifications.

1.5 With regard to the proposed allocation to the space research service in the bands 27.5 - 28.5 GHz and 37 - 38 GHz, a query had been raised concerning the power flux-density limits as well as the sharing criteria with respect to the fixed-satellite service in the band 37.5 - 38 GHz. Although there was a provision in the Radio Regulations stipulating the power flux-density limits in the band 37.5 GHz - 40.5 GHz, the power flux-density limits would need to be confirmed for the proposed allocation in 27.5 - 28.5 GHz.

1.6 Related to these proposals was the proposal for an allocation to the earth exploration-satellite service. If the proposed allocation in the 37 - 38 GHz band was accepted then the allocation of SRS around 28 GHz was not needed any longer, and that withdrawal would permit it to lower the allocation to the earth exploration-satellite service from 29.5 - 31 GHz to 28.5 - 30 GHz.

1.7 The Chairman of Working Group 4C, in response to a query from the delegate of the United Kingdom, confirmed that advice on the power flux-density limits for other bands, in particular in connection with the inter-satellite service, would be sought from the Working Group of the Plenary, as had been requested.

1.8 The Chairman suggested that the Committee should approve the proposed allocation of 37 - 38 GHz to the space research service on a primary basis pending confirmation from the Working Group of the Plenary that the power flux-density limits would be similar to those applicable in adjacent bands for sharing with the fixed service. As a consequence of that addition, the proposed allocation of the band 29.5 - 31 GHz to the earth exploration-satellite service on a secondary basis should be reduced to 28.5 - 30 GHz.

1.9 The proposed addition and modification were approved on that understanding.

1.10 The Chairman of Working Group 4C recalled that there were a number of issues which had not been resolved and should be considered by the Committee, including the proposed allocation of 21.7 - 22 GHz to the inter-satellite service. Consideration of the proposed allocation had been held in abeyance pending the outcome of discussions on the HDTV allocations.

1.11 The Chairman suggested that the allocation to the inter-satellite service in the band 21.7 - 22 GHz should be approved on the understanding that the HDTV BSS allocations would not occupy that spectrum.

1.12 The delegate of Canada expressed the view that the ISS was not compatible with either the BSS or its feeder links. Since his delegation has submitted a proposal relating to the latter, it would be preferable and more practical to defer consideration of the proposed allocation to ISS pending resolution of the BSS issues.

1.13 The delegate of the United Kingdom endorsed the comments by the delegate of Canada, reiterating the view that when considering the allocation to the inter-satellite service, the question of power flux-density limits must be addressed.

1.14 It was agreed to defer consideration of the allocation of the band 21.7 - 22 GHz to the inter-satellite service pending the outcome of consideration of HDTV BSS issues.

1.15 The Chairman of Working Group 4C drew attention to another unresolved issue stemming from proposals submitted by the United States (Document 12) for the accommodation of the radiolocation-satellite service on a primary exclusive basis in the band 24.55 - 24.65 GHz. The delegate of Japan had objected to that proposal as it would entail the deletion of the allocation to the radionavigation service used by his country.

1.16 The delegate of the United Kingdom observed that the problem of accommodating the radiolocation-satellite service was closely linked to HDTV issues, and in particular to proposals which had been submitted by the European countries. He therefore proposed that the Committee should await the outcome of work on the HDTV proposals before taking up the matter.

1.17 The delegate of Japan said that his country wished to continue using the band in question for its radionavigation service and in that connection had commenced discussion on sharing possibilities between the radionavigation and radiolocation-satellite services with the United States delegation. Nevertheless, he agreed with the United Kingdom delegate that HDTV proposals needed to be taken into account and endorsed the suggestion that the matter should be held in abeyance for the time being.

1.18 The delegate of Canada also supported the proposal of the United Kingdom delegate.

1.19 It was agreed to defer consideration of the proposal relating to the radiolocation-satellite service pending the outcome of consideration of HDTV issues.

1.20 The Chairman of Working Group 4C, referring to the section of Document 207 relating to agenda item 2.2.3a, outlined the various proposals submitted concerning feeder links for the broadcasting-satellite service (sound) on which informal discussions were being held, no consensus having been reached in the Working Group. In connection with the same agenda item, the delegate of Brazil had proposed the deletion of Footnotes 782, 784 and 785. Footnote 782 applied only to the Administration of Austria, which had agreed to the proposed deletion. However, objections had been raised by several administrations to the proposed deletion of the two remaining footnotes.

1.21 The delegate of Brazil stressed the importance of the deletion of Footnotes 784 and 785 since their retention might impair the use of the band 3.4 - 3.6 GHz. With a view to seeking a solution, he requested the member of the IFRB to explain the Board's position with regard to the status of the two footnotes.

1.22 The delegates of Argentina and Chile endorsed the proposal by the delegate of Brazil for the deletion of Footnotes 784 and 785.

1.23 The delegates of Norway and Denmark, supported by the delegate of the United Kingdom, objected to the proposed deletion of Footnote 785, the former on the grounds that it was outside the scope of the Conference agenda, and the latter because Denmark was one of the countries mentioned in the footnote.

1.24 The member of the IFRB, referring to the Board's Rules of Procedure in respect of footnotes, said that the radiolocation service had had a lower status since 1985, because of the fact that administrations had been urged to protect other services.

1.25 The delegate of Brazil said that, in the light of the foregoing comments, he would not press for the deletion of the two footnotes, on the understanding that the fixed-satellite service had a higher status with respect to the radiolocation service and that the use of the 3.4 - 3.6 GHz band by the fixed-satellite service would not be impaired.

1.26 It was agreed to delete Footnote 782, and to retain Footnotes 784 and 785 on the above understanding.

1.27 The Chairman, reverting to the subject of feeder links for the broadcasting-satellite service (sound), which had not elicited any comments, suggested that the Committee should provisionally agree that frequency bands need not be specifically identified for that application in the fixed-satellite service, on the understanding that the matter could be reviewed, if necessary, when allocations were made to the broadcasting-satellite service.

1.28 It was so agreed.

1.29 The Chairman of Working Group 4C observed that no proposals had been submitted on the question of MSS feeder links, which had been assigned to his Working Group under agenda item 2.2.4. The Working Group had therefore concluded that requirements for MSS feeder links could be satisfied using the existing allocations to the fixed-satellite service.

1.30 He then introduced the section of the report relating to agenda item 2.2.8 (Document 207, page 4, and Annex A) concerning requests from several countries to be included in Footnote 797B.

1.31 The proposed modifications to Footnote 797B were approved.

1.32 The Chairman of Working Group 4C introduced the section of the report relating to agenda item 2.6 (Document 207, page 4) concerning consequential modifications to the Radio Regulations. One delegation had objected to taking up issues not appearing in the Conference agenda. The Working Group had agreed to accept the proposals by the Democratic People's Republic of Korea, Yemen and Hungary to consider the relevant footnotes.

1.33 The proposed modifications were approved.

1.34 The Chairman of Working Group 4C introduced the section of the report relating to agenda item 2.2.3b (Document 207, page 3), drawing particular attention to the summary of proposals for a BSS (HDTV) downlink allocation in Table A of Document DT/75. The issue had not yet been resolved, but he felt sure that delegations would continue to work together to achieve consensus.

1.35 The Chairman noted from Table A of Document DT/75 that, while administrations were divided on the matter, many appeared to favour a downlink allocation in the 21 GHz band; he urged others to reconsider their position. He invited comments, with particular emphasis on the downlink allocation, since the up link would be consequential on that choice.

1.36 The delegate of Venezuela said that for climatic reasons his Administration could not accept the 21 or 25 GHz bands and requested the inclusion of Venezuela among administrations favouring an allocation in the 17 GHz band.

1.37 The delegate of Canada said that his Administration had considerable difficulty with the proposal to add BSS to the 21.4 - 22 GHz band, for two reasons. First, the rain attenuation costs would be substantially higher than in the case of the 17.3 - 17.8 GHz band, and secondly, Canada already had extensive and expanding fixed systems in that band and saw no reason why they should be moved. While it was true that a long list of administrations favoured 21 GHz as compared with the 17 GHz option, a different picture emerged if one viewed the matter regionally. There was very strong support for a 17 GHz allocation in Region 2, which led him to believe that a regional allocation might be the solution.

1.38 The delegate of Nigeria, after recalling his Administration's concern over high rain attenuation in the Tropical Region, said that he supported continued studies in the 12 GHz band and meanwhile favoured an allocation in the 17 GHz band for reasons connected with propagation and cost.

1.39 The delegate of Brazil said that, like the delegates of Canada and Nigeria, he favoured an allocation in the 17 GHz band and agreed that a regional approach might offer the best solution.

1.40 The delegate of Mexico pointed out that, for administrations like his own, propagation costs doubled as between the 17 and 21 GHz bands. Consequently the countries in Region 2 favoured an allocation in the 17 GHz band, which explained the emergence of a trend towards regionalization of the issue.

1.41 The delegate of Bangladesh recalled his Administration's choice of 17.3 - 17.7 GHz for a BSS (HDTV) down link in its proposal in Document 126.

1.42 The delegate of the Republic of Korea expressed his interest in seeking a worldwide solution to the problem. His Administration had fixed stations in the 21.4 - 22 GHz band and would therefore prefer an allocation in the 25 GHz band.

1.43 The delegate of Greece said that although, for administrative reasons, his Administration had not been able to sign the European proposal in Part III of Document 20, it strongly supported it and wished to be added to the list of sponsors.

1.44 The delegate of Japan pointed out that there were many existing terrestrial stations in the 21.4 - 22 GHz band, which gave rise to a sharing problem. His Administration therefore favoured a BSS (HDTV) downlink allocation in the 25 GHz band, which it already used for radionavigation, preferably on a worldwide basis.

1.45 The Chairman noted that divergent opinions were still strongly held, although there was reasonable support for an allocation on a worldwide basis. He invited comments on the nature of the allocation, bearing in mind that whatever band was chosen, it would already have allocations to existing services. Some administrations might wish the allocation to be exclusive, worldwide and primary, while others might prefer progressive introduction of an allocation shared with terrestrial services.

1.46 The delegate of Canada, referring to the problem of inter-service sharing, said that an exhaustive Canadian study had shown that the broadcasting-satellite service in the 17.3 - 17.8 GHz band could be shared with the broadcasting-satellite feeder links in Appendix 30A. A problem of local interference may arise between a transmitting and a receiving earth station, but it could be solved within the area of the administration concerned or in conjunction with its immediate neighbours. Under the 21 GHz option, sharing with the fixed service was not possible, nor with the radio astronomy in the frequency band 22.01 - 22.21 GHz.

1.47 The delegate of the Netherlands recalled that his Administration strongly supported a worldwide allocation and felt that success had never been so close. Some 53 countries supported the 21 GHz band and, given the spirit of cooperation that prevailed in Committee 4, it should be possible to reach consensus. As regards the status of the allocation, the European countries, including his own, proposed a primary allocation on a co-primary basis with the fixed and mobile services. In some countries, where the full 600 MHz was not needed, some fixed or mobile applications would be possible.

1.48 The delegate of Argentina said that sharing problems would arise for his Administration in the 21.4 - 22 GHz band owing to the existence of very short-distance, low-power radio links in that frequency range. In the absence of any universally recognized standards for HDTV, Argentina favoured the 12 or the 17 GHz option, although they too would give rise to some sharing problems.

1.49 The delegate of Australia pointed out that his Administration had proposed a draft Resolution to improve the existing BSS Plan for Region 3, which could perhaps be adapted to accommodate HDTV. After studying existing allocations, Australia had concluded that the 22.5 - 23 GHz band in Regions 2 and 3 was not suitable for a worldwide allocation and had decided that the 21 GHz band represented the best compromise. His Administration continued to support the attempt to find a worldwide allocation and proposed that existing fixed and mobile services be retained in the band, with the development of appropriate sharing criteria. In that connection, he noted that the current Table of Frequency Allocations for the 12 GHz band made some provision for the fixed and mobile services, so there might also be scope for sharing in the 21 GHz band.

1.50 The delegate of the United States said that his Administration would prefer a worldwide allocation, although it recognized that a difficult situation had arisen. Some possibilities existed for the use of the 12 GHz band: in Region 2 the Plan provided opportunities for BSS, including the possibility of HDTV. After noting that many countries had extensive fixed operations at 21 GHz and were currently installing new 21 GHz terrestrial fixed services, he pointed out that the technical differences between 21 and 25 GHz were very slight. At 25 GHz the disruption to services was non-existent. One country was already making some use of that band, but its requirement could be accommodated. In the search for a worldwide allocation, 25 GHz had a slight edge and he urged all countries to examine the possibility of adopting it.

1.51 The delegate of Israel said that, as the representative of a small country, he strongly supported a worldwide system that was not linked to specific regions. Israel wanted to be able to receive programmes from different satellites on a worldwide basis and in particular would not like to see a situation arise in which Region 2 adopted a system different from Region 1.

1.52 In response to the Chairman's suggestion to set up a small ad hoc Group to try to achieve the goal of a worldwide allocation, the delegates of Brazil and Canada expressed support for a regional approach.

1.53 The delegate of Nigeria drew attention to the need to ensure proper representation on the group for the tropical African countries, which shared the same climatic conditions as some of the Latin American and Asian countries.

1.54 The delegate of the United Kingdom expressed the hope that the ad hoc Group would take into account the consequences of any choice of band it might recommend, in particular the impact on other bands.

1.55 The delegate of the United States recalled that several issues had been deferred in the space services pending decisions on HDTV. He hoped the ad hoc Group would address those issues.

1.56 The Chairman said that such matters would be better dealt with by Committee 4 itself. He suggested that the ad hoc Group's terms of reference should be as set forth in the Conference agenda, bearing in mind the possibility of a regional approach, concentrating essentially on downlink issues, but not overlooking the uplinks, and taking into account all the relevant documentation and proposals.

1.57 On that understanding, the Committee decided to set up ad hoc Group 1, under the chairmanship of Mr. Bedford (United Kingdom), composed of the representatives of Australia, Brazil, Canada, the United States, the Russian Federation, the Islamic Republic of Iran, Israel, Japan, Mexico, Nigeria, the Netherlands, the United Kingdom, Germany and Singapore.

1.58 The Chairman of Working Group 4C, referring to the section of Document 207 concerning agenda item 2.2.5, sought the Committee's views on the alternative approach proposed by the delegate of Canada for the allocation of frequencies in the band 13.75 - 14 GHz. Unfortunately, Drafting Group 2 had been unable to complete its discussion on the matter in the time allotted to it.

1.59 The delegate of Spain said that his delegation had produced Document 204 on the subject and trusted that its proposal would be considered by any ad hoc Group set up to discuss the matter further. His Administration could agree in principle to Canada's alternative approach, provided suitable transitional protection measures were adopted for its radiolocation service using that band. It was imperative for the present Conference to seek an appropriate solution to the problem.

1.60 The delegate of the Netherlands, speaking on behalf of several European countries, said that having examined the Canadian proposal and discussed the matter both formally and informally, he was prepared to consider the possibility of seeking an alternative allocation to the fixed-satellite service in order to redress the existing imbalance.

1.61 The delegate of the Russian Federation said that it would unfortunately be difficult for his delegation to agree to the approach proposed by the Canadian delegation, as the allocation of the 13.75 - 14 GHz band was outside the scope of the Conference agenda. He would welcome an opportunity to discuss further alternative proposals as a means of remedying the imbalance. In the meantime he proposed that the allocation be placed in square brackets pending the resolution of related technical issues by the Conference.

1.62 The delegate of Singapore agreed to the principle of allocating the band 13.75 - 14 GHz so as to redress the current imbalance. The Canadian proposal represented a reasonable compromise solution, but he was somewhat concerned about the sharing implications. The advice of the Working Group of the Plenary might perhaps be sought on that matter.

1.63 Following comments by the delegates of Mexico and Niger, the Chairman, taking up the suggestion by the delegate of the Russian Federation, said that an ad hoc Group might perhaps be set up under the chairmanship of Mr. Kimball (United States) to examine the matter on the basis of the Canadian proposal, having regard to the comments made during the discussion.

1.64 It was so agreed.

1.65 It was further agreed that the ad hoc Group, C4 ad hoc 2, would be composed of the delegates of Australia, Brazil, Burkina Faso, Canada, the Republic of Korea, Spain, the United States, the Russian Federation, France, India, Japan, Luxembourg, Mali, Pakistan, the Netherlands, Venezuela and the United Kingdom.

1.66 The Chairman of Working Group 4C said that the matter of providing an allocation for a new service to be called the general-satellite service remained unresolved. Neither the Drafting Group set up under the chairmanship of Mr. J. Connolly, the results of which were set out in Document DT/74, nor Working Group 4C itself had been able to reach consensus on the matter. Some delegates had questioned the need for such a service while others had expressed their continuing support for efforts to seek an allocation. He therefore

recommended that Committee 4 should set up an ad hoc Group to provide an opportunity for further discussion of the matter.

1.67 The Committee decided to set up ad hoc Group 3 for that purpose, under the chairmanship of Mr. Taylor (United States), composed of the representatives of Australia, Canada, Spain, the United States, the Russian Federation, France, Italy, Japan, Mali, Mexico, the Netherlands and the United Kingdom.

1.68 The Chairman expressed his thanks to the Chairman of Working Group 4C for his efforts.

2. Statement by the delegate of New Zealand

2.1 The delegate of New Zealand, referring to his Administration's proposal under agenda item 2.6 on page 5 of Document 26, pointed out that the deletion of Footnotes 580 and 586 had been mentioned only as an example of an action that might be taken at some future competent conference. Until such time Footnotes 580 and 586 would remain unchanged.

The meeting rose at 2305 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

COMMITTEE 4

SUMMARY RECORD

OF THE

SIXTH MEETING OF COMMITTEE 4

(FREQUENCY ALLOCATION)

Thursday, 20 February 1992, at 1645 hours

Chairman: Mr I.R. HUTCHINGS (New Zealand)

Subjects discussed

1. Reports submitted by the Chairman of Working Group 4C
2. Consideration of the third report of Working Group 4A
3. Approval of the summary record of the third meeting of Committee 4

Documents

205, 206, 207
198
166

1. Reports submitted by the Chairman of Working Group 4C (Documents 205, 206, 207)

1.1 The Chairman of Working Group 4C introduced Document 205, which set out a number of consequential changes required as a result of allocation proposals adopted by Working Group 4C in the frequency range 31.8 - 34.7 GHz.

1.2 Document 205 was approved.

1.3 The Chairman of Working Group 4C submitted to Committee 4 Document 206 containing a report by the Chairman of Drafting Group 2.

1.4 It was agreed that Document 206 would be referred to ad hoc Group 2 of Committee 4 for discussion the following day.

1.5 Replying to a request for clarification by the delegate of the Russian Federation, the Chairman of Working Group 4C confirmed that the whole text on page 3 of Document 206, including the Table, should be placed in square brackets and would be discussed on that basis by ad hoc Group 2.

1.6 Referring to the second report of Working Group 4C to Committee 4 (Document 207), which had been discussed by the Committee at its fifth meeting, he indicated that the paragraph at the top of page 3 concerning the Brazilian Administration's proposal had been erroneously associated with feeder links for the broadcasting-satellite service (sound). It should be inserted as the second paragraph under agenda item 2.2.4 - mobile-satellite service feeder links.

1.7 The delegate of Brazil proposed that a full stop be inserted in that paragraph after the phrase "the proposals to suppress Footnotes 784 and 785" and that the rest of the sentence be deleted.

1.8 In the absence of any objections, it was agreed that the first paragraph on page 3, as amended by the delegate of Brazil, would be inserted as the second paragraph under the heading "Agenda item 2.2.4 - MSS feeder links" on page 3.

1.9 The Chairman of Working Group 4C, referring to a point which was associated with the discussion on Document 207, recalled that the Working Group of the Plenary had been requested to give advice on the application of one of the provisions of Article 28 to a small portion of the band near 37 GHz, and that a number of possible changes had been proposed to Article 8 after that advice had been received. He read out the following statement from the Administration of the Russian Federation concerning the associated changes which would accompany the modifications to the 37 - 38 GHz band:

"In the discussion of the proposals on frequency allocations for new space applications within the space research service, it appeared that of the two proposed frequency bands intended for data transmission VLBI (space-to-Earth) [27.5 - 28.5 GHz (Document 7/2) and 37 - 38 GHz (Documents 12/127, 128)], one band is sufficient as indicated in the CCIR Report (Document 3/4.2.1.2). In view of the fact that the other band is paired strictly with another Earth-to-space frequency band [40 - 40.5 GHz], the delegation of the Russian Federation will not insist on its proposal if the band 37 - 38 GHz is allocated for the above-mentioned purpose in order to improve the spectrum efficiency and to resolve a problem in allocating the 1.5 GHz band for EESS (Earth-to-space) proposed by Document 7/4.5 in this frequency range."

1.10 Following a request by the delegate of Lebanon for the inclusion of Lebanon in the list of countries in Annex A to Document 207, the Chairman observed that the text of the footnotes, as approved by the Committee at its previous meeting, had already been forwarded to the Editorial Committee for alignment and submission to the Plenary Meeting, which would therefore be the appropriate place for the delegate of Lebanon to raise the matter.

2. Consideration of the third report of Working Group 4A (Document 198)

2.1 The Chairman of Working Group 4A, introducing its third report to Committee 4 (Document 198), stated that the Working Group had considered that certain changes to footnotes, such as the deletion or addition of names of countries or the suppression of out-of-date footnotes, might be made by the Working Group. At least one delegation, however, had expressed concern about consideration of any footnotes that were not explicitly related to the agenda of the Conference.

2.2 The delegate of the Russian Federation confirmed his delegation's previously stated view that no changes to footnotes, whether additions or deletions of country names, should be considered by the Committee unless they related to the agenda of the Conference. After noting that Document 198 contained references to countries which did not exist, he suggested that any amendments made by the Committee should be placed in square brackets pending approval by the Plenary.

2.3 The Chairman acknowledged the importance of avoiding ad hoc changes to the Regulations. He suggested that the Committee might examine the proposed amendments set out in the Annex to Document 198, on the understanding that their approval would be conditional upon endorsement by the Plenary.

2.4 MOD 446, 447, 449 and 457, SUP 464A, 481 and 551, MOD 555, SUP 569 and MOD 571 were approved on that understanding. In MOD 581 the name of Spain was deleted from all language versions at the request of that country's delegation. In MOD 587 (Mob-87) the names of Austria and Poland were deleted at the request of those delegations.

2.5 It was agreed that the Chairman would report to the Plenary that a decision of principle was required from the latter as to whether the Committee should consider updating and deletions which had no effect on the substance of the footnotes concerned.

3. Approval of the summary record of the third meeting of Committee 4 (Document 166)

3.1 The delegation of the Russian Federation requested a correction to paragraph 5.7 of Document 166.

3.2 Subject to that correction, the summary record of the third meeting was approved.

The meeting rose at 1725 hours.

The Secretary:
T. GAVRILOV

The Chairman:
I.R. HUTCHINGS

COMMITTEE 4

Source: Document DT/81

THIRD REPORT OF WORKING GROUP 4A TO COMMITTEE 4

The Working Group examined the proposals concerning the footnotes in Article 8 of the Radio Regulations and proposed action with respect to some of them, as indicated in the annex to this report. One Delegation (Russian Federation) was against consideration of the footnotes which are not explicitly on the agenda.

S. HESS
Chairman of Working Group 4A

Annex: 1

ANNEX

Proposed action with respect to footnotes in Article 8 of the Radio Regulations

MOD	446	Additional allocation: in Bulgaria, Hungary , Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the band 14 - 17 kHz is also allocated to the radionavigation service on a permitted basis.
MOD	447	The stations of services to which the bands 14 - 19.95 kHz and 20.05 - 70 kHz and in Region 1 also the bands 72 - 84 kHz and 86 - 90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Bulgaria, Hungary , Mongolia, Poland, Czechoslovakia and the U.S.S.R., the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions.
MOD	449	Additional allocation: in Bulgaria, Hungary , Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the band 67 - 70 kHz is also allocated to the radionavigation service on a permitted basis.
MOD	457	Additional allocation: in Bulgaria, Hungary , Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the U.S.S.R., the band 130 - 148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate.
SUP	464A	
SUP	481	
SUP	551	
MOD	555	Additional allocation: in Angola, Cameroon, the Congo, Madagascar, Mozambique, Somalia, Sudan, Tanzania, and Chad and Yemen (P.D.R. of) , the band 47 - 68 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a permitted basis.
SUP	569	
MOD	571	Additional allocation: in Bulgaria, China, Hungary , Mongolia, Poland, Czechoslovakia and the U.S.S.R., the bands 74.6 - 74.8 MHz and 75.2 - 75.4 MHz are also allocated to the aeronautical radionavigation service, on a primary basis, for ground-based transmitters only.

- MOD 581** Additional allocation: in the Federal Republic of Germany, ~~Spain~~, France, Ireland, Italy, Liechtenstein, Monaco, the United Kingdom, and ~~Switzerland and Yemen (P.D.R.)~~, the band 87.5 - 88 MHz is also allocated to the land mobile service on a permitted basis and subject to agreement obtained under the procedure set forth in Article 14.
- MOD 587** Additional allocation: in Austria, Bulgaria, ~~Hungary~~, Israel, Kenya, **Mob-87** Mongolia, Poland, Syria, the German Democratic Republic, the United Kingdom, Somalia, Czechoslovakia, Turkey, and the U.S.S.R., the band 104 - 108 MHz is also allocated to the mobile, except aeronautical mobile (R), service on a permitted basis until 31 December 1995 and, thereafter, on a secondary basis.
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INTERNATIONAL TELECOMMUNICATION UNION

WARC-92

WARC FOR DEALING WITH FREQUENCY
ALLOCATIONS IN CERTAIN PARTS OF THE SPECTRUM

Document 199-E
19 February 1992

MALAGA-TORREMOLINOS, FEBRUARY/MARCH 1992

B.3

PLENARY MEETING

THIRD SERIES OF TEXTS SUBMITTED BY THE
EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

<u>Source</u>	<u>Document</u>	<u>Title</u>
COM 5	178	Article 55
		Article 56

P. ABOUDARHAM
Chairman of Committee 6

Annex: 2 pages

ARTICLE 55

NOC Mob-87

**Certificates for Personnel of
Ship Stations and Ship Earth Stations**

NOC 3860
Mob-87
to 3978*

* Note by the Editorial Committee

No. 3873 is modified in the French text only.

ARTICLE 56

NOC	Mob-87	Personnel of Stations in the Maritime Mobile and the Maritime Mobile-Satellite Service
NOC	Mob-87	Sections I and II
NOC	Mob-87	Section III. Class and Minimum Number of Personnel for Ship Stations and Ship Earth Stations Using the Frequencies and Techniques Prescribed in Chapter N IX and for Public Correspondence
NOC	3987 Mob-87	§ 4. Administrations shall ensure that the personnel of ship stations and ship earth stations are adequately qualified to enable efficient operation of the station, and shall take steps to ensure the operational availability and maintenance of equipment for distress and safety communications in accordance with the relevant international agreements.
NOC	3988 Mob-87	§ 5. An adequately qualified person shall be available to act as a dedicated communications operator in cases of distress.
MOD	3989 Mob-87	§ 6. The personnel of ship stations and ship earth stations for which a radio installation is compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall, with respect to the provisions of Article 55, include at least:
MOD	3990 Mob-87	a) for stations on board ships which sail beyond the range of VHF coast stations, taking into account the provisions of the Convention for the Safety of Life at Sea: a holder of a first- or second-class radio electronic certificate or a general operator's certificate;
SUP	3991 Mob-87	
MOD	3992 Mob-87	b) for stations on board ships which sail within the range of VHF coast stations, taking into account the provisions of the Convention for the Safety of Life at Sea: a holder of a first- or second-class radio electronic certificate or a general operator's certificate or a restricted operator's certificate.
MOD	3993 Mob-87	§ 7. The personnel of ship stations and ship earth stations for which a radio installation is not compulsory under international agreements and which use the frequencies and techniques prescribed in Chapter N IX shall be adequately qualified and certificated in accordance with the administration's requirements.
NOC	3994 to 4011	NOT allocated.

LIST OF DOCUMENTS

(Documents 151 to 200)

No.	Origin	Title	Destination
151	WG 5B	Third Report of Working Group 5B to Committee 5	C5
152	WG 5A	Second Report of the Chairman of Working Group 5A to Committee 5	C5
153	C3	Note by the Chairman of Committee 3 to the Chairmen of Committees 4 and 5	C4, C5
154	CLM, CUB, EQA, HND, PNR	Agenda items 2.2.4a and 2.2.4d - Low-Orbit Satellites	C4
155	SG	Transfer of powers - Belize / Commonwealth of the Bahamas	PL
156	WG PL	Note by the Chairman of the Working Group to the Plenary to the Chairman of Committee 5	C5
157	WG PL	Note by the Chairman of the Working Group to the Plenary to the Chairman of Committee 5	C5
158	WG PL	Second series of texts from the Working Group to the Plenary to the Editorial Committee	C6
159	F	Proposals for the work of the Conference	WG 4B
160	GUI	Proposals for the work of the Conference	C4
161(Rev.2)	SG	Budget of the WARC-92 adjusted at 1 February 1992	C3
162 + Corr.1	ARG	Proposals for the work of the Conference	C5
163	E	Proposed amendment to Document DT/40	C5
164	PL	Minutes of the third Plenary Meeting	PL
165 + Corr.1	SWG 4B1	Report of the Chairman of Sub-Working Group 4B1 to the Chairman of Working Group 4B	WG 4B
166	C4	Summary Record of the third meeting of Committee 4	C4
167	C5	Summary Record of the fourth meeting of Committee 5	C5
168	C4	Summary Record of the fourth meeting of Committee 4	C4
169	WG 4C	First Report of Working Group 4C to Committee 4	C4

No.	Origin	Title	Destination
170	WG 5C	Draft Resolution relating to implementation of changes in frequency allocations between [4 000 kHz and 20 000 kHz]	WG 5C
171	WG PL	Note by the Chairman of the Working Group to the Plenary to the Chairmen of Committees 4 and 5	C4, C5
172	WG PL	First progress report to the Plenary on the work of the Working Group of the Plenary	PL
173 + Corr.1	GHA, NIG, ZMB	Proposals for the work of the Conference	C4, C5
174	SG	Transfer of powers - Republic of Cape Verde / Republic of Senegal	PL
175	C6	B.1 - First series of texts submitted by the Editorial Committee to the Plenary Meeting	PL
176	SG	Situation of the accounts of the Conference as at 17 February 1992	C3
177	WG 4C	Note by the Chairman of Working Group 4C to the Working Group of the Plenary	WG PL
178	C5	First series of texts from Committee 5 to the Editorial Committee	C6
179	C5	Second series of texts from Committee 5 to the Editorial Committee	C6
180	C6	B.2 - Second series of texts submitted by the Editorial Committee to the Plenary Meeting	PL
181	WG 5B	Fourth Report of Working Group 5B to Committee 5	C5
182	WG 5B	Fifth Report of Working Group 5B to Committee 5	C5
183	C5	Third Series of texts from Committee 5 to the Editorial Committee	C6
184	URS	Proposals for the work of the Conference	C4, C5
185	Ad Hoc 1 to C5	Note by the Chairman of Ad Hoc 1 to Committee 5 - Resolution COM5/: Provisional application of Article 56 to ensure harmonization with the International Convention for the Safety of Life at Sea (SOLAS) as revised in 1988	C5
186	NGR	Proposals for the work of the Conference	C4, C5
187	INS, MLA, CLN	Proposals for the work of the Conference	WG 4B
188	PHL	Proposals for the work of the Conference	WG 4B

No.	Origin	Title	Destination
189	GAB	Proposal for modification of Document DT/40	WG 5B
190	CAN	Proposal to accommodate FPLMTS around 2 GHz	C4
191	CAF	Proposals for the work of the Conference	C4
192	WG 5C	Second and Final Report of the Chairman of Working Group 5C to Committee 5	C5
193	C5	Summary Record of the Fifth Meeting of Committee 5	C5
194	C3	Summary Record of the Second Meeting of Committee 3	C3
195	PL	Minutes of the Fourth Plenary Meeting	PL
196	C4	Summary Record of the Fifth Meeting of Committee 4	C4
197	C4	Summary Record of the Sixth Meeting of Committee 4	C4
198	WG 4A	Third Report of Working Group 4A to Committee 4	C4
199	C6	B.3 - Third series of texts submitted by the Editorial Committee to the Plenary Meeting	PL
200	SG	List of documents (151 - 200)	-