Documents of the World Administrative Radio Conference (WARC-79)
(Geneva, 1979)

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INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 501-E
3 December 1979
Original : English

COMMITTEE 5

SUMMARY RECORD OF THE SEVENTH MEETING OF COMMITTEE 5

Paragraph 4.1

Replace by the following text :

"4.1 The delegate of the Netherlands, introducing the proposal, said that his delegation had hoped that the principles set out in the paper could have been discussed at some length during the early stages of the Conference. His administration identified two main problems which, although both requiring new balances to be struck by the Conference, were different in nature.

A primary problem confronting the Conference was that a new balance must be struck with regard to the equal access to the spectrum to meet the real requirements of the developing countries. The basic provisions to solve that problem were being elaborated in Committee 6. The Netherlands proposal mainly dealt with the balance to be achieved between the needs of each of the radio services. At past Conferences - and there were several indications that that was the case also at the present Conference - delegates had affirmed the desirability of future changes to the repartition of services to the Table of Frequency Allocations. However, it had been found difficult to find ways of accommodating those needs, largely because several countries which had recently invested considerable amounts in new equipment had hesitated to introduce fundamental changes into the Table. So the relevant part of the Table remained unchanged and the present Conference was again faced with the same problem. Since 1959, the development of radio had advanced extremely rapidly and the ITU community had grown by nearly sixty Members; clearly, the Conference had to deal with the problems of all the Member countries, not only those of the countries producing the most advanced equipment. It was therefore essential to look to the future and to plan with the 20 year intervals between WARCs in mind. The Netherlands administration believed that it would be useful for WARC-79 to establish machinery for a more flexible and dynamic method of frequency allocation, taking into account the time scale for the implementation of each type of service in each frequency band, the period of overlap for compatibility between old and new systems and a phase-out plan for equipment in order to protect investments, with assurances on which administrations, the user and industry could rely on a long-term basis.

Many of the proposals before the Conference were in fact long-term, but were difficult to deal with because they affected more than one band and service and could not easily be assigned to any specific working group. A more specific and dynamic way of dealing with those proposals should be evolved forthwith, not 20 years later at the next WARC.

Some suggestions for the method to arrive at the introduction of long-term views in the Radio Regulations were given in Document No. 25. It seemed impossible to deal with the matter in full in Committee 5 and he requested that an ad hoc group be set up to consider the necessary machinery."

Paragraph 4.4

Amend the second part of the third sentence to read :

"... since the Table would come into force a year or two after WARC-79, it might be wise to introduce footnotes or to adopt a Resolution on the later dates of implementation."

Paragraph 5.7

Replace the word "principle" by "proposal".

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 501-E
6 November 1979
Original : English

COMMITTEE 5

SUMMARY RECORD

OF THE

SEVENTH MEETING OF COMMITTEE 5

(FREQUENCY ALLOCATIONS)

Thursday, 25 October 1979, at 1400 hrs

Chairman : Mr. M. HARBI (Algeria)

Subjects discussed		Document No.
1.	Adoption of the agenda	C5-7
2.	Approval of the Summary Record of the fifth meeting of Committee 5	331
3.	Consideration of proposals concerning radiocommunication between Red Cross and similar organizations	273, 313
4.	Consideration of the proposal from the Kingdom of the Netherlands	252
5.	Consideration of proposals concerning an article on radio astronomy	89 + Corr.1
6.	Fifth Report of Working Group 5A	325
7.	Second Report of Working Group 5B	228(Rev.1)
8.	Participation in working groups	-

1. Adoption of the agenda (Document No. C5-7)

1.1 The delegate of India requested that the agenda be modified to include the subject of a general discussion on planning of the fixed-satellite service and the allocation of a frequency band for the up-links of the direct broadcasting-satellite service which had been the object of a plan for Regions 1 and 3 in 1977. He pointed out that several Administrations, including his own, had submitted proposals on the subject to the Conference and that the question was important enough to be discussed at an early date.

1.2 The Chairman, in reply, said he considered that the question was very important and that he was already having informal consultations on the subject with several delegations; he intended to include the item on the agenda of a future meeting of Committee 5 when the discussions were sufficiently advanced, in order to facilitate Committee 5's task.

Subject to that understanding the delegate of India said he was satisfied with the Chairman's reply and would not press the point.

1.3 The delegates of Belgium and Guatemala pointed out certain typographical errors in the French and Spanish versions of the agenda.

Subject to the necessary corrections the agenda was adopted.

2. Approval of the Summary Record of the fifth meeting of Committee 5 (Document No. 331)

Document No. 331 was approved, subject to a revised text of paragraph 5.8 to be submitted by the United Kingdom delegation and issued as a corrigendum.

3. Consideration of proposals concerning radiocommunication between Red Cross and similar organizations (Documents Nos. 273, 313)

3.1 The delegate of Sweden, introducing the draft Resolution contained in Document No. 273, said that the text represented a compromise of earlier proposals and, if adopted, would enable Recommendation No. 34 of the 1959 Radio Regulations to be deleted.

The sponsors felt that the Radio Regulations concerned should be confined to giving guidance for the location of frequencies but should not actually enumerate frequency bands - which meant that the studies and considerations referred to in Recommendation No. 34 of the 1959 Radio Regulations would have been accomplished once the present draft Resolution was adopted.

The sponsors fully supported the proposal made by the Democratic Republic of Afghanistan in Document No. 313, and agreed that the draft Resolution contained in Document No. 273 should be amended accordingly.

The purpose was to meet the communication requirements of the Red Cross and similar organizations when normal facilities were not available - for example, for continuous tasks over relatively long periods in remote or difficult areas. The draft Resolution did not relate to frequencies which might normally be used in disaster cases; the Committee would doubtless discuss that topic later.

Replying to a question by the delegate of Japan, he said that the frequencies assigned should be in a fixed service band, immediately adjacent to the band allocated to the amateur service.

3.2 The representative of the Red Cross said that the Resolution should be applied to the following organizations : the Red Cross, the Red Crescent, the Red Lion and the Red Sun, which were recognized by the Geneva Convention of 12 August 1949.

3.3 The Chairman, replying to a question by the delegate of Cameroon, said that the Red Cross, Red Crescent, Red Lion and Red Sun organizations were separate entities with similar objectives all recognized pursuant to the Geneva Convention.

3.4 The delegate of the Federal Republic of Germany said that his Administration supported the proposal to assign, for the Red Cross and associated organizations, a fixed service band adjacent to the amateur band.

3.5 In reply to a question by the delegate of India, the Chairman said that the draft Resolution, if adopted, would supersede Recommendation No. 34 of the 1959 Radio Regulations, as the sponsors had noted.

3.6 The delegate of Switzerland endorsed the Chairman's observation.

3.7 The preambular part of the draft Resolution contained in Document No. 273 was adopted.

3.8 The delegate of Switzerland, in response to observations by the delegates of Kenya and Tanzania, said that the sponsors were aware of the value of using amateur service frequency bands in disaster cases; but the purpose of the present draft Resolution was to give the organizations concerned facilities for long-term operation in difficult areas where no other telecommunication means were available.

3.9 The Chairman added that the problem relating to the use of frequencies in disaster situations would be examined by Committee 5 at a later stage.

3.10 The operative part of the draft Resolution contained in Document No. 273 was approved, subject to the addition of the word "minimum" before "necessary" in paragraph 2.

Document No. 273 as a whole, subject to drafting amendments to incorporate the substance of Document No. 313, was approved.

4. Consideration of the proposal from the Kingdom of the Netherlands (Document No. 252)

4.1 The delegate of the Netherlands, introducing the proposal, said that his delegation had hoped that the principles set out in the paper could have been discussed at some length during the early stages of the Conference.

A primary problem confronting the Conference was that a new balance must be struck with regard to the surplus portions of the spectrum to meet the requirements of the developing countries. The Netherlands proposal also dealt with the other half of the problem, that of the balance to be achieved between the needs of new radio services; at past conferences, it had been found difficult to find new ways of accommodating those services in the spectrum, largely because certain countries which had recently invested considerable amounts in new equipment had hesitated to introduce fundamental changes into the Table of Frequency Allocations. Meanwhile, the development of radio equipment had advanced extremely rapidly and the ITU community had grown by nearly sixty Members since 1959; clearly, the Conference had to deal with the problems of all the Member countries, not only those of the countries producing the most advanced equipment. It was therefore essential to look to the future and to plan with the 20 year intervals between WARCs in mind. The Netherlands delegation believed that it would be useful for WARC-79 to establish machinery for a more flexible and dynamic method of frequency allocation, taking into account the time scale for the implementation of each type of service in each frequency band, the period of overlap for compatibility between old and new systems and a phase-out plan for equipment in order to protect investments, with assurances on which Administrations and industry could rely on a long-term basis.

Many of the proposals before the Conference were in fact long-term, but were difficult to deal with because they affected more than one band and service and could not easily be assigned to any specific working group. A more specific and dynamic way of dealing with those proposals should be evolved forthwith, not 20 years later at the next WARC. It was clearly impossible to deal with the matter in Committee 5 and an ad hoc group might perhaps be set up to consider the necessary machinery.

4.2 The delegate of India made the statement reproduced in Annex 1.

4.3 The delegate of Malawi said that he could agree with the ideas set out in the Netherlands paper but had some doubts concerning the priorities involved. Changes in frequency allocations could not be divorced from economic realities, but he failed to see why such stress was being laid on the 20-year period between WARCs : technological developments might necessitate another conference in 10 years' time, when radical changes could be made which were impossible at the present stage.

4.4 The delegate of Denmark supported the Netherlands proposal. A number of working groups of Committee 5 had found it difficult to obtain satisfactory results because the ideal solutions were obstructed by existing assignments and equipment. It was to be hoped that the ideas set out in the Netherlands paper would be taken up in those working groups, especially where the date of the implementation of the new Table of Allocations was concerned : since the Table would not come into force for a year or two after WARC-79, it might be wise to introduce footnotes or to adopt a Resolution on the dates of implementation. Although the principles might be discussed in an ad hoc group, the best course would be for the operational working groups to introduce the extra dimension provided by the Netherlands paper into the discussion of their practical difficulties.

4.5 The delegate of Italy endorsed the ideas in the Netherlands paper. WARC-79 should consider long-term changes with a view to avoiding the difficulties encountered. In his opinion, a decision on the subject should be taken in Committee 5, since the issue was substantive rather than procedural.

4.6 The delegate of France said he fully supported the Netherlands paper, in view of the absolute necessity of reaching the most economic solutions for countries whose telecommunications were less developed than those of others and which therefore found it difficult to envisage long-term changes. In the developed countries, too, the replacement of old systems by new ones should be planned on a long-term basis, considering that the development period for equipment was about twenty years. Accordingly, an attempt should be made to incorporate the ideas set out in the Netherlands paper in the remaining work of WARC-79.

4.7 The delegate of Nigeria endorsed the views expressed by the Indian delegate. The work of Committee 5 must be guided by such fundamental principles as the most efficient utilization of the sprectrum and equitable access to the spectrum by all countries. That being so, his delegation wondered whether the idea of a 20-year interval between WARCs was in fact equitable for the developing countries. The industrialized countries, with their more or less stabilized technical growth, were in a position to make more far-reaching projections for technical developments. Accordingly, the question of the intervals between WARCs might perhaps be referred to another Committee; countries which had not been represented at the 1959 Conference did not know how the decision on those intervals had been arrived at. All those considerations gave grounds for concern as to whether the allocations were in fact being made on the basis of efficiency and equity. His delegation was thinking of submitting a paper on that important issue.

4.8 The delegate of the USSR said that, although some of the points in the Netherlands paper deserved the attention of the Conference, in his delegation's view those ideas should be borne in mind during the consideration of specific bands, not as a general problem. It was therefore hardly necessary to set up yet another ad hoc group, of which there were already enough. Moreover, the proposals for the work of the Conference were based on the opinions of the telecommunication experts and industries of each country and thus took long-term prospects duly into consideration.

4.9 The delegate of Cameroon observed that the Netherlands paper took into account some of the preoccupations expressed in Committee 5 concerning the equitable access of newcomer countries to the spectrum. It was common knowledge that the International Master Frequency Register contained a number of so-called phantom frequencies, and there should be a general discussion on the possibility of appealing to the good will of the holders of those assignments to relinquish them so that they could be assigned to other countries. He agreed with the preceding speaker that it was unnecessary to set up an ad hoc group, but considered that a debate should be held on the general principles of frequency allocation, so that the Conference could instruct the IFRB to consult with countries having many frequency assignments about the possibility of redistributing them to others.

4.10 The delegate of Brazil said that the problem basically concerned the difficulties of the developing countries. The question of the investments already made by the big telecommunication users had been raised, and it was understandable that those countries wanted certain modifications to be made at the Conference; nevertheless, it was absolutely impossible to meet the requirements of other Administrations if those fundamental changes led to a lower allocation of bands which were continually used to the fullest extent in the medium term. He agreed with those who had opposed the establishment of an ad hoc group, since every time a new group was set up, the smaller delegations found it increasingly difficult to assign participants to it. Finally, he endorsed the view of the delegate of the USSR that the Netherlands suggestions should be considered in the operational working groups in connection with each specific band; it was particularly important to examine the time of the implementation of changes in that connection.

4.11 The delegate of Greece endorsed the ideas in the Netherlands document and said that they should be examined more closely in a small group which would report back to Committee 5 for a final decision.

4.12 The delegate of Kenya supported the Netherlands proposals. The developing countries were concerned about the tendency at past conferences - and, indeed, at WARC-79 - to regularize the practices of certain Administrations. Kenya therefore supported the idea of establishing an ad hoc group to consider that important issue.

4.13 The delegate of Pakistan said that the idea of fixing a time schedule for phasing out existing equipment was a very good one for the manufacturers, but that in the developing countries there were instances of equipment being used for 30 to 40 years. Thus, for some countries even the 20-year interval between WARCs might be relatively short as an amortization period : indeed, there had been recent cases where countries with limited resources had renounced for purely economic reasons even the specifications for equipment agreed upon in 1959. Since the problem was so closely linked with economic conditions, it was most doubtful whether many developing countries at the current Conference would wish to replace their equipment in less than 20 years, and it was therefore unnecessary to set up a new group to consider a phase-out period. As a number of speakers had pointed out, a more equitable distribution of the spectrum among all countries was a much more important issue than the promotion of new equipment and technology.

4.14 The Chairman said that the debate had demonstrated Committee 5's recognition of the wide scope and importance of the Netherlands document, which should indeed have been considered early in the Conference - although, of course, proposals for the work of WARC-79 had been in preparation for some years and some of them took the considerations set out in Document No. 252 into account. The question of the period of implementation of decisions had been raised by some delegations : in his opinion, that depended largely on the scope of changes in the Table of Frequency Allocations. The matter should be debated in a plenary session of the Conference. There was no hard-and-fast rule concerning the intervals between WARCs, and the 20-year interval mentioned on several occasions in fact represented a significant period of evolution for equipment. Administrations were, however, sovereign to decide whether the Final Acts of WARC-79 would remain in force for twenty years or whether another WARC should be held sometime between 1990-1995.

As for the point raised by the delegate of Cameroon, the Chairman informed Committee 5 that Committee 6 was studying the question in detail, as it came within its competence.

Opinions on whether or not to set up an ad hoc group were evenly divided, but he wished to draw attention to the Conference timetable : Committee 5's requests for meetings of its working groups could not always be satisfied and it would be difficult to find interpreters for another group. In any case it could not report back to the Committee before 10 days, by which time many of the working groups would have finished and conclusions from the ad hoc group would have no effect. It would therefore be wiser to take note of Document No. 252 and to recommend Working Groups 5BA to 5E to bear the contents of the paper in mind when taking decisions.

4.15 The delegate of the Netherlands said he was somewhat disappointed by the outcome of the debate. Telecommunication Administrations would be working on the basis of the results of the Conference for at least 10 years; Committee 5 must realize that it was doing long-term work, and that point was well worth pondering even at that relatively late stage of the Conference. Moreover, he had the impression that some ideas in the paper had been misunderstood : in particular, he wished to assure the delegate of Pakistan that the Netherlands was fully aware of the regrettable tendency for conferences to be dictated to by the industries of a few advanced countries, whereas they should be directed solely towards meeting the requirements of all countries and their Administrations.

Bringing the document to the attention of the competent working groups would not be the best solution since in the absence of specific instructions from Committee 5 those groups could not take the ideas of the paper into account in their decisions; it was of course possible to adopt a Recommendation on the subject, but experience had shown that Recommendations did not yield the desired results - for instance, difficulties were still being encountered in applying Recommendation No. 14 of the 1959 Conference. WARC-79 should take active steps to deal with the distribution of the spectrum; its decisions should relate not only to the period of implementing changes, but also with the conditions of allocation. A radical revision of the allocation system was essential.

4.16 The delegate of Kenya said that his delegation was less concerned by the time factor than by the indiscriminate use of the spectrum by some Administrations. If that problem could not be discussed in an ad hoc group, it should perhaps be submitted to the Plenary Meeting.

4.17 The Chairman recalled that the equitable use of the spectrum came under Article N12 and fell within the competence of Committee 6, not of Committee 5. His suggestion to take note of Document No. 252 had been made from a purely pragmatic point of view, in the light of the timetable of the Conference and the difficulties of setting up an ad hoc group on the question at the fifth meeting of the Committee.

The Committee took note of Document No. 252, on the understanding that its operational working groups should take the ideas contained therein into account when taking their decisions.

5. Consideration of proposals concerning an article on radio astronomy (Document No. 89 + Corr.1)

5.1 The delegate of the Netherlands, introducing HOL/89, said that the radio astronomy service was unique in being a passive one, and in being extremely susceptible to interference. The CCIR had been concerned with the protection of its frequency bands for some twenty years, and the Netherlands Administration had for a long time considered that the special needs of the service called for a separate article in the Radio Regulations. Furthermore, several working groups had concluded that the footnotes relating to radio astronomy were inadequate and would be better in the form of a separate article, particularly in the light of the decision of Committee 5 on standardized footnotes. He requested that the Committee should take the appropriate steps for the establishment of such an article.

5.2 The delegate of Argentina said that his delegation supported the idea of a separate article both with a view to simplifying the footnote problem and providing Administrations with proper guidance on the protection of radio astronomy.

5.3 The delegate of the United Kingdom said that there were a number of dangers in proceeding with the general principle of an article on radio astronomy. The frequency allocations for the service were covered in Article N7 and those allocations were protected by the status given to them. Proposals for a separate article on radio astronomy tended either to be informative rather than regulatory and as such had no place in the Radio Regulations, or else they contained specific requirements for the protection of the radio astronomy service which ran the risk of having an impact on every other radiocommunication service. Some specific requirements for the protection of radio astronomy existed in No. 116A, and a number of articles in the Radio Regulations dealt specifically with a single service, including provisions which related purely to that service which had no strong inter-action elsewhere.

5.4 The delegate of France supported the Netherlands' proposal for a separate article. The proposed text, however, required a certain amount of detailed study by a working group.

5.5 The Chairman said that Working Group 5A would review the text of the proposed article provided that the Committee agreed on it in principle.

5.6 The Chairman suggested that since the Committee appeared to agree to the article in principle, the United Kingdom delegation might be asked to go along with the principle, on the understanding that Working Group 5A would examine the new article in detail.

5.7 The delegate of the United Kingdom said that although he had reservations about the need for a separate article on the radio astronomy service, he would accept the principle.

It was so agreed.

6. Fifth Report of Working Group 5A (Document No. 325)

6.1 The Chairman of Working Group 5A, introducing the report, said that it contained the first series of definitions adopted unanimously by the Working Group. The square brackets round the word "reflecting" in 3024 could be removed from all language versions, and it had been left to the Drafting Group to decide whether the word "all", in square brackets in the Spanish text, should be retained.

The Working Group had decided that the text proposed for "space station" and "terrestrial station" should be examined by Committee 9, for concordance of the three language versions.

6.2 The observer for IATA said that as far as aviation was concerned, a radiodetermination service was a safety service, yet the definitions given in the document (3049/46 and 3029/69) did not make that connection. As the connection had been implied in the definition of "harmful interference" (Document No. 307) he felt that a radiodetermination service should also be classed as a safety service in Document No. 325.

6.3 The Chairman of Working Group 5A observed that in view of the definition of radiolocation (3028/54) there was no need to class radiodetermination as a safety service.

6.4 The Chairman agreed with that interpretation.

6.5 The delegate of the United Kingdom said that Working Group 5A had discussed the link between the two services and had noted a United Kingdom proposal to make the connection in Article N8. The matter might therefore be left until such time as the United Kingdom proposal was dealt with.

Document No. 325 was approved.

7. Second Report of Working Group 5B (Document No. 228(Rev.1))

7.1 The Chairman of Working Group 5B said that the revised document contained drafting amendments made by the Drafting Group to bring the text into line with the harmonized texts for the related frequency bands. In the Spanish text of paragraph 2, the word "definir" in the second sentence of the second sub-paragraph should read "supprimir" as in the English text. In paragraph 3, the delegates of France and Finland should be included as having reserved the right to revert to the question in Committee 5. Particular attention was drawn to the frequency band 25 010 - 25 070 kHz, on which the Working Group had reached no real concensus and had decided to refer the entire question to the Committee. The Working Group had also decided to remove the square brackets from 3453/159 in Annex 2.

7.2 The delegate of the German Democratic Republic observed that "MOD 3452A" in Annex 1 should read "ADD 3452A" in the English text.

Annex 1 was approved.

7.3 Annex 2

7.3.1 The delegate of Greece, supported by the delegate of the Netherlands, considered that the second sentence of provision 3453/159 should be deleted altogether because, in his view, stations transmitting standard frequency and time signals should not have priority over the services in the Table as far as protection from harmful interference was concerned.

7.3.2 The delegate of the USSR, supported by the delegate of Czechoslovakia, understood the provision to mean, not that standard frequency and time signals took precedence over the services in the Table but, rather, that they were on an equal footing with those services. Consequently, he considered that the second sentence should be retained and only the square brackets removed.

7.3.3 The delegate of France, supported by the delegate of Greece, expressed the view that the provision was somewhat ambiguous and proposed its replacement by a standardized footnote or similar text indicating that stations transmitting standard frequency and time signals had the same status as the services in the Table.

7.3.4 The Chairman said that if he heard no objection he would take it that the solution proposed by the French delegate was acceptable to the Committee as a whole and that the Drafting Group could be requested to deal with the matter.

It was so agreed.

7.3.5 The delegate of the United States of America said that to his recollection, which was borne out by the second paragraph of section 2 of the Working Group's report, provision 3458/164 was to have remained unchanged. He asked why the indication "(MOD)" now appeared against the provision in Annex 2 and why the words "In Region 2" had been added at the beginning of the first sentence in the absence of any agreement to that effect.

7.3.6 The Secretary of the Committee said that no substantive changes had been introduced; the frequency bands to which the provision applied had merely been added to the text and the words "In Region 2" inserted in the interests of clarity, because the footnote concerned that Region alone.

7.3.7 The delegate of Pakistan observed that provision 3460A neutralized the effect of provision 3459/165 as far as the band 84 - 86 kHz was concerned and also had the effect of removing primary status from the services listed as such in the Table and operating in the bands 72 - 84 kHz. He therefore considered that provision 3460A should be deleted, at least insofar as it related to Region 3.

7.3.8 The delegate of France endorsed the comments by the previous speaker. His delegation had very similar reservations in respect of provision 3460A, which afforded special protection to a service outside the band allocated to that service - a situation which his delegation regarded as quite irregular. As to provision 3459/165, the present text might appropriately be replaced by a standardized footnote.

7.3.9 The delegate of Finland said that the protection sought in the first sentence of footnote 3460A was covered by No. 3280 and that the second sentence was merely a repetition of No. 3244. He therefore shared the view that the footnote should be deleted altogether.

7.3.10 The delegate of Italy supported the proposal to delete footnote 3460A.

7.3.11 The Chairman said that if he heard no objection he would take it that the Committee wished provision 3459/165 to be replaced by a standardized footnote and provision 3460A to be deleted.

It was so decided.

7.3.12 The delegate of Iran requested that the name of his country be included in provision 3459/165.

7.3.13 The Chairman said that that would be done.

Annex 2, as amended, was approved.

7.4 Annex 3

7.4.1 The delegate of India, referring to provision 3461A, said that the text did not make it clear whether the coordination in question was to be carried out between Administrations themselves or through an international agency.

7.4.2 The Chairman said he would take that question up with the Drafting Group. He suggested that consideration of Annexes 3 and 4 of Document No. 228(Rev.1) should be deferred until the Committee's next meeting.

It was so agreed.

8. Participation in working groups

8.1 The delegate of France said that his delegation would welcome a ruling from the Chairman concerning delegations' participation in working groups established in accordance with No. 440 of the International Telecommunication Convention. The French delegation considered that the only relevant provision was No. 447 of the Convention, which laid down that Committees of Administrative Conferences should be composed of delegates who had so requested. Furthermore, working groups were to be convened in accordance with No. 449 of the Convention. Consequently, the French delegation wished to table a formal request to participate in the small groups set up by the Committee's various working groups, particularly in cases where it had previously taken part in the related discussions.

8.2 The Chairman said that working group Chairmen must clearly bear the spirit of the Convention in mind at all times. It was also clear that in certain cases a Chairman could, in the interests of efficiency, ask that a particular group be restricted in numbers. However, any delegation which had submitted a proposal and felt the need to take part in a working group was entitled to do so. A Chairman could not deny access to his working group to any delegation which so requested.

The meeting rose at 1710 hours.

The Secretary :

M. SANT

The Chairman :

M. HARBI

Annex : 1

ANNEX

STATEMENT BY THE DELEGATE OF INDIA

We are indeed grateful to the delegation of the Netherlands for focussing attention on some essential principles of frequency allocation. Without clarification of such fundamental aspects, this Conference may not be as successful as it ought to be. The delegation of the Netherlands has referred to aspects concerning optimum efficiency in the use of the radio frequency spectrum and the necessity to set time limits for phasing out earlier operations of certain services, to yield place for others. There are other, equally important aspects namely, those of equity of access and meaningful sharing of this resource by all the countries of the world which have inherited this common resource, which also need to be emphasized. We do not think it is any longer possible to divorce one from the other, since they are closely knit together. We are convinced that no technical consideration can be truly technical unless the allied economic and social impacts are taken into account. This has been debated in recent times in many fora and I will not go into this in further detail now.

There is, however, one important question to which I wish to draw attention, by way of illustration, on the need for clearer perception of fundamentals. Only a couple of hours ago, in one of the working groups, the possibilities of the optimum usage of one sizeable portion of the spectrum came up for detailed consideration. Mr. Chairman, many Administrations of Regions 1 and 3, principally from the developing world, expressed anxiety and support for utilizing some 850 MHz of spectrum space for up-links for broadcasting-satellite service. This appears attractive on all accounts, including an early implementation of the BSS plan of 1977 for these two Regions. From the discussion in the Working Group, it appears that such use would indeed be most efficient. However, it seems that this would not be admissible because this entire spectrum space is used on a global basis by one Administration for certain aero-mobile applications. The Group is trying to find out whether any technically compatible solutions would be possible and we sincerely hope these efforts will succeed. But it is clear that this issue has given rise to a point of great importance, which is related to the item under discussion now in this Committee. This is because, it seems that within the Frequency Table, usage by one Administration can, de facto, block access to the optimum usage of a portion of the spectrum by many other Administrations of the world. I refer to this since it gives cause for considerable concern to many developing countries and might even shake their confidence in the prudence and equity of the Table.

We are aware that in the bands below about 30 MHz global usages such as for radiolocation, standard time and frequency service, etc. are coordinated internationally by CCIR/IFRB and other international agencies. There is no such possibility or provision with regard to usage of bands above 30 MHz. This could lead to very serious limitations and many unforeseen problems in coming decades.

Since at this Conference we are trying to lay down, hopefully, new and more worthwhile and more equitable guidelines for the use of the scarce spectrum resource in the coming decades, my delegation is using this opportunity to draw the attention of Committee 5 to this particular aspect. We trust that this would be taken into account and that in its wisdom the Committee might even now insert appropriate provisions. We regard this as a matter of great importance and fundamental significance to the Table of Frequency Allocations.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 502-E
6 November 1979
Original : French

COMMITTEE 8

SUMMARY RECORD

OF THE

SIXTH MEETING OF COMMITTEE 8

(RESTRUCTURE)

Thursday, 18 October 1979, at 0900 hrs

Chairman : Mr. O. LUNDBERG (Sweden)

Subjects discussed	Document No.
1. Consideration of the report of the ad hoc Group on the Articles relating to the maritime mobile service and the land mobile service	261
2. Consideration of the report of ad hoc Group 2 on the proposals relating to accounting and operation in the maritime mobile service	266
3. Consideration of a note by Committee 7 on medical transports	254

1. Consideration of the report of the ad hoc Working Group on the Articles relating to the maritime mobile service and land mobile service (Document No. 261)

1.1 The Chairman of the ad hoc Working Group introduced the report of the Group, the Annex to which contained its conclusions with regard to Chapter NXI and on the last page notes concerning certain proposals. The report was very succinct, and he would be ready to answer any questions delegates might wish to put to him.

The Working Group had approved without change the United States proposals on Chapter NXII (land mobile service) as they appeared on page 18 of Document No. 50, but had not considered any of the proposals relating to CCITT studies.

1.2 The delegate of Italy asked in what form the Committee's report would be submitted to the Plenary Meeting.

In response to the question by the delegate of Italy, the Committee decided that :

a) its report to the Plenary would be considered first in draft from in Committee on the basis of a green working document drawn up in a similar way to Document No. DT/71 with the revised texts spelled out in the Annex;

b) the adopted report would be transmitted to Committee 9 and the Plenary in a white document;

c) the texts contained in the Annex and destined for inclusion in the Final Acts would be transmitted to the Editorial Committee for presentation to the Plenary in the blue series for reading and approval;

d) the report of the Committee should not be placed on the agenda of the Plenary.

1.3 The Chairman proposed that the Committee should consider Document No. 261 Article by Article.

It was so decided.

1.4 Article N51

Provisions 7663, 7664 and 7666

The provisions were approved.

1.5 Article N52

1.5.1 Provisions 7694 and 7698

The provisions were approved.

1.5.2 Provision 7695

The Chairman said that no proposal had been made and drew delegates' attention to Note 1 (page 10).

1.6 Article N54/21

Title

Proposal G/53C/735(Corr.1) was approved.

Provisions 7836, 7837, 7840, 7841, 7842

The provisions were approved.

1.7 Article N55

1.7.1 Provision 7867

The provision was approved, with a correction to the English text of proposal ARG/149/198.

1.7.2 Provisions 7872, 7887 and 7889

The provisions were approved.

1.8 Article N56

1.8.1 Provisions 7919, 7920, 7922, 7923 and 7924

The provisions were approved.

1.8.2 Provision 7925

The Chairman stated that the United States proposal had been withdrawn, but that United Kingdom proposal G/53C/749 had been approved, on condition that it was brought into harmony with provision 7349 and that in provision 7925 a reference to provision 6214 was added, as had been done in the case of provision 7349.

The provision was approved, with the amendments proposed by the United Kingdom delegation.

1.8.3 Provision 7926

The provision was approved, the text in square brackets being deleted.

1.8.4 Provisions 7945, 7946, 7946.1, 7947

The Chairman invited members of the Committee to refer to Note 4, which stated that the proposals raised substantive issues which were outside the terms of reference of Committee 8.

1.8.5 Provision 7949

The Chairman invited members of the Committee to refer to Note 5, which said that it was considered that the reminders in a number of the proposals of Zaire to update certain provisions were adequately covered by the proposals of the United Kingdom.

In the light of that Note, provision 7949 was approved.

1.8.6 Provisions 7954, 7955, 7957, 7959-7961

The provisions were approved.

1.8.7 Provision 7960

The Chairman drew attention to Note 6, which stated that the proposals were consequent on decisions on agenda item 2.8 regarding CCITT studies and had therefore been deferred.

1.8.8 Provisions 7962, 7963 and 7964

The proposals of the United Kingdom and the United States were approved.

1.8.9 Provision 7965

The Chairman drew the attention of members of the Committee to Note 7, which stated that the internal amendments of No. 7965 proposed by the United States of America had been accepted by the Working Group, subject to the addition of a new phrase at the end of the provision to read : "notwithstanding No. 8448".

The provision was approved.

1.8.10 Provisions 7966, 7967, 7968, 7969, 7970 and 7971

The proposals of the United Kingdom to debate the above provisions being accepted, the other proposals become unnecessary.

1.9 Article N57

1.9.1 Provision 8032

The provision was approved.

1.9.2 Provision 8039

The Chairman said that it had not been possible to consider the proposal at the present stage because it appeared to depend on a decision of another Committee.

1.9.3 Provisions 8040 and 8041

The Chairman said that the United Kingdom proposal on the subject had been approved, but that the Philippine proposals appeared to be outside the terms of reference of Committee 8.

1.9.4 Provision 8045

The provision was approved.

1.9.5 Provision 8048

The United Kingdom proposal on the provision was approved. As far as the Tanzanian proposal was concerned, the Working Group did not see what would be gained by the amendments. As regards the proposal by Zaire, the Chairman referred members of the Committee to Note 5.

1.9.6 Provisions 8049 and 8050

The Chairman said that the comments he had just made on provision 8048 applied also to those two provisions.

1.9.7 Provisions 8052, 8062, 8063, 8069, 8074

The provisions were approved, with due reference to Note 5 in the case of provision 8063.

1.9.8 Provision 8077

The Chairman said that it had not been possible to consider the proposal at the present stage (see Note 8).

1.9.9 Provisions 8084, 8097, 8100, 8104, 8105, 8109, 8110, 8111, 8112, 8114, 8116, 8117, 8118, 8119, 8124, 8125, 8128

The provisions were approved.

1.9.10 Provisions 8129-8188

The provisions were approved.

1.9.11 Provisions 8192-8204

The delegate of Argentina proposed that, in the case of provisions 8192-8204, the ad hoc Group's conclusions should be amended to refer in column 5 to Note 8 rather than Note 4.

With that amendment, the provisions were approved.

1.9.12 Provisions 8207-8254

The provisions were approved.

The representative of the International Transport Workers Federation asked whether the word "mobile" should be kept in the English text of provision 8241.

The delegate of Denmark thought that the words "mobile stations" should be replaced by "ship stations".

1.10 Article N58

1.10.1 The Chairman drew the attention of members of the Committee to Note 6, which stated that the proposals were consequent on decisions on agenda item 2.8 regarding CCITT studies and had therefore been deferred.

1.11 Article N59

1.11.1 Provisions 8391, 8399, 8399.1 and 8401

The provisions were approved.

1.12 Articles N59 + N62

United States proposal USA/50/787 was approved.

1.13 Article N59

United States proposals USA/50/797, 798 and 799 were approved.

1.14 Article N60

1.14.1 Provision 8423

The delegate of Norway, referring to Note 11, said that provision 7435 should also be brought into line with provision 8423.

The proposal was approved.

1.14.2 Provisions 8424-8528

The provisions were approved.

1.15 Article N62

1.15.1 Provisions 8671-8816

The Chairman reminded the Committee that the delegate of Argentina had proposed replacing Note 4 by Note 8.

The provisions were approved.

1.16 Article N62A

The Chairman drew the attention of members of the Committee to Note 6, which stated that the proposals were consequent on decisions on agenda item 2.8 regarding CCITT studies and had therefore been deferred.

1.17 The Chairman invited members of the Committee to approve the United States proposal on Chapter NXII (land mobile service) as they appeared in Document No. 50 (page 18).

1.17.1 The delegate of the United Kingdom, who had reserved the right to raise the question of the entire deletion of Chapter NXII, associated himself with the position of the United States delegate, whose proposal had been supported by the ad hoc Working Group.

1.17.2 The delegate of Norway also supported the United States proposal. He wished to suggest the following amendments to Article N68, provisions 9078 and 9079 :

In provision 9078, the first sentence and the words "for this purpose" at the beginning of the second sentence should be deleted. The paragraph would then read as follows : "The / land / mobile station may call the land station only when it comes within the service area of the latter, that is to say, that area within which, by using an appropriate frequency, the / land / mobile station can be heard by the land station."

In provision 9079, he proposed that the word "however" at the beginning of the paragraph should be deleted.

1.17.3 The delegate of the United Kingdom supported the proposal by the delegate of Norway, which was agreed.

The Committee approved the report of the ad hoc Working Group as amended.

2. Consideration of the report of ad hoc Group 2 on the proposals relating to accounting and operation in the maritime mobile service (Document No. 266)

2.1 The Chairman of ad hoc Working Group 2 said that the Group had met twice and that its conclusions were given in the four Annexes to Document No. 266, which indicated that a number of Articles, Appendices, Resolutions and Recommendations Mar could be deleted now that the ad hoc Group had duly aligned the texts and made the necessary drafting amendments. Stressing the importance of avoiding any duplication between CCITT Recommendations and the provisions of the new Radio Regulations, he drew particular attention to points a) and b) in Annex 4 in Document No. 266. He thanked the members of the Group for the spirit of cooperation they had shown and the Secretary of the Committee for his excellent work.

2.2 Annex 1

2.2.1 The delegate of the USSR pointed out that Article 39A applied to different types of service, whereas Article N39B related only to the maritime mobile service. He referred to the work of the Expert Group and suggested that the provisions of Article N39A should be divided among the Articles dealing with the land and aeronautical mobile services. Article N39B should be included in the chapter on the maritime mobile service. He did not think it advisable to include all the above-mentioned services in the same chapter.

2.2.2 The delegate of Norway said that the experts had endeavoured to group the points common to the different services in a single chapter. He was in favour of maintaining the presentation of Article N39A and the contents of footnote 1) of Article 39B as proposed by the ad hoc Group.

2.2.3 The delegate of Denmark said that Article N39A was essentially intended to define the order of priority of communications, which was a great advantage. Article N39B dealt only with public correspondence in the maritime mobile service, but it was clear that the provisions of the Article might in the future be of concern to other services also.

2.2.4 The delegates of the Federal Republic of Germany, Greece, Argentina, Cuba and the German Democratic Republic supported the proposal by the delegate of the USSR and stressed that to divide the provisions of Article N39A among the sections of the new Regulations which dealt with the different services, would facilitate the work of future conferences devoted to one or other of those services.

2.2.5 Following a discussion in which the delegates of Brazil, Norway, Argentina and Spain took part, the delegate of the USSR proposed that a decision on where to place the provisions of Article N39A in the new Radio Regulations should be postponed.

2.2.6 The Chairman agreed with that view and asked the USSR delegation to consult with the other delegations which had spoken on the Article so that the question could be decided at the next meeting of Committee 8.

It was so agreed.

2.2.7 With regard to Article N39B, the delegate of the United Kingdom pointed out that the relevant CCITT Recommendations stipulated that the provisions relating to public correspondence applied equally to the maritime mobile-satellite service.

2.2.8 It was accordingly decided to add the words "and the maritime mobile-satellite service" after the words "in the maritime mobile service" in the title of Article N39B.

It was also decided to place the figure "1)" after the title of the Article, which would refer to a footnote reading "1) See Resolution No. /AA/".

Sections II, III, IV and V of Annex 1 were approved.

Subject to the postponed decision concerning Article N39A and to the amendments set forth above, Annex 1 was approved.

2.3 Annex 2

2.3.1 At the suggestion of the delegate of Canada, supported by the delegate of the United Kingdom, it was decided that the words "in accordance with Resolutions Nos. Mar2 - 23 and Mar2 - 22" in preambular paragraph a) should be replaced by the words "in accordance with a request by the Maritime Conference 1974".

2.3.2 On the proposal of the delegate of the United Kingdom, it was decided that the words "in accordance with Resolutions Nos. Mar2 - 23 and Mar2 - 22 which can now be abrogated" in preambular paragraph b) should be replaced by the words "in accordance with the pertinent Resolutions of the Maritime Conference, 1974 which are now abrogated".

2.3.3 Following a remark by the Deputy Secretary-General, it was agreed that, for the time being, the words at the end of the paragraph "which are now abrogated" should be placed in square brackets.

2.3.4 The delegate of Argentina hoped it would be specified that the two Resolutions in question were abrogated as from the present Conference.

2.3.5 The Deputy Secretary-General agreed with the principle implied by the Argentine delegate and said that the Editorial Committee would take account of it when finalizing the texts concerned.

2.3.6 At the request of the delegate of Spain, some small drafting amendments were made to the Spanish version of Annex 2.

There being no further observations, Annex 2, with the above-mentioned amendments, was approved.

2.4 Annex 3

The draft Resolution relating to the eventual abolition of mobile station charges for public correspondence in the maritime mobile service was approved with minor drafting changes and with the deletion of the alpha-numerical references in paragraph 3.

2.5 Annex 4

2.5.1 The Deputy-Secretary-General pointed out that the Manual already comprised a number of source materials including the relevant CCITT Recommendations. He therefore proposed that paragraph 1 should read : "There is a need to continue to include ...".

It was so agreed.

2.5.2 The delegate of Canada drew attention to an editorial error in paragraph 2 b) where Chapter NIX should read Chapter NIXA.

2.5.3 The delegate of the United Kingdom said that in paragraph 2 a) N48 and N 58 should be placed in square brackets and the word "and" should be inserted after the words "N69 - 72", and the delegate of Canada said that N66 should also be included in square brackets.

2.5.4 The Chairman said that the note in Annex 4 would be considered further at the Committee's next meeting after a decision had been taken on the location of the Articles in question.

It was agreed to delete Appendices 21, 21A and 22.

It was further agreed to delete Resolutions Nos. Mar2 - 22 and Mar2 - 23 Recommendation No. Mar2 - 18.

3. Consideration of a note from Committee 7 regarding medical transports (Document No. 254)

3.1 The Chairman, referring to Document No. 254, noted that Committee 7 had adopted a set of provisions covering the subject of medical transports and those provisions had no consequential effects on the Articles already adopted by Committee 8.

Finally, he invited the delegations of the United Kingdom, France and Spain each to nominate a member to form a small group to assist in preparing the work of the Committee for submission to Committee 9 and to be available to advise that Committee.

The meeting rose at 1205 hours.

The Secretary :

J. PELEGRI

The Chairman :

O. LUNDBERG

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 8

SUMMARY RECORD

OF THE

SEVENTH MEETING OF COMMITTEE 8

(RESTRUCTURE)

Tuesday, 23 October 1979, at 0905 hrs

Chairman : Mr. O. LUNDBERG (Sweden)

Subjects discussed		Document No.
1.	Consideration of draft Article N39A	266 (Annex 1), DL/107
2.	Consideration of draft Article N39B, draft Resolution No. /AA/ and draft Note to Committee 7	266 (Annexes 1, 2 and 4), DL/107
3.	Consideration of proposals URS/63A/21 and URS/63A/22	63A
4.	Consideration of remaining proposals relating to Resolutions and Recommendations	210(Add.1), 229
5.	Consideration of the second report of Committee 8	DT/71 and Add.1
6.	Consideration of the third report of Committee 8	DT/93 and Add.1
7.	Consideration of the Summary Records of the second and third meetings	289, 290
8.	Note from the Vice-Chairman of Committee 7 to the the Chairman of Committee 8	277

1. Consideration of draft Article N39A (Annex 1 to Document No. 266, DL/107).

1.1 The Chairman recalled that the Committee had been unable to agree on the appropriate place(s) for draft Article N39A - priority of communications. The suggestion of the consultation group which had considered the issue was that the text on page 2 of Document No. DL/107 should be included, as Article N48, in the chapter of the Radio Regulations relating to the aeronautical mobile service, whereas the text of draft Article N39A (Annex 1 to Document No. 266) should be included, as Article N58, in the chapter relating to the maritime mobile service. If he heard no objection, he would take it that the principle of including the Article in both chapters was acceptable to the Committee.

It was so agreed.

Draft Article N48 (Document No. DL/107, page 2)

1.2 At the suggestion of the delegate of the United Kingdom, supported by the delegates of the Federal Republic of Germany and France, it was agreed to restore the original text of item 6 of the list of priorities, namely, "Communications relating to the navigation, movements and needs of ships, and weather observation messages destined for an official meteorological service".

Draft Article N48, as amended, was approved.

Draft Article N39A (Annex 1 to Document No. 266)

1.3 Approved subject to renumbering as Article N58 and replacement of the words "the mobile services" in the heading and the preamble by the words "the maritime mobile service and the maritime mobile-satellite service".

2. Consideration of draft Article N39B, draft Resolution No. [AA 7] and draft Note to Committee 7 (Annexes 1, 2 and 4 to Document 266, DL/107)

2.1 The Chairman observed that certain matters, which he now proposed to take up, had been left pending from the Committee's previous meeting, during which Annexes 1, 2 and 3 to Document No. 266 had been considered and, for the most part, approved.

Draft Article N39B (Annex 1 to Document No. 266)

2.2 The Chairman observed that the words "and the Protocols annexed thereto" in Section I.1 of draft Article N39B had been placed between square brackets at the request of the Deputy Secretary-General. He had now been advised that those words should be deleted altogether.

It was so agreed.

2.3 The Chairman drew attention to the suggestion by the consultation group that Article N39B should be placed at the end of the chapter concerning the maritime mobile service (Document No. DL/107, page 2).

The suggestion was approved.

2.4 The delegate of the United Kingdom observed that, as a consequence of the Committee's decision, the Article would have to be renumbered Article N62A.

2.5 The delegate of Norway requested that mention should be made of the consultation group's opinion that it would be a good and practical solution in future to keep all provisions covering public correspondence, charging and accounting in a common chapter for the mobile services, even if at present the Article on public correspondence, charging and accounting should be placed at the end of Chapter NX for the maritime mobile service.

The Chairman said that that opinion would be reflected in the summary records of the meeting.

Draft Resolution No. / AA 7 (Annex 2 to Document No. 266)

2.6 The Chairman drew attention to the consultations group's suggestion on page 2 of Document No. DL/107 that the phrase "seeking to harmonize to the maximum extent possible all such provisions for the mobile services in question" should be added at the end of the invites paragraph of the draft Resolution.

It was so agreed.

Draft Note from the Chairman of Committee 8 to the Chairman of Committee 7 (Annex 4 to Document No. 266)

2.7 The Chairman said that, as a result of the decisions just taken by the Committee, the numbers "N48, N58" should be deleted from paragraph 2 a) of the draft Note, and paragraph 2 b) should be altered to read : "the addition of Article N62A (Public correspondence in the maritime mobile service and the maritime mobile-satellite service) at the end of Chapter NXI".

The draft Note in Annex 4 to Document No. 266, as amended, was approved.

3. Consideration of proposals URS/63A/21 and URS/63A/22 (Document No. 63A)

3.1 The Chairman drew attention to the USSR's proposal URS/63A/21 (Document No. 63A, page 5) to place Article N3 at the end of Chapter NI.

3.2 The delegates of the United States, the German Democratic Republic and Australia supported the proposal.

3.3 The delegate of France said that if Article N2 was not to be moved, his delegation would prefer Article N3 to remain in its present place.

3.4 The Chairman said that if he heard no objection he would take it that a majority of delegations was in favour of moving Article N3 to the end of Chapter NI.

It was so agreed.

3.5 The representative of the IFRB observed that once Article N3 had been removed from Chapter NII, the latter's title would no doubt require modification.

3.6 The delegate of the United Kingdom said that it did not appear to be standard practice to give a title to chapters which contained only one article. Consequently, he proposed that the title of Chapter NII should be deleted.

It was so decided.

3.7 The Chairman invited the Committee to consider proposal URS/63A/22, which sought to transfer No. 3281 to Chapter NVIII as a new Article N33A entitled "Radio astronomy service".

3.8 The delegate of India, supported by the delegate of the United Kingdom, observed that the question of an article on radio astronomy was under consideration in Committee 5. Accordingly, it would not be appropriate to take a decision on the Soviet Union's proposal at the present stage.

3.9 The delegate of the USSR considered that the most appropriate course would be to draw Committee 5's attention to No. 3281, which should be taken into account when a new article on radio astronomy was drawn up by that Committee.

3.10 The Chairman said that if the USSR delegation would undertake to raise the issue in Committee 5 at the appropriate time, there might be no need for Committee 8 to take any further action at the present stage.

It was so agreed.

4. Consideration of remaining proposals relating to Resolutions and Recommendations (Documents Nos. 210(Add.1) and 229)

Draft Recommendation No. /AA/ (Document No. 229, page 3)

4.1 The Chairman recalled that approval of the draft Recommendation had been deferred until the Committee had dealt with all the questions arising from CCITT studies. If he heard no objection he would take it that the principle of the draft Recommendation was acceptable to the Committee.

It was so agreed.

4.2 Following suggestions by the delegates of the USSR and the United States, it was decided to substitute the word "revise" for the words "undertake substantive revision of" in the recommends paragraph.

4.3 At the suggestion of the delegate of Argentina, supported by the delegates of Brazil, Nigeria and Chile, it was decided to alter the instructs the Secretary-General paragraph to read :

"to communicate the text of this Recommendation to ICAO and IMCO and to request the attention of these organizations to a study of the material contained in Chapters NX and NXI respectively with a view to assisting Administrations in their preparations for that Conference".

Draft Recommendation No. /AA/, as amended, was approved.

Deletion of Resolutions and Recommendations (Addendum No. 1 to Document No. 210)

4.4 The Chairman drew attention to the Resolutions and Recommendations listed in Addendum No. 1 to Document No. 210 in respect of which a decision had not yet been taken.

It was decided to delete Resolutions Nos. Mar2 - 16 and Sat 10 and Recommendations Nos. Mar 2, Spa2 - 14 and Mar2 - 21.

Proposed draft Resolutions and Recommendations (Addendum No. 1 to Document No. 210)

4.5 The Chairman said that draft Resolution No. /ZA/ proposed by the United Kingdom had already been dealt with and that draft Resolution No. /AC/ proposed by Australia was not for Committee 8 to consider. Similarly, draft Recommendation No. /CC/ proposed by Argentina should be taken up in either Committee 5 or Committee 7 rather than in Committee 8. Consequently, the Committee had now completed consideration of the existing and new texts allocated to it in Addendum No. 1 to Document No. 210.

5. Consideration of the second report of Committee 8 (Document No. DT/71 and Addendum No. 1)

5.1 The Chairman proposed that the following sentence should be added to paragraph 2 of the second report (Document No. DT/71, page 1) :

"The General Secretariat is authorized to allocate blocks of spare numbers at the end of each article and within Article 1 also at the end of sections, in accordance with the foreseeable need in each case".

It was so decided.

5.2 Following a short exchange of views concerning the desirability of commencing each Chapter and Article of the Radio Regulations with an even number, during which the delegate of the United States said that his delegation's reaction to the idea was negative whereas the delegate of Norway said that he favoured such a system, the Chairman suggested that the principle retained by the Group of Experts should be approved, since the even numbering method did not appear to command a great deal of support.

It was so agreed.

5.3 Following a comment by the delegate of Norway concerning paragraph 3, the Chairman suggested that the second sentence of the paragraph should be deleted.

It was so decided.

The draft second report of Committee 8, as amended, was approved.

5.4 The Chairman invited the Committee to consider the Articles reproduced in the Annex to Document No. DT/71. He said that the ADD proposals left aside as pending were now to be disregarded, as they had been dealt with by Committee 7; the pending MOD proposals were covered in the Annex to Addendum No. 1 to the document.

5.5 The delegate of India, referring to Article N37, said that the section entitled "Safety Signal and Messages" was numbered II in the Addendum to Document No. DT/71, whereas it bore the number III in documentation produced elsewhere.

5.6 The Chairman said that the attention of Committee 9 would be drawn to that point. There being no further comments on the texts reproduced in the Annexes to Document No. DT/71 and its Addendum, he stated that the contents of those two Annexes would be transmitted to Committee 9; the report proper would be reissued as an official white document addressed to the Plenary Meeting.

6. Consideration of the third report of Committee 8 (Document No. DT/93 + Add.1)

6.1 The Chairman proposed that the decisions taken earlier in the meeting should be incorporated in the final version of the report. That would involve changing the opening words of the first sentence to "At its fourth, fifth, sixth and seventh meetings, ..." and revising paragraph 1 to read "Adopted the revision of Articles N40-N46, N48-N62, N65 and N68". The letter "N" should, of course, be inserted before the numbers of all the Articles mentioned.

It was so agreed.

6.2 Paragraphs 1 to 5

Approved.

6.3 Paragraph 6

Approved, subject to the replacement of "/39B/" by "N62A".

6.4 Paragraph 7

Approved.

6.5 Paragraph 8

6.5.1 The delegate of the USSR observed that, since the draft Resolution was the outcome of a draft Recommendation of the CCITT which might not be ultimately adopted in its existing form and since the whole subject of the abolition of mobile station charges for public correspondence in the maritime mobile service had been referred to the CCITT, it might be inappropriate to propose a specific WARC Resolution on the subject.

6.5.2 The Chairman said that the purpose of the draft Resolution was to endorse the CCITT draft Recommendation concerned, with specific emphasis on the aspect in question.

6.5.3 The delegate of the United Kingdom supported that view. The date for the abolition of charges had been agreed upon after considerable debate and compromises, and maritime countries attached great importance to the specific endorsement of WARC-79 on that matter.

6.5.4 The delegate of Norway supported the views of the preceding speaker.

The use of the adjective "eventual" in paragraph 8 was not clear and he suggested that it be deleted.

After a brief discussion, it was decided to retain the word "eventual" in the English text and to align the French and Spanish versions accordingly.

Paragraph 8 was approved, subject to the above remarks.

6.6 Paragraphs 9 and 10

Approved.

6.7 The Chairman proposed that a new paragraph 11 be added, reading "Approved the proposal URS/62A/21 to move Article N3 to the end of Chapter 1 and to delete the old title of Chapter 2".

It was so decided.

6.8 The Chairman said that the square brackets should be removed from the last sentence of the report and that the words "(See Annex)" should be deleted.

6.9 The delegate of Cuba said he was concerned by the decision to delete Articles N63 and N64 relating to the authority of the land mobile services. His delegation considered that the conditions for those services should be specified by analogy to those for the maritime and aeronautical services. Perhaps that could be done by amplifying provision 8579 in Article N65.

6.10 The Chairman observed that the substantive discussion on proposals had been concluded and that the report was concerned with decisions only. The Cuban delegate's statement would be mentioned in the summary record.

He invited the Committee to consider the Annex to Document No. DT/93.

6.11 Article N40

Approved, subject to drafting changes in the English text of provisions 7110, 7141 and 7164.

6.12 Articles N42, N43, N44 and N45

Approved.

6.13 Article N46

6.13.1 The delegates of Norway and the United Kingdom suggested that the term "by an aircraft station" be substituted for "from aircraft stations" in provision 7349.

6.13.2 The delegate of France suggested that the expression "(Aeronautical)" at the end of provision 7350 be replaced by "(Section VI, Aircraft Stations)".

Article N46 was approved as amended.

6.14 Article N48

The Chairman said that the text on page 16 of the document should be replaced by that of Document No. DL/107, approved earlier during the meeting.

6.15 Article N49

Approved, subject to a drafting amendment to the English text of provision 7523.

6.16 Article N50

Approved, subject to a drafting amendment to the English text of provision 7562.

6.17 Articles N51, N52 and N53

Approved.

6.18 Article N54

Approved, subject to drafting changes in the English text of provisions 7836, 7837 and 7841.

6.19 Article N55

In reply to a question by the delegate of the USSR concerning the use of the term "Greenwich Mean Time (G.M.T.)" in provision 7866, the delegate of the United Kingdom said that the ad hoc Working Group had concluded that the substitution of the term "Universal Coordinated Time" for "Greenwich Mean Time" was a matter for Committee 9.

Approved, on that understanding.

6.20 Article N56

6.20.1 The Chairman said that the words "a ship station" should be substituted for "ship stations" in provision 7925, by analogy with the decision taken on provision 7349. The expression "(Maritime)" should be deleted from the reference to Appendix 11 in provision 7926 and in provision 7960 the references to Articles N69 and N70 should be deleted and replaced by Articles N59, N60, N62 and N62A.

6.20.2 In reply to a query by the delegate of the USSR concerning the difference between an aircraft station and a station on board an aircraft, the delegate of the United Kingdom pointed out that, although the definition of an aircraft station in provision 3078 was "A mobile station in the aeronautical mobile service on board an aircraft or an air-space vehicle", the stations referred to in Section III of Article N56 could communicate with the maritime mobile service and could thus, so to speak, cross over from one service to another. The wording concerned had been deliberately chosen to avoid a hard-and-fast decision on whether an aircraft in the maritime mobile service was an aircraft station or a ship station, and it would be best not to change it.

6.20.3 The delegate of the Netherlands pointed out that the Committee had changed the term "stations on board aircraft" to "aircraft stations" in provision 7317 of Article N45.

After a brief discussion, it was decided to reverse that decision and to retain the wording used in Article N56.

6.20.4 The delegate of Argentina observed that, to be consistent with that decision, the words "or other vehicle carrying the mobile station" should be deleted from provision 7108, since that phrase clearly related to spacecraft.

6.20.5 The delegate of the United Kingdom said that his delegation had originally proposed the deletion of the phrase, but that attention had been drawn to the possible existence in the aeronautical mobile service of mobile stations other than those defined in Article N1. It had therefore been decided to leave the words in the provision.

6.20.6 In reply to a question by the delegate of the USSR, the delegate of the United Kingdom said that his delegation had proposed the deletion of provisions 7967 to 7971 because they duplicated the information already comprehensively set out in provisions 7959 and 7960.

Article N56 was approved.

6.21 Article N57

Approved.

6.22 Article N58

The Chairman said that the text on page 79 of the document should be replaced by one in Document No. 266 approved earlier during the meeting.

6.23 Article N59

Approved.

6.24 Article N60

6.24.1 In reply to a question by the delegate of France, the delegate of the United States said that the purpose of provision 8448A was to permit for aircraft stations the shorter time interval required in the aeronautical mobile service. The provision was necessary because of the interface with the maritime mobile service, in which the required interval was longer.

6.24.2 In response to a comment by the delegate of the United Kingdom, the Chairman suggested that the wording of provision 8448A be aligned to that of provision 7965 and that the text should end with the words "notwithstanding No. 8448". The expression "(See No. 8448)" would of course be deleted.

Approved as amended.

6.25 Articles N61 and N62

Approved.

6.26 Article 62A

The Chairman said that page 113 of the document would contain the text of Article 62A approved earlier during the meeting.

6.27 Articles N63 and N64

Approved.

6.28 Article N56

6.28.1 The delegate of Venezuela drew attention to a substantive error in provision 8980. Receiving apparatus obviously could not radiate energy.

6.28.2 The Chairman said he would send a note to the Chairman of Committee 4 drawing attention to that anomaly.

Approved on that understanding.

6.29 Articles N66, N67 and N68 and pages 117 and 118

Approved.

6.30 Addendum to Document No. DT/93

6.30.1 The Chairman said that the document contained a draft Recommendation, the text of Article N62A, Resolutions Nos. /AA/ and /AB/ and a draft note that he proposed to send to the Chairman of Committee 7. He suggested that the question of the words in square brackets in Resolution No. /AA/ be referred to Committee 9.

6.30.2 The representative of the IFRB said it had been drawn to his attention that it would be desirable to retain the references in Resolution No. /AB/ for the convenience of the reader.

6.30.3 The Chairman suggested that the references should take the form of footnotes.

The Addendum was approved as amended.

Document No. DT/93 and Addendum was approved as amended.

6.31 The Chairman said that Committee 8 had completed its work on the Re-Arrangement of the Radio Regulations and on the CCITT studies relating to public correspondence. Its remaining work would be confined to amendments consequential on the decisions of other Committees and would be largely editorial. The secretariat should be able to help it to prepare all those amendments so that they could be dealt with quickly at a short meeting towards the end of the Conference.

7. Consideration of the summary records of the second and third meetings (Documents Nos. 289, 290)

7.1 Document No. 289

The representative of the IFRB said that he had submitted a corrigendum to the record of his statement in section 3.20 (see Corrigendum No. 1 to Document No. 289).

Approved, subject to that statement.

7.2 Document No. 290

The delegate of France, said that a further line should be added to paragraph 3.6 (see Corrigendum No. 1 to Document No. 290).

Approved as amended.

8. Note from the Vice-Chairman of Committee 7 to the Chairman of Committee 8 (Document No. 277)

The Chairman said that the note in question had been sent for information, advising Committee 8 that Committee 7 might approve provisions which might call for consequential changes in its texts.

The Committee took note of Document No. 277.

The meeting rose at 1210 hours.

The Secretary :
J. PELEGRI

The Chairman :
O. LUNDBERG

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 504(Rev.1)-E
10 November 1979
Original : English

COMMITTEE 7

Sweden, Switzerland

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE N37

Section IV

ADD

Use of radiocommunication for the safety of ships and aircrafts of states not parties to an armed conflict

ADD 6895

For the purpose of announcing and identifying ships and aircrafts of states not parties to an armed conflict referred to below as neutral transports a complete transmission of the urgency signals described in Nos. 6873 and 6874 is followed by the addition of the single group "NNN" in radiotelegraphy and by the addition of the single word "neutral", pronounced as in French, "neutral" in radiotelephony.

ADD 6896

The frequencies specified in No. 6878 may be used by neutral transports for the purpose of self-identification and to establish communications. As soon as practicable, communications shall be transferred to an appropriate working frequency.

ADD 6897

The use of the signal as described in 6895 indicates that the message which follows concerns a neutral transport. The message shall convey the following data :

a) the call sign or other recognized means of identification of the neutral transport;

b) position of the neutral transport;

c) number and type of neutral transports;

d) intended route;

e) estimated time en route and of departure and arrival, as appropriate;

f) any other information, such as flight altitude, radio frequencies guarded, languages and secondary surveillance radar modes and codes.

ADD 6898

The provisions of Section 1 of this Article shall apply as appropriate to the use of the urgency signal by neutral transports.

ADD 6899

The identification and location of neutral ships may be effected by means of appropriate standard maritime radar transponders.

ADD 6900 The identification and location of neutral aircraft may be effected by the use of the secondary surveillance radar (SSR) system specified in Annex 10 to the Chicago Convention on International Civil Aviation dated 7 December 1944, which is periodically brought up to date. The SSR mode and code reserved for the exclusive use of neutral aircraft must be defined by the parties to the conflict or by one of the parties to the conflict, acting by common agreement or individually, in accordance with procedures to be recommended by the International Civil Aviation Organization.

ADD 6901 The use of the provisions of this Section by neutral transports is optional; however, if they are used, the provisions of Articles N34 and N35 apply as appropriate.

SUP S/15/376

SUP SUI/76/85...88 and 87A

SUP Recommendation No. Mar2 - 17

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 504-E
6 November 1979
Original : English

COMMITTEE 7

Sweden, Switzerland

PROPOSALS FOR THE WORK OF THE CONFERENCE

ARTICLE N37

Section IV

ADD

Use of radiocommunication for the safety of ships and aircrafts of states not parties to an armed conflict

ADD 6895 For the purpose of announcing and identifying neutral transports which are protected under the 1949 Geneva Conventions, a complete transmission of the urgency signals described in Nos. 6873 and 6874 is followed by the addition of the single group "NNN" in radiotelegraphy and by the addition of the single word "neutral", pronounced as in French, "neutral" in radiotelephony.

ADD 6896 The frequencies specified in No. 6878 may be used by neutral transports for the purpose of self-identification and to establish communications. As soon as practicable, communications shall be transferred to an appropriate working frequency.

ADD 6897 The use of the signal as described in 6895 indicates that the message which follows concerns a protected neutral transport. The message shall convey the following data :

a) the call sign or other recognized means of identification of the neutral transport;

b) position of the neutral transport;

c) number and type of neutral transports;

d) intended route;

e) estimated time en route and of departure and arrival, as appropriate;

f) any other information, such as flight altitude, radio frequencies guarded, languages and secondary surveillance radar modes and codes.

ADD 6898 The provisions of Section 1 of this Article shall apply as appropriate to the use of the urgency signal by neutral transports.

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ADD 6900 The identification and location of neutral aircraft may be effected by the use of the secondary surveillance radar (SSR) system specified in Annex 10 to the Chicago Convention on International Civil Aviation dated 7 December 1944, which is periodically brought up to date. The SSR mode and code reserved for the exclusive use of neutral aircraft must be defined by the parties to the conflict or by one of the parties to the conflict, acting by common agreement or individually, in accordance with procedures to be recommended by the International Civil Aviation Organization.

ADD 6901 The use of the provisions of this Section by neutral transports is optional; however, if they are used, the provisions of Articles N34 and N35 apply as appropriate.

SUP S/15/376

SUP SUI/76/86...88 and 87A

SUP Recommendation No. Mar2 - 17

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 505-E
6 November 1979
Original : English

COMMITTEE 4

NOTE BY THE CHAIRMAN OF WORKING GROUP 4C

Working Group 4C has agreed on the following note, which it requests the Chairman of Committee 4 to transmit to the Chairman of Committee 5 :

"NOTE FROM THE CHAIRMAN OF COMMITTEE 4 TO THE CHAIRMAN OF COMMITTEE 5

Subject : Your request in Document No. 423

Committee 4 has considered the question whether the limitation to 50 W mean power currently specified in footnote 3507/211 and applying to stations of the fixed service operated in the band 6 200 to 6 525 kHz allocated exclusively to the maritime mobile service is adequate. The conclusions given below are based on the following two considerations :

- possibility of sharing with the maritime mobile service in general, and
- possibility of sharing with the maritime mobile service on the carrier frequency 6 215.5 kHz (channel 606 : 6 215.5 to 6 218.6 kHz; see Appendices 15 Mar 2 and 17 Rev.) which is designated to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply in the area specified in No. 6648/1351F (see also footnote 3508/211A).

Committee 4 concludes :

1. that a limitation to 50 W mean power for fixed stations is, in general, adequate for sharing with the maritime mobile service in the band 6 200 to 6 525 kHz, but

2. that the operation of fixed stations in the band 6 215.5 to 6 218.6 kHz should be excluded in order to give the necessary protection to the carrier frequency 6 215.5 kHz the use of which relates to the safety of life at sea.

If Committee 4 were posed a similar question concerning footnote 3504/209 the answer would be in principle the same as given in 1. and 2. above."

E. GEORGE
Chairman of Working Group 4C

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 506-E
6 November 1979
Original : Spanish

COMMITTEE 5

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

In the discussion of the frequency bands 160 - 285 kHz for Region 1, some delegations proposed the inclusion of a footnote limiting the effective radiated power of the broadcasting stations of Region 1 in these bands in the direction of any previously notified radionavigation stations (see CAN/60B/230).

In the initial discussions, the Working Group failed to reach agreement on this proposal and decided to recommend that Committee 5 should consult Committee 4 on the various aspects of a footnote for broadcasting stations in Region 1 in order to protect the services operating in Regions 2 and 3 in accordance with the Table (see Document No. 388, paragraph 3.2). Subsequently, the text of the footnote submitted to Committee 5 (Document No. DT/132) was rejected, with the result that the matter was referred back to Working Group 5BA, although the principle of consultation had been approved by that Group.

Further discussion by Working Group 5BA failed to yield a consensus on the inclusion of the footnote, or on the consultation of Committee 4. A poll showed that 29 delegations were in favour of consulting Committee 4 while 28 were opposed to such a step.

It was therefore decided to refer the matter back to Committee 5 for a final decision.

L. COOK
Chairman of Working Group 5BA

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 507-E
6 November 1979
Original : English

COMMITTEE 4

NOTE BY THE CHAIRMAN OF WORKING GROUP 4C

Working Group 4C has agreed on the following Note, which it requests the Chairman of Committee 4 to transmit to the Chairman of Committee 6 :

"NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

Subject : Your request in Document No. 369 concerning Appendix 1

The comments from Committee 4 on technical matters involved in Appendix 1 are contained in the Annex.

Annex : 1"

E. GEORGE
Chairman of Working Group 4C

Annex : 1

A N N E X

TECHNICAL COMMENTS ON APPENDIX 1

SECTION E.II

1. In order to make the calculations to ensure compliance with Article N.25, Committee 4 has the following comments :

a) Column 4c and 5a (geographical coordinates)

Committee 4 understands that Sub-Working Group 6A3 has decided that in the shared bands (space and terrestrial systems) above 1 GHz the coordinates be supplied in degrees, minutes and seconds. Committee 4 supports this decision as far as degrees and minutes are concerned. As regards "seconds", it is of the opinion that / multiples of 10 seconds are sufficient /.

b) Column 8 (power)

In the shared bands (space and terrestrial systems above 1 GHz), it is recommended that the e.i.r.p. be notified. In the event that Committee 6 decides not to require the e.i.r.p. to be notified, it is necessary that the antenna gain, transmitter power and transmission line loss be notified. It is noted that with the present Note 2 to Column 8 it is not possible to calculate the e.i.r.p. as the transmission line loss is not required to be notified.

c) Column 9 (antenna characteristics)

As the power limits of Article N.25 are given in terms of e.i.r.p., it is necessary that the notified antenna gain be clearly indicated as to the reference antenna (dipole or isotropic). Committee 4 recommends that the antenna gain for the bands above 1 GHz should likewise be relative to an isotropic antenna in Appendix 1.

In addition in order to calculate the direction of an antenna relative to the geostationary orbit, the elevation angle of the antennae is required.

2. Additional comments

a) Column 1 (assigned frequency)

Committee 4 has / adopted / in Article 2 (Document No. / /) the manner in which frequencies shall be expressed.

b) Column 8 (power)

Committee 4 has / agreed / to definitions of e.r.p. and e.i.r.p. (Document No. / /) and Note 3 to this column does not provide for the use of e.i.r.p.

In addition Committee 4 has / adopted / additional symbols for representing power. (Document No. / /)

c) Column 9 (antennae characteristics)

Committee 4 has considered the comments on this column as contained in IFRB Circular-letter No. 411 and agrees with the substance of these comments (see, however, Notes 1 to 3 from Committee 4). These comments are attached as an Appendix to this Annex.

Appendix : 1

Appendix

Extract from IFRB Circular-letter No. 411

Column 9 - Antenna characteristics

General comments

In respect of the sub-columns of Column 9 listed below the following are suggested :*)

9a - Azimuth of maximum directivity
9b - Elevation angle of maximum directivity
9c - Beamwidth (3 dB) in azimuth
9d - Beamwidth (3 dB) in elevation
9e - Polarization
9f - Effective height of antenna
9g - Maximum (isotropic) antenna gain.[1])

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*) Extract from IFRB Comment No. 13 - The Board considers that instead of one sub-column concerning altitude or effective height of antenna above mean sea level (9f) three sub-columns are required, 9e bis for LF/MF BC, 9e ter for VHF/UHF BC as defined in the European VHF/UHF Broadcasting Plan, Stockholm, 1961 and in the African VHF/UHF Broadcasting Plan, Geneva, 1963 and 9f for Earth stations (Appendix 1A, sections B and C). The list should therefore read :

9a - Azimuth of maximum directivity
9b - Elevation angle of maximum directivity
9c - Beamwidth (3 dB) in azimuth
9d - Beamwidth (3 dB) in elevation
9e - Polarization
9e bis - Height of antenna (metres) for a simple vertical antenna (LF/MF BC)
9e ter - Maximum effective height of antenna (VHF/UHF BC)
9f - Altitude (metres) of antenna above mean sea level (Appendix 1A, Sections B and C)
9g - Maximum (isotropic) antenna gain[1])
9h - Azimuth of limited radiation sector
9i - Maximum agreed radiation in 9h sector
9j - Type of antenna CCIR.[2])

Rule 1 For notices concerning non-directional antennae :
Insert in Column 9a 'ND';

Rule 2 For notices concerning assignments below 28 MHz excluding those relating to LF/MF Broadcasting :
Complete Columns 9a, 9c, 9g;

Rule 3 For notices relating to No. 490 :
Complete Column 9g only;

Rule 4 For notices relating to LF/MF Broadcasting :
Complete Columns 9a, 9b, 9c, 9g;**) 3)

Rule 5 For notices relating to VHF/UHF FM/TV Broadcasting :
Complete Columns 9a, 9c, 9e, 9f, 9g;***) 3)

Rule 6 For notices relating to the shared terrestrial/space bands :
Complete Columns 9a, 9b, 9e, 9g;

Rule 7 For notices relating to radio astronomy :
Complete Columns 9b, 9g;

Rule 8 For notices relating to all other cases :
Complete Column 9g only.

**) IFRB Comment No. 14 - Reference to sub-column 9b should be deleted but reference to sub-column 9e bis should be included (see IFRB Comment No. 13).

***) IFRB Comment No. 15 - Reference to sub-column 9f should be deleted and reference to sub-column 9e ter should be included (see IFRB Comment No. 13).

Committee 4 comments :

1) Column 9g should read :

Maximum antenna gain (isotropic, relative to a short vertical antenna or relative to a half-wave dipole, as appropriate).

2) Column 9j should read :

Type of antenna (see CCIR Book "Antenna Diagrams").

3) Rules 4 and 5 :

Reference to sub-columns 9h and 9i should be added.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 508-E
6 November 1979
Original : English

COMMITTEE 5

Canada, Denmark

PROPOSALS FOR THE WORK OF THE CONFERENCE

Footnote :

CAN DNK/508/1	ADD	3502A	Alternative allocation : in Canada and Greenland, the band 3 950 - 4 000 kHz is allocated to the broadcasting service on a primary basis.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 509-E
6 November 1979
Original : French

COMMITTEE 7

Republic of Zaire

REQUEST FOR THE ALLOCATION OF ADDITIONAL CALL SIGN SERIES

As a result of the development of telecommunications in the Republic of Zaire, the call sign series allocated to our Administration have been used up.

Our Administration accordingly requests the allocation of two new call sign series to the Republic of Zaire.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 510(Rev.1)-E
7 November 1979
Original : French

WORKING GROUP 5BA

REPORT OF SUB-WORKING GROUP 5BA8 TO WORKING GROUP 5BA

Terms of reference

1. To determine and propose for allocation to the radiolocation service the band of 10 kHz needed for operating medium-range radio direction systems.

2. To examine proposals relating to the allocation of an additional band in the band 3 200 - 3 700 kHz to radiolocation.

3. To examine Footnote 3490/195A.

1. The Sub-Working Group 5BA8, consisting of the delegates of the Federal Republic of Germany, France, Netherlands and the United Kingdom, as well as a representative of IMCO, met on 2 November.

1.1 Low-power radiolocation systems enable the position of all classes of vessels to be determined along coastlines for up to distances of 400 km.

The Members of the Sub-Working Group consider that such systems are of great value to the economy and development of maritime countries, as well as to shipping.

Indeed, such systems have been essential to the satisfactory accomplishment of many studies :

- hydrographic surveys for the establishment of accurate sea-bed charts essential to the safety of shipping and the exploitation of marine resources,
- marine operations, such as sounding and dredging for the creation and maintenance of access roads to ports,
- studies for the protection of coastal areas against erosion, silting and pollution,
- geophysical research and petroleum exploitation,
- fisheries support.

1.2 The Sub-Working Group approved the technical considerations set out in Document No. 418 on which is based the choice of the frequency bands needed for the operation of short-range (less than 100 km) and medium-range (100 - 400 km) systems.

Document 418 recalls, inter alia, that :

- for short-range users, the lower of the two frequencies needed should be between 88 % and 91 % of the highest frequency,
- for medium-range users, the relationship between the two frequencies should be between 83 % and 86 %.

1.3 So far, Working Group 5BA has adopted two frequency bands for radiolocation, each of 10 kHz : 1 625 - 1 635 kHz and 1 800 - 1 810 kHz, whose central frequencies offer a ratio of (1 630 : 1 805) x 100 = 90.3 %. Both bands therefore satisfy short-range users.

1.4 The Sub-Working Group considered that medium-range uses should also be made practicable since they were implemented just as frequently as short-range uses.

To that end, an additional band affording a ratio of 83 - 86 % with one of the bands already adopted should be allocated to radiolocation.

1.5 Accordingly, and bearing in mind the frequencies already adopted by Working Group 5BA and recalled in paragraph 1.3 above, Sub-Working Group 5BA8 decided unanimously to recommend, for consideration by Working Group 5BA, that the additional frequency band of :

2 163.5 - 2 173.5 kHz

should be allocated to the radiolocation service in Region 1.

In conjunction with the band already adopted, namely, 1 800 - 1 810 kHz, that new band affords a ratio suitable for medium-range users.

2. Radiolocation in the band 3 200 - 3 700 kHz

2.1 Although the need of most systems can be satisfied by the allocation mentioned in paragraph 1 above, a few isolated systems, of which only one is known to the Sub-Working Group, require two frequencies - one of which is the second harmonic of the other - in order to operate. The additional bands 3 250 - 3 270 kHz, or 3 600 - 3 620 kHz, would therefore correspond to the bands already adopted by the Working Group.

2.2 The Sub-Working Group concluded unanimously that, since very few systems were using that technique, there was no justification for allocating a special band in addition to those already adopted. Users of systems requiring two frequencies in harmonic relation could, whenever necessary, try to seek a local coordination with the Administration concerned.

2.3 To that end, footnote 195A could be entered for the band 3 250 - 3 270 or 3 600 - 3 620 kHz, after amendment as follows :

/ MOD 3490/195A The countries of Region 1 shall use ..... affected /.

3. Footnote 3490/195A

Sub-Working Group 5BA8 decided that the above footnote could be deleted.

Discussions within Working Group 5BA have revealed, however, that at least one delegation wishes to retain the footnote. Sub-Working Group 5BA8 therefore submits the question of deleting or amending that footnote to Working Group 5BA for consideration.

4. Protection

Sub-Working Group 5BA8 decided unanimously to recommend to Working Group 5BA that the following footnote be added :

ADD Pulse systems are not authorized in the bands 1 625 - 1 635 kHz, 1 800 - 1 810 kHz and 2 163.5 - 2 173.5 kHz.

P. LAURENT
Coordinator of Sub-Working Group 5BA8

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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6 November 1979
Original : French

WORKING GROUP 5BA

REPORT OF SUB-WORKING GROUP 5BA8

TO WORKING GROUP 5BA

Terms of reference

1. To determine and propose for allocation to the radiolocation service the band of 10 kHz needed for operating medium-range radio direction systems.

2. To examine proposals relating to the allocation of an additional band in the band 3 200 - 3 700 kHz to radiolocation.

3. To examine Footnote 3490/195A.

1. The Sub-Working Group 5BA8, consisting of the delegates of the Federal Republic of Germany, France, Netherlands and the United Kingdom, as well as a representative of IMCO, met on 2 November.

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The Members of the Sub-Working Group consider that such systems are of great value to the economy and development of maritime countries, as well as to shipping.

Indeed, such systems have been essential to the satisfactory accomplishment of many studies :

- hydrographic surveys for the establishment of accurate sea-bed charts essential to the safety of shipping and the exploitation of marine resources,
- marine operations, such as sounding and dredging for the creation and maintenance of access roads to ports,
- studies for the protection of coastal areas against erosion, silting and pollution,
- geophysical research and petroleum exploitation,
- fisheries support.

1.2 The Sub-Working Group approved the technical considerations set out in Document No. 418 on which is based the choice of the frequency bands needed for the operation of short-range (less than 100 km) and medium-range (100 - 400 km) systems.

Document 418 recalls, inter alia, that :

- for medium-range users, the lower of the two frequencies needed should be between 88 % and 91 % of the highest frequency,
- for medium-range users, the relationship between the two frequencies should be between 83 % and 86 %.

1.3 So far, Working Group 5BA has adopted two frequency bands for radiolocation, each of 10 kHz : 1 625 - 1 635 kHz and 1 800 - 1 810 kHz, whose central frequencies offer a ratio of (1 630 : 1 805) x 100 = 90.3 %. Both bands therefore satisfy short-range users.

1.4 The Sub-Working Group considered that medium-range uses should also be made practicable since they were implemented just as frequently as short-range uses.

To that end, an additional band affording a ratio of 83 - 86 % with one of the bands already adopted should be allocated to radiolocation.

1.5 Accordingly, and bearing in mind the frequencies already adopted by Working Group 5BA and recalled in paragraph 1.3 above, Sub-Working Group 5BA8 decided unanimously to recommend, for consideration by Working Group 5BA, that the additional frequency band of :

2 163.5 - 2 173.5 kHz

should be allocated to the radiolocation service in Region 1.

In conjunction with the band already adopted, namely, 1 800 - 1 810 kHz, that new band affords a ratio suitable for medium-range users.

2. Radiolocation in the band 3 200 - 3 700 kHz

2.1 Although the need of most systems can be satisfied by the allocation mentioned in paragraph 1 above, a few isolated systems, of which only one is known to the Sub-Working Group, require two frequencies - one of which is the second harmonic of the other - in order to operate. The additional bands 3 250 - 3 270 kHz, or 3 600 - 3 620 kHz, would therefore correspond to the bands already adopted by the Working Group.

2.2 The Sub-Working Group concluded unanimously that, since very few systems were using that technique, there was no justification for allocating a special band in addition to those already adopted. Users of systems requiring two frequencies in harmonic relation could, whenever necessary, try to seek a local coordination with the Administration concerned.

2.3 To that end, footnote 195A could be entered for the band 3 250 - 3 270 or 3 600 - 3 620 kHz, after amendment as follows :

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3. Footnote 3490/195A

Sub-Working Group 5BA8 decided that the above footnote could be deleted.

Discussions within Working Group 5BA have revealed, however, that at least one delegation wishes to retain the footnote. Sub-Working Group 5BA8 therefore submits the question of deleting or amending that footnote to Working Group 5BA for consideration.

4. Protection

Sub-Working Group 5BA8 decided unanimously to recommend to Working Group 5BA that the reference to footnote 3456/162 should be added in the three bands proposed for radiolocation, namely :

1 625 - 1 635 kHz
1 800 - 1 810 kHz
2 163.5 - 2 170.5 kHz.

P. LAURENT
Coordinator of Sub-Working Group 5BA8

INTERNATIONAL TELECOMMUNICATION UNION

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WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 511
6 November 1979

E

B.7

PLENARY MEETING

7th SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

Source	Document No.	Title
C.5	468 + 469	Resolution AE relating to the Division of the World into Regions for the Purposes of Allocating Frequency Bands Resolution AF relating to the Use of Radiotelegraph and Radiotelephone Links by Red Cross, Red Crescent, Red Lion and Red Sun Organizations
C.7	438 + 439	Art. 21; Art. 22; Art. 30; Art. 31; Art. 32; Art. 33

P. BASSOLE
Chairman of the
Editorial Committee

Annex: 13 pages

RESOLUTION AE

Relating to the Division of the World into Regions for the Purposes of Allocating Frequency Bands

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the present division of the world into Regions 1, 2 and 3 for the purposes of allocating frequency bands was made in 1947 and the technical bases for this division were not clearly defined;

b) that since 1947 considerable advances in radiocommunication techniques have been made and many new countries have emerged;

being aware that this division of the world into three Regions as presently constituted, may not be appropriate to meet the requirements of all countries on an equitable basis;

recognizing that it is not possible to carry out the required revision of the existing Regional division during this Conference;

resolves that this division should be reviewed in the light of the major developments in radio technology and increase in the membership of the Union with countries at different stages of development;

requests the CCIR to undertake a study of the technical and operational bases for the possible revision of the division of the world for the purposes of allocating the frequency bands, based on all relevant factors such as radio propagation, climatic conditions, natural geographical configuration of the world, state of economic and technical development, which would permit improvement in the efficient utilization of the radio frequency spectrum by all Member countries of the Union;

urges all Members of the Union to participate actively in the above study by contributing to its work;

further requests the CCIR to complete and submit this study if possible to the next Plenary Assembly of the CCIR, and in any case to prepare a report for consideration by the next Plenary Assembly;

invites the Administrative Council to follow the conduct of the study and to furnish advice to the Plenipotentiary Conference with a view to this matter being suitably resolved at one of the future World Administrative Radio Conferences of the Union.

RESOLUTION AF

Relating to the Use of Radiotelegraph and Radiotelephone Links by Red Cross, Red Crescent, Red Lion and Red Sun Organizations

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the world-wide relief work of the Red Cross, Red Crescent, Red Lion and Red Sun Organizations is of increasing importance and often indispensable;

b) that in such circumstances normal communication facilities are frequently overloaded, damaged, completely interrupted or not available;

c) that it is necessary to facilitate by all possible measures the reliable intervention of these national and international organizations;

d) that rapid and independent contact is essential to the intervention of these organizations;

e) that for international relief work of the Red Cross it is necessary that the national Red Cross Societies involved be able to communicate with each other as well as with the International Committee of the Red Cross and the League of Red Cross Societies;

decides to urge Administrations

1. to take account of the possible needs of the Red Cross, Red Crescent, Red Lion and Red Sun Organizations for communication by radio when normal communication facilities are interrupted or not available;

2. to assign to these organizations the minimum number of necessary working frequencies in accordance with the Table of Frequency Allocations; in the case of fixed circuits between 3 and 30 MHz, the frequencies shall be selected as far as possible adjacent to the amateur bands;

3. to take all practicable steps to protect such links from harmful interference.

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CHAPTER NVI

NOC **Administrative Provisions for Stations**

ARTICLE N21/17

NOC **Secrecy**

MOD **5193** 722 In the application of the appropriate provisions of the Convention, administrations bind themselves to take the necessary measures to prohibit and prevent:

NOC **5194** 723 a) the unauthorized interception of radiocommunications not intended for the general use of the public;

NOC **5195** 724 b) the divulgence of the contents, simple disclosure of the existence, publication or any use whatever, without authorization of information of any nature whatever obtained by the interception of the radiocommunications mentioned in No. **5194**/723.

5196 to **5220** NOT allocated.

ARTICLE N22/18

Licences

NOC

MOD 5221 725 § 1. (1) No transmitting station may be established or operated by a private person or by any enterprise without a licence issued in an appropriate form and in conformity with the provisions of these Regulations by the administration of the country to which the station in question is subject. (However, see Nos. 5222/726 and 5228/732.)

MOD 5222 726 (2) However, the government of a country may conclude with the government of one or more neighbouring countries a special [agreement] concerning one or several stations of its broadcasting service or of its land mobile services, operating on frequencies above 41 MHz, situated in the territory of a neighbouring country and intended to improve national coverage. This [agreement], which shall be compatible with the provisions of the present Regulations as well as of those regional [agreements] to which the countries concerned are signatories, may allow exceptions to the provisions of No. 5221/725 and shall be communicated to the Secretary-General in order that it may be brought to the notice of administrations for their information. [ ] [ ] [ ]

NOC 5223 727 (3) Mobile stations which are registered in a territory or group of territories which does not have full responsibility for its international relations may be considered, in so far as the issue of licences is concerned, as subject to the authority of that territory or group of territories.

MOD 5224 728 § 2. The holder of a licence is required to preserve the secrecy of telecommunications, as provided in the relevant provisions of the Convention. Moreover, the licence shall mention, specifically or by reference, that if the station includes a receiver, the interception of radiocommunication correspondence, other than that which the station is authorized to receive, is forbidden, and that in the case where such correspondence is involuntarily received, it shall not be reproduced, nor communicated to third parties, nor used for any purpose, and even its existence shall not be disclosed.

MOD 5225 729 § 3. To facilitate the verification of licences issued to mobile stations, there shall be added, when necessary, to the text written in the national language, a translation of the text in one of the working languages of the Union.

MOD **5226** 730 § 4. (1) The administration which issues a licence to a mobile station shall mention therein in clear form the particulars of the station, including its name, call sign and, where appropriate, the public correspondence category, as well as the general characteristics of the installation.

MOD **5227** 731 (2) For land mobile stations, including stations consisting only of one or more receivers, a clause shall be included in the licence, specifically or by reference, under which the operation of these stations shall be forbidden in countries other than the country in which the licence is issued, except as may be provided by special [agreement] between the governments of the countries concerned. [ ]

NOC **5228** 732 § 5. (1) In the case of a new registration of a ship or aircraft in circumstances where delay is likely to occur in the issue of a licence by the country in which it will be registered, the administration of the country from which the mobile station wishes to make its voyage or flight may, at the request of the operating company, issue a certificate to the effect that the station complies with these Regulations. This certificate, drawn up in a form determined by the issuing administration, shall give the particulars mentioned in No. **5226**/730 and shall be valid only for the voyage or flight to the country in which the registration of the ship or aircraft will be effected, or for a period of three months, whichever is the lesser.

ADD **5228A** (became **5230A**)

NOC **5229** 733 (2) The administration issuing the certificate shall inform the administration responsible for issuing the licence of the action taken.

NOC **5230** 734 (3) The holder of the certificate shall comply with the provisions of these Regulations applicable to licence holders.

ADD **5230A** (3A) In the case of hire, lease or interchange of aircraft, the administration having authority over the aircraft operator receiving an aircraft under such an arrangement may, by agreement with the administration of the country in which the aircraft is registered, issue a licence in conformity with that specified in No. **5226**/730 as a temporary substitute for the original licence.

5231 to **5330** NOT allocated.

ARTICLE N30/41

MOD **[Radio] Amateur Service and [Radio] Amateur-Satellite Service** [][]

MOD **Section I. [Radio] Amateur Service** []

MOD **6354** 1560 § 1. Radiocommunications between [radio] amateur stations of different countries shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radiocommunications. []

MOD **6355** 1561 § 2. (1) When transmissions between [radio] amateur stations of different countries are permitted, they shall be made in plain language and shall be limited to messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. []

ADD **6355A** (1A) It is absolutely forbidden for [radio] amateur stations to be used for transmitting international communications on behalf of third parties. []

NOC **6356** 1562 (2) The preceding provisions may be modified by special [arrangements] between the administrations of the countries concerned. []

MOD **6357** 1563 § 3. (1) Any person seeking a licence to operate the apparatus of a [radio] amateur station shall prove that he is able to send correctly by hand and to receive correctly by ear, texts in Morse code signals. The administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 30 MHz. []

MOD **6358** 1564 (2) Administrations shall take such measures as they judge necessary to verify the operational and technical qualifications of any person wishing to operate the apparatus of a [radio] amateur station. []

MOD **6359** 1565 § 4. The maximum power of [radio] amateur stations shall be fixed by the administrations concerned, having regard to the technical qualifications of the operators and to the conditions under which these stations are to operate. []

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MOD **6360** 1566 § 5. (1) All the general rules of the Convention and of these Regulations shall apply to [radio] amateur stations. In particular, the emitted frequency shall be as stable and as free from spurious emissions as the state of technical development for such stations permits. []

MOD **6361** 1567 (2) During the course of their [transmissions], [radio] amateur stations shall transmit their call sign at short intervals. [][]

MOD **Section II. [Radio] Amateur-Satellite Service** []

ADD **6361A** § 6. (1) The provisions of Section I of this Article shall apply equally, as appropriate, to the [radio] amateur-satellite service. []

6362 1567A Spa2 [PENDING] []

6363 to **6388** NOT allocated.

ARTICLE N31

MOD **Standard Frequency and Time Signals Service**

MOD **6389** 1623 § 1. (1) To facilitate more efficient use of the radio frequency spectrum and to assist other technical and scientific activities, administrations providing or intending to provide a standard frequency and time signals service shall co-ordinate, in accordance with the provisions in this Article, the establishment and operation of such a service on a world-wide basis. Attention should be given to the extension of this service to those areas of the world not adequately served.

NOC **6390** 1624 (2) To this end, each administration shall take steps to co-ordinate, with the assistance of the International Frequency Registration Board, any new standard frequency or time signal [transmission] or any change in existing [transmissions] in the standard frequency bands. For this purpose, administrations shall exchange between themselves, and furnish to the Board, all relevant information. On this matter the Board shall consult the Director of the CCIR who shall also continue to seek the advice and co-operation of the International Time Bureau (BIH), the International Scientific Radio Union (URSI) and other international organizations having a direct and substantial interest in the subject. [ ] [ ]

NOC **6391** 1625 (3) In so far as is practicable, a new frequency assignment in the standard frequency bands should not be made or notified to the Board until appropriate co-ordination has been completed.

NOC **6392** 1626 § 2. Administrations shall co-operate in reducing interference in the standard frequency bands in accordance with the Recommendations of the CCIR.

NOC **6393** 1627 § 3. Administrations which provide this service shall co-operate through the CCIR in the collation and distribution of the results of the measurements of standard frequencies and time signals, as well as details concerning adjustments to the frequencies and time signals.

NOC **6394** 1628 § 4. In selecting the technical characteristics of standard frequency and time signal [transmissions], administrations shall be guided by the relevant CCIR Recommendations. [ ]

6395 to **6419** NOT allocated.

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ARTICLE N32/42

NOC

Experimental Stations

NOC **6420** 1568 § 1. (1) An experimental station may enter into communication with an experimental station of another country only after it has been authorized to do so by its administration. Each administration shall notify other administrations concerned when such authorizations are issued.

NOC **6421** 1569 (2) The administrations concerned determine by special [arrangement] the conditions under which communications may be established. [ ]

NOC **6422** 1570 § 2. (1) In experimental stations any person operating radiotelegraph apparatus, either on his own account or for another, shall have proved his ability to transmit by hand and to receive by ear, texts in Morse code signals.

MOD **6423** 1571 (2) Administrations shall take such measures as they judge necessary to verify the operational and technical qualifications of any person wishing to operate the apparatus of an experimental station.

MOD **6424** 1572 § 3. The administrations concerned shall fix the maximum power of experimental stations, having regard to the purpose for which their establishment has been authorized and the conditions under which they are to operate.

MOD **6425** 1573 § 4. (1) All the general rules of the Convention and of these Regulations shall apply to experimental stations. In particular, experimental stations shall comply with the technical conditions imposed upon transmitters operating in the same frequency bands, except where the technical principles of the experiments prevent this. In such a case, the administration which authorizes the operation of these stations may grant a dispensation in an appropriate form.

MOD **6426** 1574 (2) During the course of their [transmissions], experimental stations shall transmit, at short intervals, their call sign or any other recognized form of identification (see Article **N23**). [ ]

6427 1575 [PENDING] [ ]

6428 to **6452** NOT allocated.

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ARTICLE N33

Title [PENDING] [ ]

NOC

Section I. General Provisions

NOC 6453 1576 § 1. Administrations which have established a [radiodetermination] service shall take the necessary steps to ensure the effectiveness and regularity of that service; however they accept no responsibility for the consequences that might arise from the use of inaccurate information furnished, defective working, or failure of their stations. [ ]

MOD 6454 1577 § 2. In the case of doubtful or unreliable observations, the station taking the bearing or fixing the position shall, whenever possible, notify the station to which this information is given of any such doubt or unreliability.

NOC 6455 1578 § 3. Administrations shall notify to the Secretary-General the characteristics of each [radiodetermination] station providing an international service of value to the maritime mobile service and, if considered necessary, for each station or group of stations, the sectors in which the information furnished is normally reliable. This information is published in the List of Radiodetermination and Special Service Stations, and the Secretary-General shall be notified of any change of a permanent nature. [ ]

NOC 6456 1579 § 4. The method of identification of [radiodetermination] stations shall be so chosen as to avoid any doubt as to their identity. [ ]

NOC 6457 1580 § 5. Signals sent by [radiodetermination] stations shall be such as to permit accurate and precise measurements. [ ]

NOC 6458 1581 § 6. Any information concerning modification or irregularity of working of a [radiodetermination] station shall be notified without delay in the following manner: [ ]

NOC 6459 1582 a) Land stations of countries operating a [radiodetermination] service shall send out daily, if necessary, notices of modifications or irregularities in working until such time [ ]

as normal working is restored or, if a permanent alteration has been made, until such time as it can reasonably be taken that all navigators interested have been warned.

NOC **6460** 1583 b) Permanent alterations or irregularities of long duration shall be published as soon as possible in the relevant notices to navigators.

SUP **6461** 1584 § 7.

Title **Section II. [PENDING]** [ ]

6462 1584A Mar2 [PENDING] [ ]

NOC **Section III. Radio Direction-Finding Stations**

NOC **6463** 1585 § 9. (1) In the maritime radionavigation service, the radiotelegraph frequency normally used for radio direction-finding is 410 kHz. All direction-finding stations of the maritime radionavigation service using radiotelegraphy shall be able to use this frequency. They shall, in addition, be able to take bearings on 500 kHz, especially for locating stations sending signals of distress, alarm and urgency.

NOC **6464** 1586 (2) Where a radio direction-finding service is provided in the authorized bands between [1 605 and 2 850 kHz], [ ] the radio direction-finding stations should be able to take bearings on the radiotelephone distress and calling frequency 2 182 kHz.

NOC **6465** 1587 § 10. The procedure to be followed by radio direction-finding stations is given in Appendix **23**.

NOC **6466** 1588 § 11. In the absence of prior [arrangements], an aircraft station which calls a radio direction-finding station for a bearing shall use for this purpose a frequency on which the station called normally keeps watch. [ ]

NOC 6467 1589 § 12. In the aeronautical radionavigation service, the procedure contemplated for radio direction-finding in this section is applicable, except where special procedures are in force as a result of [arrangements] concluded between the administrations concerned. [ ]

NOC **Section IV. Radiobeacon Stations**

NOC 6468 A. General

NOC 6469 1590 § 13. When an administration thinks it desirable in the interests of navigation to organize a service of radiobeacon stations, it may use for this purpose:

NOC 6470 1591 a) radiobeacons properly so called, established on land or on ships permanently moored or, exceptionally, on ships navigating in a restricted area, the limits of which are known and published. The [emissions] of these radiobeacons may have either directional or non-directional patterns; [ ]

NOC 6471 1592 b) fixed stations, coast stations or aeronautical stations designated to function as radiobeacons, at the request of mobile stations.

NOC 6472 1593 § 14. (1) Radiobeacons properly so called shall use the frequency bands which are available to them under Chapter MIII/II.

NOC 6473 1594 (2) Other stations notified as radiobeacons shall use for this purpose their normal working frequency and their normal class of emission.

NOC 6474 1595 (3) The power radiated by each radiobeacon properly so called shall be adjusted to the value necessary to produce the stipulated field strength at the limit of the range required (see Nos. 6477/434 and 6482/458).

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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6 November 1979
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COMMITTEE 4

NOTE BY THE CHAIRMAN OF WORKING GROUP 4B

Working Group 4B has agreed on the following note, which it requests Committee 4 to transmit to the Chairman of Committee 6 :

"NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

The consideration of the proposals Nos. F/82/816 to F/82/821 inclusive for the addition of an Article N27A to the Radio Regulations has been completed in Committee 4. The proposals concerned the up-links to broadcasting-satellites in the band 11.7 - 12.5 GHz (which would concern Regions 1 and 3 only).

The subject was considered in Working Group 4B who set up a Sub-Working Group 4B7 to study the matter in depth. The report of Sub-Working Group 4B7 is reproduced in the Annex.

The report has been agreed unanimously in Working Group 4B and in Committee 4 and in particular the conclusion that a new Article N27A containing a constant frequency translation and a procedure for coordination for the same orbital position is feasible if certain coordination measures are agreed. However, it has not been demonstrated that the constant frequency translation approach provides the optimum solution and therefore Committee 4 was unable to adopt the introduction of a new Article 27A in the Radio Regulations.

Committee 4 is nevertheless of the opinion that the conclusions listed in Section 4 of the Annex might form the basis for a procedural solution to allow implementation of up-links to broadcasting-satellites in the band 11.7 - 12.5 GHz in Regions 1 and 3 in advance of an overall plan, in a similar way to that in which the provisions of Resolution No. Spa2 - 3 allowed for broadcasting-satellite down-links.

Your Committee is invited to consider this matter and to take any further action that may be deemed desirable."

E.R. CRAIG
Chairman of Working Group 4B

Annex : 1

A N N E X

REPORT OF SUB-WORKING GROUP 4B7 TO WORKING GROUP 4B

1. Introduction

Sub-Working Group 4B7 was asked by Working Group 4B to consider the technical basis for the proposed new Article N27A under the assumption that a total band of 800 MHz and 500 MHz respectively be available for the up-link of the broadcasting satellites provided for in the plan for Regions 1 and 3. The Sub-Working Group discussed the interference situation for 12.75, 14.5 and 17.3 GHz at the same orbital position and between satellites at adjacent orbital positions for the condition that the down-link operates as indicated in the Final Acts of the WARC-77 and the up-link frequencies are derived by a fixed frequency translation of the frequencies for the down-link.

The results of the interference calculation were compared with the requirements of the Administrations listed in paragraph 3.

2. Discussion of the interference situation

2.1 Interference between satellites located at adjacent orbital positions

For the calculations, the following assumptions were adopted :

- $\frac{C}{I}$ equal to 45 dB for one entry (see Recommendation SAT 5)
- Receive reference diagram identical to transmit one, as given in Annex 8 of the Final Acts (WARC-BS 77).

The $\frac{C}{I}$ ratio is given by :

$$\frac{C}{I} = P_w - P_i + G\left(\phi/\phi_0\right) + G'$$

where :

P_w = e.i.r.p. of the wanted earth station

P_i = e.i.r.p. of the interfering earth station

$G(\phi/\phi_0)$ = relative gain of the satellite receiving antenna given by Annex 8 of the Final Acts

G' = relative gain of the interfering earth station given by CCIR Recommendation No. 465.

$$G' = G_{max} - 32 + 25 \log \theta$$

where

$\theta = 5.8^0$ (adjacent orbital position with satellite station keeping tolerances)

$$G' = G_{max} - 12.9 \text{ dB}$$

According to the principle of crossed beams (Final Acts, Annex 7, paragraph 3, page 89), adjacent orbital station will not serve adjacent service area. We then have to adopt a value of ϕ/ϕ_0, which to satisfy nearly all cases would have to be based on a distribution curve. This is not available.

It may be assumed that in most cases $\phi/\phi_0 \geq 1$ and for $\phi/\phi_0 = 1$ a value of $G(\phi/\phi_0) = 12.5$ dB is appropriate.

With the value of 12.5 dB for $G(\phi/\phi_0)$ we get $45 = (P_w - P_i) + 12.5 + G_{max} - 12.9$

If we assume that the e.i.r.p. values of the wanted and interfering signals are equal

$G_{max} = 45.4$ dB

However, in the worst cases we can have a difference of e.i.r.p. of 12 dB if the earth stations are located in the beam centres. If not, 3 dB more has to be added in the case of satellite receiving antenna beamwidth being equal to the satellite transmit antenna beamwidth. If the beamwidth of the satellite receiving antenna is smalller than that of the satellite transmit antenna and the earth station is located at the edge of the coverage area of the satellite transmit antenna the value to be added would become greater than 3 dB.

With this we arrive at the following dimensions of the earth station antenna for a reference frequency of 12.75, 14.5 and 17.3 GHz (assumed m = 55 %, $G(\phi/\phi_0) = 12.5$ dB) :

f (GHz)	Difference in e.i.r.p. (dB)	G_{max} (dB)	D (m)
12.75	12	57.4	7.5
	15	60.4	10.6
14.5	12	57.4	6.6
	15	60.4	9.3
17.3	12	57.4	5.5
	15	60.4	7.8

Arriving at these values it was assumed that differences in up-link e.i.r.p. due to precipitation attenuation would be compensated by power control or other means.

2.2 Interference between satellites located at the same orbital position

2.2.1 Co-channel interference

Critical interference may exist in the same channel between distant areas, above all from a large area towards a small one but in this case interference may be reduced by adjusting e.i.r.ps. However, in the case of areas of similar size e.i.r.p. adjustment will not alleviate the interference problem.

2.2.2 Adjacent channels interference

The most critical case occurs between two adjacent countries using opposite polarizations according to the Plan.

$\frac{C}{I}$ = 29 dB for a single entry is required.

In the case where there is no difference in e.i.r.p's and earth stations are located at the beam centres then a value of 30 dB may be obtained. If there is no e.i.r.p. difference and the earth stations are not located at the beam centres a C/I of 27 dB results. These values reduce further with differences in e.i.r.p's. These values are based on a depolarization in the atmosphere of about 27 dB. More severe depolarization effects may further aggravate the interference situation.

Results of the studies on sandstorms have also to be considered.

3. Requirements of Administrations

3.1 Position of the transmitting earth station

Some Administrations find it desirable to have some flexibility in the choice of the siting of up-link earth stations at some point in the service area of the down-link or within a region which is covered by multiple beams. In some cases, it will even be necessary to use up-links from points outside the service area.

Some other Administrations in Region 1 expressed that they do not intend to make use of this flexiblity and that the requirements can be satisfied by them by other means.

3.2 Earth transmitting antenna

Transportable and small fixed up-link earth stations providing direct connection to a broadcasting satellite are required in certain countries and their numbers can be expected to increase as the broadcasting-satellite service develops. An example of this application will arise in remote areas where terrestrial radio-relay systems are not available for connection to the main earth station.

Transportable and some fixed earth stations will use relatively small antennae.

Some Administrations in Region 1 do not intend to use small transportable earth stations to feed into a broadcasting satellite in their countries.

4. Conclusions

The proposal for a new N27A containing a constant frequency translation and a procedure for coordination for the same orbital position is feasible if the following coordination measures are agreed to by all [1] Administrations.

1) The earth station transmit antenna diameter size cannot be smaller than indicated in paragraph 2.1.

2) To avoid an increase of the earth station antenna diameter to higher values than indicated in the Table in paragraph 2.1 for 12 dB of e.i.r.p. differences and to avoid the deterioration according to paragraph 2.2.2, the earth station should be located near the centre of the beam.

3) Up-link power control or other measures have to be effected to compensate for aggravation of up-link e.i.r.p. differences (between wanted and interfering carriers) because of precipitation attenuation.

4) The beamwidth of the satellite receiving antenna has to be equal to or smaller than that of the satellite transmit antenna. The transmit antenna reference pattern of the WARC-77 Final Acts has to be met by the satellite receiving antenna.

5) E.i.r.p. adjustments would have to be carried out on a coordinated basis to optimize up-link C/I ratios. Adjustments of earth station e.i.r.p. between adjacent satellite positions may not be necessary if the increase in e.i.r.p. is reached by the use of higher performance antennae.

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1) All measures might not necessarily apply to all countries but it is not possible due to lack of information at the moment to identify these countries.

Even with these measures there would be negative up-link margins in some cases[2] which would require consideration of other solutions. Depolarization higher than 27 dB may further aggravate the interference situation for adjacent channels in the case of colocated satellites.

With the constraints of equal up-link and down-link bandwidth and on the basis of available information at this Conference it has not been demonstrated that the constant frequency translation approach provides the optimum solution. However, the Sub-Working Group 4B7 is not in the position to comment on whether or not other methods would provide significantly better solutions taking into account the requirements of all Administrations.

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2) It is not possible at the moment to identify these cases.

INTERNATIONAL TELECOMMUNICATION UNION

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WORKING GROUP 5BA

REPORT OF SUB-WORKING GROUP 5BA7 TO WORKING GROUP 5BA

Subject : Recommendation relating to the preparation of a broadcasting plan in the band 1 605 - 1 705 kHz in Region 2

Document No. 381 approved by Working Group 5BA provides an allocation table for the band 1 605 - 1 705 kHz, and No. / 3484A / therein provides for the introduction of broadcasting service along with retention and phase out of other services subject to a broadcasting plan to be established in 1985 at the latest. The Sub-Working Group consisting of delegates from Brazil, Columbia, Ecuador, Uruguay, United States of America and Venezuela, under the chairmanship of Mr. Chau (Canada), met three times to develop a Recommendation accordingly. All proposals submitted were considered and the Sub-Working Group decided unanimously to adopt the Recommendation as given in the Annex.

L.K. CHAU
Chairman of Sub-Working Group 5BA7

Annex : 1

ANNEX

DRAFT RECOMMENDATION No.

Relating to the Preparation of a Broadcasting Plan in the Band 1 605 - 1 705 kHz in Region 2

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the band 1 605 - 1 705 kHz is allocated to the broadcasting service in Region 2 by the present Conference;

b) that in accordance with No. /~3484A~/, the use of the band 1 605 - 1 705 kHz by the broadcasting service is subject to a broadcasting plan to be established in 1985 at the latest;

c) that No. /~3484A~/ also provides that the band 1 605 - 1 625 kHz is allocated to the broadcasting service, and the band 1 625 - 1 705 kHz is allocated to the broadcasting service on a shared basis with other services;

recommends

1. that a Regional Administrative Radio Conference be convened to establish a plan for the broadcasting service in the band 1 605 - 1 705 kHz in Region 2;

2. that such a Conference be convened in 1985 at the latest;

3. that the exact dates of coming into force of the plan be decided at the said Regional Administrative Radio Conference. Nevertheless, the implementation of the broadcasting service /~should~/ /~shall~/ not take place before 1 July 1987 for the frequencies between 1 625 - 1 665 kHz, and 1 July 1990 for the frequencies between 1 665 - 1 705 kHz;

invites the Administrative Council to take the necessary steps for the convening of a Region 2 Administrative Radio Conference to plan the use of the band 1 605 - 1 705 kHz by the broadcasting service;

encourages Administrations to promote the development and availability of receivers suitable for reception of the extended band 1 605 - 1 705 kHz.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 5

EIGHTH REPORT OF WORKING GROUP 5A TO COMMITTEE 5

1. The Working Group 5A presents its eighth Report to Committee 5. The texts adopted by the Group for the approval of Committee 5 are shown in the Annex.

2. The following comments are also brought to the notice of Committee 5 in conjunction with the Annex.

2.1 In the definitions of the terms Feeder Link and Fixed-Satellite Service, square brackets have been put around the word "specified" on the insistence of the delegate of Canada, who would prefer that these definitions do not contain this word.

2.2 The footnotes No. 3099.1 and No. 3106.1 are identical. A view was expressed in the Working Group according to which, since Committee 5 in Document No. 284 has adopted provision No. 3446A, these footnotes were not necessary. If Committee 5 decides to retain these footnotes, Committee 9 would have to be invited to see if only one footnote could be adequate.

2.3 Committee 7, which is examining Article N30 (Amateur Service and Amateur-Satellite Service) should be informed that Working Group 5A / and Committee 5 / have adopted the terms : Amateur Service and Amateur-Satellite Service for inclusion in Article N1.

2.4 Argentina reserved its position on the definition of Fixed-Satellite Service (3102/84AG). This delegation preferred that the definition remains as presently found in the Radio Regulations.

3. The definitions of the following terms still remain to be examined by the Working Group :

Earth Exploration Service;

Meteorological Aids Service;

Radiosonde;

Transportable Earth Station;

Radio Astronomy;

Radio Astronomy Service; and

Radio Astronomy Station.

4. While examining the Working Group's third Report (Document No. 284), Committee 5 had returned provision No. 3423/133 (European Broadcasting Area) to the Group for reconsideration. The revised text, adopted unanimously, is included in the Annex.

5. Considering that Committee 4 has already defined the term "permissible interference", Committee 6 should be invited to advise on the necessity of the phrase "or interference in excess of the permissible, whichever is the case" in Nos. 3430/139 and 3442/148 (Document No. 284 refers).

V. QUINTAS
Chairman of Working Group 5A

Annex : 1

A N N E X

ARTICLE N1

MOD 3079/36 Maritime Mobile Service : A mobile service between coast stations and ship stations, or between ship stations, or between associated on-board communication stations (see No. 3082/39A); survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

NOC **3090/84AF** ***Space System:*** Any group of co-operating Earth and/or space stations employing space radiocommunication for specific purposes.

NOC **3091/84AFA** ***Satellite System:*** A space system using one or more artificial Earth satellites.

NOC **3092/84AFB** ***Satellite Network:*** A satellite system or a part of a satellite system, consisting of only one satellite and the co-operating Earth stations.

MOD 3093/84AFC Satellite Link : A radio link between a transmitting Earth station and a receiving Earth station through one satellite.

A satellite link comprises one ~~up-path~~ up-link and one ~~down-path~~ down-link.

MOD **3094/84AFD** ***Multi-Satellite Link:*** A radio link between a transmitting Earth station and a receiving Earth station through two or more satellites, without any intermediate Earth station.

A multi-satellite link comprises one ~~up-path~~ up-link, one or more satellite-to-satellite ~~paths~~ links and one ~~down-path~~ down-link.

ADD 3094A Feeder Link : A radio link from an Earth station at a /_ specified _/ fixed point to a space station, or vice versa, conveying information for a satellite service other than the fixed-satellite service.

NOC **3098/84AZ** ***Space Tracking:*** Determination of the orbit, velocity or instantaneous position of an object in space by means of radiodetermination, excluding primary radar, for the purpose of following the movement of the object.

/_ (MOD) _/ **3099/84ATD** ***Space Research Service:*** [1] A radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.

ADD 3099.1 [1] When the suffix /_ "(Active)" or _/ "(Passive)" is used in Article N7/5 to qualify the allocation of a frequency band to this service, that allocation may be employed only for /_ active or _/ passive sensors /_, in accordance with the suffix _/.

NOC **3100/84ATE** *Space Operation Service:* A radiocommunication service concerned exclusively with the operation of spacecraft, in particular tracking, telemetry and telecommand.

These functions will normally be provided within the service in which the space station is operating.

NOC **3101/84ATF** *Inter-Satellite Service:* A radiocommunication service providing links between artificial earth satellites.

MOD 3102/84AG Fixed-Satellite Service : A radiocommunication service ~~/~~ ~~/~~ between Earth stations at [specified] fixed points when one or more satellites are used; in some cases this service includes satellite-to-satellite links, which may also be effected in the inter-satellite service : this service may also include feeder links for other satellite services (see ADD 3094A).

NOC **3103/84AP** *Broadcasting-Satellite Service:* A radiocommunication service in which signals transmitted or re-transmitted by space stations are intended for direct reception[1] by the general public.

NOC **3103.1/84AP.1** [1] In the broadcasting-satellite service, the term "direct reception" shall encompass both individual reception and community reception.

NOC **3104/84APA** *Individual reception* (in the broadcasting-satellite service): The reception of emissions from a space station in the broadcasting-satellite service by simple domestic installations and in particular those possessing small antennae.

NOC **3105/84APB** *Community reception* (in the broadcasting-satellite service): The reception of emissions from a space station in the broadcasting-satellite service by receiving equipment, which in some cases may be complex and have antennae larger than those used for individual reception, and intended for use:

- by a group of the general public at one location; *or*
- through a distribution system covering a limited area.

MOD 3106/84ASA

Earth Exploration-Satellite Service: A radiocommunication service between earth stations and one or more space stations [1] in which: [/ or between space stations /]

- information relating to the characteristics of the Earth and its natural phenomena is obtained from [active or] passive sensors on Earth satellites;
- similar information is collected from air-borne 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 (see 3094A).

[ADD 3106.1

[1] When the suffix /"(Active)" or/ "(Passive)" is used in Article N7/5 to qualify the allocation of a frequency band to this service, that allocation may be employed only for /active or/ passive sensors /, in accordance with the suffix/.]

NOC 3107/84AT

Meteorological-Satellite Service: An earth exploration-satellite service for meteorological purposes.

NOC 3108/84ATA

Amateur-Satellite Service: A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.

MOD 3109/84ATB

Standard Frequency and Time Signal-Satellite Service : A radiocommunication service using space stations on Earth satellites for the same purposes as those of the standard frequency and time signal service.

SUP 3110/84ATC

Time Signal-Satellite Service

MOD 3111/84APC

Radiodetermination-Satellite Service : A radiocommunication service ~~involving the use~~ for the purpose of radiodetermination and involving the use of one or more space stations.

MOD 3112/84AQ

Radionavigation-Satellite Service : A radiodetermination-satellite service used for the ~~same~~ purpose ~~as the~~ of radionavigation ~~service; in certain cases this service includes transmission or retransmission of supplementary information necessary for the operation of radionavigation systems~~. This service may also include feeder links necessary for its operation. (See ADD 3094A.)

NOC 3113/84AQA See Document No. 382.

NOC 3114/84AQB *Maritime Radionavigation-Satellite Service:* A radionavigation-satellite service in which mobile earth stations are located on board ships.

MOD 3115/84AGA *Mobile-Satellite Service:* A radiocommunication service:

– between mobile earth stations and one or more space stations, or between space stations used by this service;

– or between mobile earth stations by means of one or more space stations.

~~– and if the system so requires, for connection between these space stations and one or more earth stations at specified fixed points.~~

This service may also include feeder links necessary for its operation. (See ADD 3094A)

ADD 3115A Mobile Earth Station : An Earth station in the mobile-satellite service intended to be used while in motion or during halts at unspecified points.

NOC 3117/84AGC *Maritime Mobile-Satellite Service:* A mobile-satellite service in which mobile earth stations are located on board ships. Survival craft stations and emergency position indicating radiobeacon stations may also participate in this service.

NOC 3118/84AGCA *Ship Earth Station:* A mobile earth station in the maritime mobile-satellite service located on board ship.

ADD 3118A Coast Earth Station : An Earth station in the maritime mobile-satellite service or in the fixed-satellite service located at a specified point on land to provide a feeder link for the maritime mobile-satellite service.

NOC 3119 84AGD *Land Mobile-Satellite Service:* A mobile-satellite service in which mobile earth stations are located on land.

ADD 3023A

Allotment (of a radio frequency or radio frequency channel) : Entry of a designated frequency channel in an agreed plan, adopted by a competent Conference, for use by one or more Administrations for a radiocommunication service in one or more identified countries or geographical areas and under specified conditions.

ADD 3023B

Assignment (of a radio frequency or radio frequency channel) : Authorization given by an Administration for a radio station to use a radio frequency or radio frequency channel under prescribed conditions.

ADD 3023C

Allocation (of a frequency band) : Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more radiocommunication services under specified conditions. This term shall also be applied to the frequency band concerned.

ARTICLE N7

MOD 3423/133

The "European Broadcasting Area" is bounded on the West by the ~~W~~western ~~B~~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 USSR, the northern part of Saudi Arabia and the part of countries bordering the Mediterranean. In addition, Iraq and Jordan are included in the European Broadcasting Area.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 515-E
7 November 1979
Original : English

COMMITTEES 5 AND 6

Somalia (Democratic Republic of)

UNFAVOURABLE CHANGE OF SERVICES IN THE HF BANDS

The delegation of Somalia hereby avails itself of this opportunity to point out that far-reaching changes will take place in the world of technology during the coming two decades beginning from the approaching "winding up" of WARC-79.

We are also under the impression that such changes are apt to have a great effect on the developing countries most of whose telecommunications equipment is oriented to the HF system and whose economy may seemingly be in a position to feel the burden of the changes herein referred to.

Relatively, it is a glaring fact that these countries are not in parity with the developed ones with regard to the dispensibility of the equipment that may consequently be rendered obsolete by such changes.

For the benefit of vulnerable Administrations and as an acceptable remedy, we propose that the appropriate authorities of the ITU embark on a thorough study of the subject which calls for allowance of an ample time for evolution.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 516-E
7 November 1979
Original : English

COMMITTEES 4, 6 AND 7

Greece

RESOLUTION No. /X/

Rational Use of the Frequency Spectrum

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the frequency spectrum is a limited natural resource;

b) that the demands of nations for use of the spectrum continue to increase;

c) that in order to satisfy those demands the spectrum has to be used, both nationally and internationally, in a rational way;

d) that not all nations are able to make such a rational use, because of the lack of adequate know-how, means and resources;

e) that such nations need assistance in obtaining this know-how and/or the necessary means;

resolves

1. that the seminars organized by the IFRB shall include the computerization of frequency management and the optimization of spectrum usage;

2. that, as far as possible, the Secretary-General shall make the Union's computer expertise available to Administrations, to cooperate with them in the training of their staff and in the establishment of data processing centres to give the necessary assistance for the frequency management;

3. that the Secretary-General shall seek the resources deemed necessary for the rationalization of frequency spectrum by the Administrations; and

invites

the Administrative Council to consider ways of achieving the above-mentioned goals;

the Administrations themselves to support technical cooperation projects through their representatives at the United Nations and to do their utmost to introduce computer methodologies and infrastructure for the rationalization of the spectrum management.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 517-E
7 November 1979
Original : English

COMMITTEE 5

Indonesia, Malaysia, the Philippines, Singapore and Thailand

ALLOCATIONS OF SERVICES IN THE FREQUENCY BAND 430 - 440 MHz

At its fifteenth meeting on Monday, 5 November 1979, Working Group 5C decided, among other things under agenda item No. 2, that the frequency band 430 - 440 MHz be allocated to the radiolocation service on a primary basis and to the amateur service on a secondary basis in Regions 2 and 3, with a footnote indicating that the band is also allocated to the fixed and mobile (except aeronautical mobile) services on a primary basis in ten countries in Region 3.

At the meeting, we attempted to put forward our proposal to include the fixed and mobile (except aeronautical mobile) services on a primary basis in the Table of Frequency Allocations for Region 3 only, since ten countries would have, for the purpose of the Working Group meeting, represented a majority for the Region concerned.

Our proposal was however not pursued by the Chair who, as an alternative, decided to deal with Regions 2 and 3 together, the reason given being to aim at a world-wide allocation for the radiolocation service.

We do not object to the world-wide allocation of the radiolocation service in the frequency band. We are however of the view that this requirement can still be met even if Regions 2 and 3 were to have different allocations of other services in the band. As it is, the allocations of Regions 2 and 3 are already not the same as that of Region 1.

In view of the above situation, we would like to request Committee 5 to reconsider our proposal that for Region 3 only, the fixed and mobile (except aeronautical mobile) services be included in 430 - 440 MHz on a primary basis in the Table of Frequency Allocations, instead of a footnote of same.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 518-E
8 November 1979
Original : French
English
Spanish

COMMITTEE 5

NOTE FROM THE CHAIRMAN OF COMMITTEE 6

TO THE CHAIRMAN OF COMMITTEE 5

Committee 6 has taken note of the request made by Committee 5 in Document No. 312 that procedures are needed to ensure that services in bands which are re-allocated can be transferred to other bands without degrading the operational utility of the transferred services and that of the existing services in the bands which accommodate the transferred service.

Committee 6, to which proposals have been allocated concerning the establishment of transitional procedures to implement the changes which might be made in the allocations in the HF bands and a consequential review of the entries in the Master Register, has decided that such procedures would be established based on the following :

a) that any displaced assignment of the fixed service would be found a suitable replacement insofar as the bands allocated to the fixed service are not reduced to an unrealistic extent;

b) that any such displaced assignment would receive the same status as assignments that would not be displaced;

c) that in the finding of replacement assignments all assignments would receive equal treatment.

Committee 6 will proceed on the assumption that a transitional procedure will be required and will continue its work on this subject.

Dr. M. JOACHIM
Chairman of Committee 6

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 519-E
7 November 1979
Original : English

COMMITTEE 5

State of Israel

PROPOSALS FOR THE WORK OF THE CONFERENCE

ISR/519/25	MOD	3674/344	Add ISR to the note, on a primary basis.
ISR/519/26	MOD	3683/350C	Add ISR to the note, on a primary basis.
ISR/519/27	MOD	3780/402	Add ISR to the note, on a primary basis.
ISR/519/28	MOD	3784/405B	Add ISR to the note - for the fixed service and mobile except aeronautical mobile service - on a primary basis.
ISR/519/29	MOD	3794/408	Add ISR to the note, on a primary basis.
ISR/519/30	ADD	3795C	Additional allocation : in Israel, the band 14 - 14.3 GHz is also allocated to the fixed service, on a primary basis.

Reasons : Existing and planned requirements.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 520-E
30 November 1979
Original : English

COMMITTEE 5

SUMMARY RECORD OF THE EIGHTH MEETING OF COMMITTEE 5

Cover page

Amend the starting time of the meeting to read "0900 hrs".

Paragraph 2.6

Add the following phrase at the end of the sentence :

"... as any frequency could be used for ISM, provided it did not cause harmful interference."

Paragraph 6.6

(Concerns the Spanish text only)

Paragraph 8.2.4

Insert the names of Bahrain and the United Arab Emirates in the list of countries.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 520-E
7 November 1979
Original : English

COMMITTEE 5

SUMMARY RECORD

OF THE

EIGHTH MEETING OF COMMITTEE 5

(FREQUENCY ALLOCATIONS)

Tuesday, 30 October 1979, at 0905 hrs

Chairman : Mr. M. HARBI (Algeria)

Subjects discussed		Document No.
1.	Adoption of the agenda	-
2.	Report of Working Group 5/ad hoc 3	374
3.	Report of Working Group 5/ad hoc 4	-
4.	Second report of Working Group 5B	228(Rev.2) (Annexes 3 and 4)
5.	First report of Working Group 5BB and draft note by the Chairman of Committee 5 to the Chairman of Committee 4	355(Rev.1) DT/125
6.	Draft note by the Chairman of Committee 5 to the Chairman of Committee 4	DT/132
7.	Third and fourth reports of Working Group 5C	320(Rev.1) 341
8.	Third and fourth reports of Working Group 5D	263(Rev.1) 350

1. Discussion of fixed-satellite services

The Chairman, replying to a question by the delegate of India on the inclusion in the agenda of the question of the planning of fixed-satellite services said that although the matter had been raised at the Committee's seventh meeting, Committee 1 had subsequently decided that the topic should be considered in Committee 6.

1.2 The delegate of India said that many delegations deemed it highly important for the members of Committee 5 to take part in deliberations on that topic in Committee 6. He hoped, therefore, that future meetings of Committee 5's Working Groups would be so arranged as to permit members of the Groups to attend the meetings of Committee 6 at which the subject would be discussed.

2. Report of Working Group 5/ad hoc 3 (Document No. 374)

2.1 The Chairman of Working Group 5/ad hoc 3, introducing that Working Group's report, drew attention to the two types of footnotes recommended for Committee 5's consideration in respect of the frequency bands designated for ISM applications.

In the case of the footnote relating to new ISM frequencies, it had been noted in the Working Group that those delegations which had advocated extending the number of frequencies used for ISM purposes had realized that it could be done only by applying stricter limits for radiation from ISM equipment to avoid harmful interference to radio services. That was one reason for the reference, in that footnote, to the latest relevant CCIR Recommendations. Indeed, it was felt, in general, that the CCIR itself was the appropriate forum for considering the matter fully and issuing specific Recommendations. Pending such Recommendations, the proposals now put forward by Working Group 5/ad hoc 3 should be regarded as a provisional solution.

It had been felt that designation in the form of indicating limits of frequency bands within which ISM equipment was to operate was preferable to percentages or frequency-width tolerances. The centre frequency should also be indicated in order to align with the provisions of the present Radio Regulations.

2.2 The Chairman felt that Committee 5 should at a future meeting, examine the Resolution in Addendum 1 to Document No. 374 concerning the studies to be entrusted to the CCIR.

2.3 The delegate of Belgium, supported by the delegate of the Federal Republic of Germany, asked why the text of footnote 1 contained the words "desiring to operate within this band", whereas the text of footnote 2 simply said "operating in this band".

2.4 The Chairman of Working Group 5/ad hoc 3 said that the text had been taken from the current Radio Regulations. One possible inference was that the second footnote related to equipment already in normal operation. However, the distinction was slight and he would have no objection to an alignment of the two texts.

2.5 It was agreed that, in the first footnote, the words "desiring to operate" would be replaced by "operating".

Footnote 1, as amended, was approved.

2.6 The delegate of Denmark, referring to the second footnote saw no purpose in the words "inside or outside this band".

2.7 The delegate of Italy said that his delegation had a similar difficulty with that part of the text.

2.8 The observer for the ICAO thought that the attention of the CCIR and of any others involved in preparing such Recommendations should be drawn to the hazards which could occasionally be caused by interference from ISM equipment, particularly at critical moments of aircraft take-off and landing in airport flight control operations.

2.9 The Chairman of Working Group 5/ad hoc 3 said that the matter had, in fact, been lengthily discussed in the Working Group. It seemed impossible to eliminate all risks, and it was chiefly a question of trying to determine on which frequencies the risks would be minimized. The text, as he had said, was intended to provide a provisional solution pending Recommendations by the CCIR; possibly a footnote to that effect could be added.

It was hoped in any case that the wording of the provision, to the effect that equipment should not cause harmful interference to radio services, would induce Administrations to take all possible steps for that purpose.

2.10 The delegate of Sweden said he shared the Italian delegation's concern about the text. Indeed, in his view, such a provision was impossible to implement.

2.11 It was agreed that the text of footnote 2 should be referred back to Working Group 5/ad hoc 3; the latter would also attend to one or two minor differences in the drafting of the various language versions.

3. Report of Working Group 5/ad hoc 4

3.1 The Chairman of Working Group 5/ad hoc 4 summarized that Working Group's report, which had not yet been issued as a document.

The report would contain the Working Group's proposals relating to convening a planning conference. In that connection, the Working Group had seen no need for planning to be linked to an extension of the HF bands currently allocated to broadcasting services. The Working Group felt that all the HF bands allocated to the broadcasting service, either exclusively or on a shared basis, excluding the bands reserved for broadcasting in the Tropical Zone should be considered for planning.

The Working Group also felt that, with a view to achieving a better spectrum utilization, the Conference should envisage the gradual introduction of a single sideband system; for that purpose, the proposed HF broadcasting conference could decide on such a future system at its first session. It was felt that relevant proposals should not be studied at the present Conference but forwarded to the proposed broadcasting conference for study. The proposed conference should also adopt the relevant technical criteria and, if necessary, the criteria for sharing if shared bands were to be subject to planning. Although the CCIR had the necessary information, some additional precision would be needed, particularly regarding adaptation of propagation data for the purpose of planning. In that connection, the Group had prepared a draft Recommendation addressed to the CCIR detailing the points to be considered for the first session of such a conference on which it would be necessary to have data from the CCIR.

The first session of the conference should decide on the general principles for the use of HF broadcasting bands, including power limits and limits on the number of frequencies for broadcasting towards a given area. On the whole, the Working Group felt that proposals put forward at the present Conference should be sent to the broadcasting conference, to be dealt with at its first session.

The Working Group's text would also recommend that, between the end of the present Conference and the holding of the broadcasting conference, Administrations should endeavour to use only the minimum number of frequencies to provide service to a given area.

With regard to the broadcasting conference, the Working Group felt that its first session (four to six weeks) should take place not earlier than eight months following the CCIR Plenary Assembly and the second session (approximately eight weeks) after a further interval of 12 to 18 months.

The Working Group would submit to the Committee a draft Recommendation on the convening of such a conference and draft Recommendations to CCIR to undertake additional studies and to hasten its studies on a single sideband system, bearing in mind particularly the economics of introducing suitable transmitters and receivers. The Working Group would also submit a list of proposals which it thought should be sent for consideration by the broadcasting conference at its first session.

3.2 The delegate of Pakistan requested the representative of the IFRB to inform the Committee, at a later meeting, whether, if the present HF broadcasting schedules were taken as a basis of various countries' requirements a reasonably acceptable plan could be prepared for the December season and for the lowest sunspot period of a sunspot cycle within the present broadcasting allocations in the Table of Frequency Allocations, with particular reference to allocations in the 6 MHz and 7 MHz bands.

3.3 The Chairman suggested that the Committee should take note of the introductory remarks by the Chairman of Working Group 5/ad hoc 4, and consider that Working Group's report in detail once it had been submitted in document form. In addition, the reply of the representative of the IFRB would be given at the next meeting of Committee 5.

It was so agreed.

4. Second report of Working Group 5B (Document No. 228(Rev.2), Annexes 3 and 4)

4.1 Annexes 3 and 4 were approved.

4.2 The Chairman said that, before Document No. 228(Rev.2) as a whole could be approved, the Committee must decide which of the two alternative proposals contained in paragraph 4 was to be adopted.

4.3 Following a show of hands, it was decided not to change the present allocations in the 25 010 - 25 070 kHz frequency band.

Document No. 228(Rev.2), as amended, was approved.

5. First report of Working Group 5BB, and draft note by the Chiarman of Committee 5 to the Chairman of Committee 4 (Documents Nos. 355(Rev.1), DT/125)

5.1 The Chairman of Working Group 5BB, introducing the Working Group's first report to Committee 5, said that the Working Group's decisions relating to the frequency bands referred to in paragraph 1 of the report appeared in Annex 1. The Working Group's decisions relating to the frequency bands mentioned in paragraph 2 were reflected in Annex 2.

As stated in paragraph 3 of the report, the Working Group unanimously recommended that the band 21 924 - 22 000 kHz should be allocated exclusively to the aeronautical mobile (R) service; the Working Group had yet to take a decision regarding the remainder of the band, viz., 21 870 - 21 924 kHz.

With regard to paragraph 4, the Working Group invited the Chairman of Committee 5 to seek the advice of Committee 4 on the 50 W power limitation (mean power) currently specified in Footnote 3507/211; a draft request to Committee 4 was contained in Document No. DT/125.

With regard to paragraph 5, the Working Group agreed to recommend that Committee 5 should request Committee 6 to establish procedures for the transfer of services in new portions of the spectrum.

With regard to Annex 1, the proposed Footnote 3498A had been left within square brackets, because doubts had been expressed about the appropriateness of such a footnote in the HF bands; the French delegation had also commented that the bands concerned were inadequate for radio astronomy purposes. One delegation had undertaken to obtain additional information from experts in radio astronomy, but that information had not yet been received.

5.2 Annex 1 of Document No. 355(Rev.1) was approved, subject to retention for the time being of the square brackets around Footnote 3498A pending its reconsideration by Working Group 5BB.

5.3 The delegate of the Netherlands, referring to Annex 2, felt that the report should contain some reference to the importance attached by his delegation to the possibility of reducing the frequency bands referred to.

5.4 The Chairman of Working Group 5BB proposed that the Working Group should consider that matter further.

5.5 The delegate of Denmark thought that the services making the biggest further demand on the spectrum should be dealt with before those making little or no further demands, since it would have to be decided where additional requirements were to be provided from.

5.6 The delegate of Greece endorsed that observation.

5.7 The Chairman noted that the Working Group had already unanimously adopted its first report. Responding to an observation by the delegate of the Netherlands, he added that further discussion in the Committee was clearly not thereby precluded, particularly since small delegations, for example, could not possibly be represented in the meetings of all working groups.

5.8 Annex 2 was approved.

5.9 The delegate of France said that the text would now have to reflect a resolution of the 1978 Aeronautical Conference relating to inclusion, in Appendix 27 to the Radio Regulations of the entire 21 924 - 22 000 kHz band.

As an editorial point, it might be clearer if, in Annex 1, where the first box referred to standard frequency and was followed by an upper band of 5 003 - 5 005, the centre frequency were to be enclosed by a guardband.

5.10 The Chairman said that the Editorial Group could adjust the text suitably.

5.11 Document No. 355(Rev.1) as a whole was approved.

5.12 Document No. DT/125 was approved.

6. Draft note by the Chairman of Committee 5 (Document No. DT/132)

6.1 The Chairman pointed out that the band in question was 160 - 285 kHz.

6.2 The delegate of the USSR said it was not clear why the document had been brought before Committee 5, since the broadcasting plan currently in force was the one drawn up by the 1975 Broadcasting Conference for Regions 1 and 3, which could not be revised under the terms of reference of WARC-79. Perhaps the document should be withdrawn.

6.3 The delegate of Canada suggested that the words "a possible footnote concerning broadcasting stations in Region 1 in order to protect" be replaced by "protection for".

6.4 The delegate of Italy said that the note might be amended to say that Committee 4 should be consulted on the measures to be taken in the light of the existing broadcasting plan to protect the services operating in Regions 2 and 3.

6.5 The delegate of Algeria said that he too had some difficulties with the text of the note. In his view, the matter was satisfactorily dealt with in No. 117 of the existing Radio Regulations.

6.6 The delegate of Argentina said it was essential to refer the matter to Committee 4 because of the need to obtain the conclusive technical opinion of the CCIR on certain incompatibilities between the broadcasting service in Region 1 and radionavigation and other services in other Regions in the band at issue. His country among others had made reservations to the 1975 Broadcasting Plan, in the belief that the Conference had allotted channels in a haphazard manner, without providing any protection to other services operating in the band in other Regions.

6.7 The Chairman of Sub-Group 5BA pointed out that the question, which had been the subject of a decision in his sub-Group, was dealt with in its first report to the Committee (Document No. 388), to be discussed at a later meeting. The matter had been raised at the current meeting because Committee 4 was due to complete its work by the end of that week.

6.8 The delegate of Italy observed that Committee 4 could undoubtedly be reconvened to consider outstanding matters referred to it by Working Groups.

It was decided to refer Document No. DT/132 back to sub-Group 5BA.

7. Third and fourth reports of Working Group 5C (Documents Nos. 320(Rev.1), 341)

7.1 Document No. 320(Rev.1)

The Chairman of Working Group 5C introduced the Group's third report, drawing attention to paragraph 2 on the concern expressed by the Republic of Korea about an additional allocation by footnote to the broadcasting service in a neighbouring country. The Working Group had noted that concern, but had considered that no further action was required.

Document No. 320(Rev.1) was approved, subject to the correction of a typing error in the French text of Provision 3543B.

7.2 Document No. 341

7.2.1 The Chairman of Working Group 5C, introducing the report, drew attention to the proposal in paragraph 3 to add a sentence to Provision 3553 in Annex 1. The text in square brackets for Provision 3531X should be replaced by the standardized footnote in paragraph 7.2 of Document No. 239. In Annex 2, the band 75.4 - 88 MHz should be replaced by 75.4 - 87 MHz in Provision 3554B, Provision 3548D had been erroneously printed as 3548B, the words "the decisions in" should be inserted before "the Final Acts" in Provisions 3548A, 3548D and 3548C, the square brackets should be removed from Provision 3560, the band 81 - 88 MHz should be replaced by 81 - 87.5 MHz in Provision 3548C and Provision 3553 should be replaced by the following text :

"ADD 3553A Additional allocation : In Afghanistan, Australia and China the band 85 - 87 MHz is also allocated to the broadcasting service on a primary basis."

Finally he drew attention to paragraphs 2 and 4 of the report, relating to a reservation by the delegation of India and to a proposal by the USSR delegation, respectively.

Annex 1

7.2.2 The delegate of Afghanistan asked that his country's name be deleted from Provision 3553.

7.2.3 The delegates of Iran and Pakistan withdrew their proposals in paragraph 3 of the report in the light of that statement.

7.2.4 The delegate of Jamaica asked that his country's name be added to Provision 3548B.

7.2.5 The delegates of Nicaragua, Colombia and Honduras asked that their countries' names be added to Provision 3552.

7.2.6 The delegate of Bulgaria asked that his country's name be added to Provision 3548A.

7.2.7 The delegate of the USSR observed that the original text of Provision 3548 had not contained the last phrase, but had ended with the words "on a primary basis". The additional phrase did not relate to the Soviet Union, which had received no allocations at the Special Conference of 1960. Moreover, his country's name did not appear in No. 250 of the existing Radio Regulations, although it was included in Provision 3546 which it was proposed to delete. The two possible solutions of that problem were either to delete the second phrase from Provision 3548 or to delete the name of the USSR from that note and to reinstate Provision 3546. He would prefer the first alternative.

7.2.8 The delegates of Italy, Sweden and Finland said they preferred the second alternative.

7.2.9 The delegate of Mongolia said that his country was in the same position as the USSR.

7.2.10 The Chairman of Working Group 5C said that, to keep in line with the discussions in the Working Group, the best course would be to delete the names of Mongolia and the USSR from Provision 3548 and to reinstate Provision 3546, adding the name of Mongolia. A consequential change would be the deletion of the names of those two countries from Provision 3548D in Annex 2.

7.2.11 The delegate of the USSR endorsed those remarks, adding that if the two bands 68 - 73 MHz and 76 - 87.5 MHz were both referred to in Provision 3548, in which the names of Mongolia and the USSR would not longer appear, Provision 3548D could be deleted altogether.

He reiterated his delegation's proposal that the broadcasting service should be added to the 73 - 74 MHz band for certain Region 1 countries and suggested that a footnote be added, worded along the lines of Provision 3546.

7.2.12 The delegate of Sweden said that the proposed footnote should follow the standardized text in Document No. 239 which referred to the special procedure being worked out in Committee 6. The text should therefore read :

"In the USSR, the band 73 - 74 MHz is also allocated to the broadcasting service, subject to agreement under the procedure set forth in Article N13A."

7.2.13 The delegate of the USSR said he could not agree that the standardized footnote was suitable in the case at issue. Since use of the standardized texts was not mandatory, he wished the footnote he had proposed to be worded in the terms of Provision 3546.

Annex 2

7.2.14 The delegate of Jamaica asked that his country's name be added to Provision 3558X.

7.2.15 The delegate of France asked that the name of the French Overseas Departments in Region 2 be added to Provision 3558X.

7.2.16 The delegate of Papua New Guinea asked that his country's name be deleted from Provision 3560.

7.2.17 The delegate of Cameroon said that it had been difficult to follow the exact decisions taken on the many proposals made and suggested that a revised text be submitted to the Committee's next meeting.

It was so decided.

7.2.18 The delegate of India said that his delegation wished to withdraw the reservation referred to in paragraph 2 of the report.

8. Third and fourth reports of Working Group 5D (Documents Nos. 263(Rev.1), 350)

8.1 Document No. 263(Rev.1)

8.1.1 The Chairman of Working Group 5D introduced the Group's third report, pointing out that "MOD 3765/392H" on page 3 should read "MOD 3766/392H".

8.1.2 The delegate of the USSR, supported by the delegate of the German Democratic Republic, proposed that Provision 3762B be deleted and that the words "except aeronautical mobile" be inserted after "MOBILE" in the boxes for the 7 300 - 7 450 MHz and 7 750 - 7 900 MHz bands.

It was so agreed.

8.1.3 The delegate of Brazil withdrew his delegation's reservation in paragraph 3 of the report. He also suggested that the second sentence of Provision 3764B be placed in square brackets, to indicate that the text would be replaced by the appropriate standardized text prepared by Working Group 5A.

It was so agreed.

8.1.4 The delegates of Turkey, Australia, the Federal Republic of Germany, Papua-New Guinea and Canada asked that their countries' names be deleted from Provisions 3765 and 3766.

8.1.5 The delegates of Greece and Honduras asked that their countries' names be deleted from Provision 3765.

8.1.6 The delegate of Venezuela suggested that Provisions 3765 and 3766 be amalgamated, since they now referred to the same two countries.

8.1.7 The Chairman said that the Editorial Group would take that suggestion into account.

Document No. 263(Rev.1), as amended, was approved.

8.2 Document No. 350

8.2.1 The Chairman of Working Group 5D introduced his Group's fourth report, drawing particular attention to paragraph 3 on recommended allocations to the inter-satellite service.

8.2.2 The Chairman said that Provision 3807AA would be replaced by the appropriate standardized text.

8.2.3 The delegates of Brazil, India and Cuba having expressed the wish to remove their countries' names from Provision 3811, it was decided to delete that provision.

8.2.4 The delegates of Algeria, Afghanistan, Cameroon, Iran, Iraq, Saudi Arabia, Bangladesh, Spain, Kuwait, Mali, Malaysia, Libya, Malawi, Somalia, Yemen Arab Republic, Tanzania, Qatar, Thailand, Senegal, Zaire, Central African Republic, Morocco, Malta, Oman, Pakistan, Kenya, Nigeria and Tunisia said they wished their countries' names to appear in Provision 3794.

8.2.5 The delegate of the United Kingdom said he was concerned by the fact that such a large number of countries had added their names to a provision which concerned allocation on a primary basis and covered not only the band allocated in the document but also others on which Working Group 5D had not yet reached decisions. Those additions would lead to an excessive amount of sharing while it was still not known what services would be involved in other bands mentioned in the footnote. Moreover, Provision 3807AA related to the coverage by one country of a larger band than the one in the Allocation Table.

8.2.6 The delegate of Italy endorsed those remarks and suggested that the whole Provision be placed in square brackets until the outstanding decisions had been taken.

It was so decided.

Document No. 350, as amended, was approved, subject to the correction of a typing error in the Spanish text of Provision 3799B.

The meeting rose at 1210 hours.

The Secretary :
M. SANT

The Chairman :
M. HARBI

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 521-E
7 November 1979
Original : English

COMMITTEE 4

ELEVENTH REPORT FROM WORKING GROUP 4C TO COMMITTEE 4

Subject : MOD Article N17

1. Working Group 4C, having considered all proposals concerning Article N17, submits the revised text of this Article for consideration in Committee 4 (see Annex).

2. This report and its Annex have been approved unanimously.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

A N N E X

MOD

ARTICLE N17

NOC

Tests

NOC 5029/700

§ 1. (1) Before authorizing tests and experiments in any station, each administration, in order to avoid harmful interference, shall prescribe the taking of all possible precautions such as the choice of frequency and of time and the reduction or, in all cases where this is possible, the suppression of radiation. Any harmful interference resulting from tests and experiments shall be eliminated with the least possible delay.

MOD 5030/701

(2) ~~A station making emissions for tests, adjustments, or experiments, shall transmit, at slow speed and at frequent intervals its identification in accordance with the provisions of Article N23/19~~. For the identification of transmissions made during tests, adjustments or experiments see Article N23/19.

ADD 5030A

(2A) In the aeronautical radionavigation service, it is undesirable, for safety reasons, to transmit the normal identification during emissions conducted to check or adjust equipment already in service. Unidentified emissions should however be restricted to a minimum.

(NOC) 5031/702

(3) Signals for testing and adjustment shall be chosen in such a manner that no confusion will arise with a signal, abbreviation, etc., having a special meaning defined by these Regulations or by the International Code of Signals.

(NOC) 5032/703

(4) For testing stations in the mobile service see Nos. **7523/1061**, **7524/1062** and **8814/1293** to **8816/1295**.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 522-E
7 November 1979
Original : English
French

WORKING GROUP 6A

THIRD REPORT OF DRAFTING GROUP 6A1

1. The texts appearing in the Annex concerning the revised version of Article N13/9 (Notification and Recording in the Master Register of Frequency Assignments to Radio Astronomy and Space Radiocommunication Stations except stations in the Broadcasting-Satellite Service) have been agreed in Drafting Group 6A1 and are presented to Working Group 6A.

2. Having discussed the proposals relating to "wide band" assignments, Drafting Group 6A1 introduced modifications intended to permit Administrations to request coordination concerning a space station or an Earth station for all or part of the frequency band occupied by the space station, however the notification and recording procedures shall be applied to each of the coordinated frequency assignments to a space station or to an Earth station.

J.K. BJÖRNSJÖ
Chairman of Drafting Group 6A1

Annex : 1

ANNEX

DRAFT

Spa2 **ARTICLE N13/9A**

MOD **Notification and Recording in the Master International Frequency Register of Frequency Assignments[1] to ~~Radio Astronomy~~ and Space / passive / Radiocommunication Stations except Stations in the Broadcasting-Satellite Service**

(Note : Deferred until decision of Committee 5)

NOC A.N13/9A [1] The expression *frequency assignment*, wherever it appears in this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called *Master Register*).

NOC **Section I. Notification of Frequency Assignments**

to be used for transmission or reception at

MOD 4575 639BA Spa2 **§ 1. (1) Any frequency assignment to an earth or space station shall be notified to the Board**

a) if the use of the frequency concerned is capable of causing harmful interference to any service of another administration; *or*

b) if the frequency is to be used for international radiocommunications: *or*

c) if it is desired to obtain international recognition of the use of the frequency.

SUP 4576 639BB (2)
Spa2

MOD **4577** **639BC** **(3)** ~~**Similar notice may be given for any**~~ **frequency or frequency band to be used for reception by a particular** ~~**radio astronomy**~~ **station, if it is desired that such data should be included in the Master Register.**

Any

may be notified

/ passive /

(Note : Deferred until decision of Committee 5)

ADD 4577A (3A) Frequency assignments to an Earth station shall be notified by the Administration of the country on whose territory [1] the Earth station is located, unless specifically stipulated otherwise by special arrangements in accordance with Article 31 of the Convention communicated to the Union by the Administrations. Frequency assignments to a space station shall be notified by the Administration (or one acting on behalf of a group of named Administrations) for which the space station is to be brought into use.

/ ADD 4577A.1 [1] If a notice is received from an Administration for a frequency assignment to an Earth station situated on a territory over which there is a dispute of sovereignty, an entry in the Master Register, after examination by the Board, does not signify recognition of the sovereignty of a country over the territory in question. /

ADD 4577B (3B) [2] When the Board receives from one Administration a notice containing a modification or deletion of a space station assignment already recorded in the Master Register on behalf of a group of Administrations, it shall be assumed, in the absence of information to the contrary, that the notice of modification or deletion is submitted on behalf of all the Administrations which were associated with the original notification.

MOD **4578 639BD Spa2** **(4) A notice submitted in accordance with No. 4575/639BA ~~or 4576/639BB~~ and relating to a frequency assignment to mobile earth stations in a satellite system shall include the technical characteristics either of each mobile earth station, or of a typical mobile earth station, and an indication of the service area within which these stations are to be operated.**

/ transportable earth stations or / / transportable or /

(Note : Deferred until decision of Committee 5)

MOD 4579 639BE Spa2

§ 2. For any notification under Nos. 4575/639BA, ~~4576/639BB~~, 4577/639BC, or 4578/639BD an ~~individual~~ notice for each frequency assignment shall be drawn up as prescribed in Appendix 1A, the various Sections of which specify the basic characteristics to be furnished according to the case. It is recommended that the notifying administration should also supply the additional data called for in Section A of that Appendix, together with such further data as it may consider appropriate.

shall

shall be submitted

MOD 4580 639BF Spa2

§ 3. (1) For a frequency assignment to an earth or space station, each notice ~~must~~ reach the Board not earlier than three years before the date on which the assignment is to be brought into use. The notice ~~must~~ reach the Board in any case not later than ninety days[1] before this date, except in the case of assignments in the space research service in bands allocated exclusively to this service or in shared bands in which this service is the sole primary service. In the case of such an assignment in the space research service, the notice should, whenever practicable, reach the Board before the date on which the assignment is brought into use, but it ~~must~~ in any case reach the Board not later than thirty days after the date it is actually brought into use.

shall

NOC 4580.1 639BF.1 Spa2

[1] The notifying administration shall take this limit into account when deciding, where appropriate, to initiate the co-ordination procedure(s).

NOC 4581 639BG Spa2

(2) Any frequency assignment to an earth or space station, the notice of which reaches the Board after the applicable period specified in No. 4580/639BF, shall, where it is to be recorded, bear a mark in the Master Register to indicate that it is not in conformity with No. 4580/639BF.

NOC

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

MOD 0502 639BH Spa2 **§ 4. Any notice which does not contain at least those basic characteristics specified in Appendix 1A shall be returned by the Board ~~immediately~~. by airmail, to the notifying administration with the reasons therefor,**

unless the information not provided is immediately forthcoming in response to an enquiry of the Board. The Board shall advise the Administration by telegram when a notice is returned under this provision.

MOD 4583 639BI Spa2 § 5. Upon receipt of a complete notice, the Board shall include the particulars thereof, including diagrams, with the date of receipt, in the weekly circular referred to in No. 4292/497 to be published within a period of forty days after receipt of the notice. When the Board is not in a position to comply with this time-limit, it shall, as soon as possible, so inform the Administrations concerned giving the reasons therefor.

MOD 4584 639BJ Spa2 § 6. The circular shall contain the full particulars, ~~including diagrams~~, of all such notices received since the publication of the previous circular and shall constitute the acknowledgement to each notifying Administration of the receipt of the complete notice.

taking into account the time-limit referred to in No. 4649/639DW.

MOD 4585 639BK Spa2 **§ 7. Complete notices shall be considered by the Board in the order of their receipt. The Board shall not postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith: moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until it has reached a finding with respect to such earlier notice.**

NOC 4586 639BL Spa2 § 8. **The Board shall examine each notice:**

MOD 4587 639BM Spa2 *a)* **with respect to its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the co-ordination procedures and the probability of harmful interference)**

which are the subject of the following sub-paragraphs;

MOD 4588 639BN Spa2 *b)* ~~**where appropriate,**~~ **(with respect to its conformity with the provisions** ~~**of No. 4114/639AJ,**~~ **relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-à-vis space radiocommunication stations)**

in cases where the provisions of No. 4114/639AJ or No. 4114/639AK are applicable;

MOD 4589 639BO Spa2 *c)* ~~**where appropriate,**~~ **(with respect to its conformity with the provisions** ~~**of No. 4138/639AN,**~~ **relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-à-vis terrestrial radiocommunication stations)**

in cases where the provisions of No. 4138/639AN are applicable;

MOD 4590 639BP
Spa2

d) with respect to the probability of harmful interference, when the coordination under No. 4114/639AJ has not been successfully effected; this examination shall take into account the frequency assignments for transmit or receive already recorded in the Master Register :

- in application of Nos. 4604/639CD, 4607/639CG, 4611/639CK, or 4615/639CO, or

- in application of No. 4616/639CP, if that frequency assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 4587/639BM;

(examination of such a notice with respect to any other frequency assignment published under No. 4118D but not yet notified, shall be deferred until both assignments have been notified; the Board shall then examine them in the order of their publication under No. 4118D);

MOD 4591 639BQ
Spa2

e) with respect to the probability of harmful interference, when the coordination under No. 4138/639AN has not been successfully effected; this examination shall take into account the frequency assignments for transmit or receive already recorded in the Master Register :

- in application of No. 4303/508, or

- in application of Nos. 4384/570AM, 4387/570AP, 4391/570AT, or 4394/570AW, or

- in application of No. 4395/570AX if that assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 4587/639BM.

SUP 4592 639BR

NOC **4593 639BS Spa2**

§ 9. When, following an examination of a notice with respect to No. 4590/639BP, the Board reaches an unfavourable finding based upon the probability of harmful interference to a recorded assignment for a space station which the Board has reason to believe may not be in regular use, the Board shall forthwith consult the administration responsible for the registered assignment. If it is established, after such consultation and on the basis of the information available, that the recorded assignment has not been in use for two years, it shall not be taken into account for the purposes of the examination in progress or any other further examination under No. 4590/639BP conducted before the date on which the assignment is brought back into use. Before the assignment is brought back into use, it shall be subject to further co-ordination in accordance with the provisions of No. 4114/639AJ or further examination by the Board with respect to No. 4590/639BP, as appropriate. The date on which the assignment is brought back into use shall then be entered in the Master Register.

MOD **4594 639BT Spa2**

§ 10. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 4587/639BM, 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~, as appropriate, further action shall be as follows:

and

NOC **4595 639BU Spa2**

§ 11. (1) *Finding Favourable with Respect to No. 4587/639BM in cases where the Provisions of Nos. 4588/639BN and 4589/639BO are not applicable.*

NOC **4596 639BV Spa2**

(2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

ADD 4596A § 11A. (1) Finding unfavourable with respect to No. 4587/639BM in cases where the provisions of Nos. 4588/639BN and 4589/639BO are not applicable.

ADD 4596B (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

ADD 4596C (3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be returned immediately by airmail to the notifying Administration with the reasons of the Board for this finding together with such suggestions as the Board is able to offer with a view to the satisfactory solution of the problem.

MOD 4597 639BW Spa2 § 12. (1) Finding unfavourable with respect to No. 4587/639BM in cases where the provisions of Nos. 4588/639BN and 4589/639BO are applicable.

and

MOD **4598 639BX Spa2** (2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. **3279/115**, and the finding is favourable with respect to Nos. **4588/639BN**, **4589/639BO**, **4590/639BP**, **4591/639BQ** ~~and **4592/639BR**~~, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

or

MOD **4599 639BY Spa2** (3) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. **3279/115** and the finding is unfavourable with respect to Nos. **4588/639BN**, **4589/639BO**, **4590/639BP**, **4591/639BQ** ~~or **4592/639BR**~~, as appropriate, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding. Should the administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register, ~~However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column~~.

with the understanding that the provisions of No. 4631/639DE shall be applied. The date of receipt by the Board of the original notice shall be entered in Column 2d.

SUP 4600 639BZ (4)

MOD **4601** 639CA Spa2 **(5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding ~~and~~ with such suggestions as the Board ~~may be~~ able to offer with a view to the satisfactory solution of the problem.**

together

is

NOC **4602** 639CB Spa2 **(6) If the notifying administration resubmits the notice unchanged, it shall be treated in accordance with the provisions of No. 4601/639CA. If it is resubmitted with a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be treated in accordance with the provisions of Nos. 4598/639BX or 4599/639BY, as appropriate. If it is resubmitted with modifications which, after re-examination, result in a favourable finding by the Board with respect to No. 4587/639BM, it shall be treated as a new notice.**

NOC **4603** 639CC Spa2 § 13. (1) *Finding Favourable with Respect to No.* **4587**/639BM *in cases where the Provisions of Nos.* **4588**/639BN *or* **4589**/639BO *are applicable.*

NOC **4604** 639CD Spa2 (2) Where the Board finds that the co-ordination procedures mentioned in Nos. **4588**/639BN or **4589**/639BO have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

MOD **4605** 639CE Spa2 (3) Where the Board finds that either of the co-ordination procedures mentioned in Nos. **4588**/639BN and **4589**/639BO has not been applied, and ~~the notifying administration requests the Board to effect the required co-ordination, the Board shall take appropriate action and shall inform the administrations concerned of the results obtained. If the Board's efforts are successful, the notice shall be treated in accordance with No. 4604/639CD. If the Board's efforts are unsuccessful, the notice shall be examined by the Board with respect to the provisions of Nos. 4590/639BP, 4591/639BQ and 4592/639BR, as appropriate~~.

ADD 4605A a) if the notifying Administration requests the Board to effect the coordination the Board shall take appropriate action; if the Board's efforts toward securing agreement are successful, it shall so inform the Administrations concerned and shall treat the notice in accordance with No. 4604/639CD;

ADD 4605B b) if the Board's efforts toward securing agreement in application of Nos. 4605A or 4127/639AS or 4149/639AS are unsuccessful, or if, when notifying the assignment, the Administration states that it has been unsuccessful and does not request the Board to effect the required coordination, the Board shall examine the notice with respect to the provisions of Nos. 4590/639BP and 4591/639BQ, as appropriate. At the same time, the Board shall so inform the Administrations concerned.

MOD **4606** 639CF Spa2

c) if ~~(4) Where the Board finds that either of the co-ordination procedures mentioned in Nos. 4588/639BN and 4589/639BO has not been applied, and~~ the notifying administration does not request the Board to effect the required co-ordination, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this action ~~and~~ together with such suggestions as the Board ~~may be~~ is able to offer with a view to the satisfactory solution of the problem.

NOC **4607** 639CG Spa2

(5) Where the notifying administration resubmits the notice and the Board finds that the co-ordination procedures mentioned in Nos. **4588**/639BN and **4589**/639BO have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

NOC **4608** 639CH Spa2

(6) Where the notifying administration resubmits the notice with a request that the Board effect the required co-ordination under Nos. **4114**/639AJ or **4138**/639AN, it shall be treated in accordance with the provisions of No. **4605**/639CE, 4605A or 4605B. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

SUP **4609** 639CI

MOD **4610 639CJ Spa2** **§ 14. (1) *Finding Favourable with Respect to Nos.* 4587/639BM, 4590/639BP** and **4591/639BQ ~~and 4592/639BR~~, *as appropriate.***

NOC **4611 639CK Spa2** **(2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.**

NOC **4612 639CL Spa2** **(3) However, should the examination show that the level of the interference noise and the percentage of time during which it is likely to occur have values slightly greater than those used for assessing the probability of harmful interference (extreme propagation conditions, abnormal atmospheric humidity, etc.), a remark shall be included in the Master Register to show that there may be a slight risk of harmful interference and hence additional precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.**

ADD 4612A (3A) In addition to the examination of a frequency assignment to an Earth station under No. 4591/639BQ, the Board shall examine that frequency assignment with respect to the probability of harmful interference caused to, or caused by those assignments to terrestrial stations communicated to the Board in application of No. 4146/639AQ and which are to be brought into use in the next three years.

ADD 4612B (3B) Following the examination under No. 4612A, the Board shall, where appropriate :

- inform the Administrations concerned of any unfavourable findings;
- enter a remark indicating such an unfavourable finding against the assignments to the Earth station recorded in the Master Register;
- record the assignments to terrestrial stations in the Master Register with a remark indicating any unfavourable finding; the date of receipt of the information communicated under No. 4146/639AQ shall be entered in Column 2d.

MOD **4613** 639CM Spa2 § 15. (1) *Finding Favourable with Respect to No.* 4587/639BM *but Unfavourable with Respect to Nos.* 4590/639BP, 4591/639BQ ~~*or 4592/639BR,*~~ *as appropriate.*

or

MOD **4614** 639CN Spa2 (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding ~~and~~ with such suggestions as the Board ~~may be~~ able to offer with a view to the satisfactory solution of the problem.

together

is

MOD **4615** 639CO Spa2 (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to Nos. 4590/639BP, 4591/639BQ ~~and 4592/639BR,~~ as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

and

MOD **4616** 639CP Spa2 (4) Should the notifying administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. 4615/639CO to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if ~~the notifying administration informs the Board~~ that the assignment has been in use for at least ~~one hundred and twenty days~~ without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column. ~~The period of one hundred and twenty days shall count from the date indicated in No. 4600/639BZ.~~

new

the Board is informed

four months

, provided that the earlier assignment is brought into use within the additional period mentioned in No. 4621A.

together with the frequency assignment to the station which was the basis for the unfavourable finding,

MOD **4617** 639CQ Spa2 § 16. (1) ***Notices relating to ~~radio astronomy~~ stations.***

passive

(Note : Deferred until decision of Committee 5)

4587/639BM only. / passive /

MOD **4618** 639CR Spa2 (2) A notice relating to a radio astronomy station shall ~~not~~ be examined by the Board with respect to No. ~~4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ and 4592/639BR~~. Whatever the finding, the assignment shall be recorded in the Master Register with a date in Column 2c. The date of receipt by the Board of the notice shall be recorded in the Remarks Column.

NOC **4619** 639CS Spa2 § 17. (1) ***Change in the Basic Characteristics of Assignments already recorded in the Master Register.***

MOD **4620** 639CT Spa2 (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix 1A (except the name of the station or the name of the locality in which it is situated) shall be examined by the Board according to No. **4587**/639BM, and, where appropriate, Nos. **4588**/639BN, **4589**/639BO, **4590**/639BP, and **4591**/639BQ ~~and 4592/639BR~~, and the provisions of Nos. **4595**/639BU to **4618**/639CR inclusive shall apply. Where the change should be recorded, the ~~original~~ assignment shall be amended according to the notice.

or the date of bringing into use)

recorded

MOD **4621** 639CU Spa2

(3) However, in the case of a change in the characteristics of an assignment which is in conformity with No. 4587/639BM, should the Board reach a favourable finding with respect to Nos. 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~, where appropriate, or find that the changes do not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in Column 2d. The date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

ADD 4621A

(3A) The projected date of bringing into use of a frequency assignment may be extended on request of the notifying Administration by four months. In the case where the Administration states that, due to exceptional circumstances, it needs a further extension of this period, such extension may be provided but it shall in no case exceed eighteen months from the original projected date of bringing into use.

NOC **4622** 639CV Spa2

§ 18. In applying the provisions of this section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board, shall be considered as a new notice.

NOC **4623** 639CW Spa2

§ 19. (1) *Recording of Frequency Assignments notified before being brought into use.*

MOD **4624** 639CX Spa2

(2) If a frequency assignment notified in advance of bringing into use has received a favourable finding by the Board with respect to No. 4587/639BM and, where appropriate, Nos. 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry.

MOD 4625 639CY Spa2

(3) Within thirty days after the date of bringing into use, either originally notified or modified in application of No. 4621A, the notifying Administration shall confirm that the frequency assignment has been brought into use. When the Board is informed that the assignment has been brought into use, the special symbol shall be deleted from the Remarks column.

ADD 4625A Spa2

(3A) If the Board does not receive this confirmation within the period referred to in No. 4625/639CY or at the end of the period referred to in Nos. 4599/639BY or 4616/639CP, as appropriate, the entry concerned shall be cancelled. The Board shall advise the Administration concerned before taking such action.

MOD **4626 639CZ** Spa2

(4) In the circumstances described in Nos. 4599/639BY and 4616/639CP, and as long as an assignment which received an unfavourable finding cannot be resubmitted ← the notifying administration may ask the Board to enter the assignment provisionally in the Master Register, in which event a special symbol to denote the provisional nature of the entry shall be entered in the Remarks Column. The Board shall delete this symbol when it receives from the notifying administration, at the end of the period specified in Nos. 4599/639BY or 4616/639CP, as appropriate, the information relating to the absence of complaint of harmful interference.

with a statement relating to operation without interference,

SUP 4627 639DA (5)

NOC **Section III. Recording of Findings in the Master Register**

NOC **4628** 639DB Spa2 § 20. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.

NOC

Section IV. Categories of Frequency Assignments

NOC **4629** 639DC Spa2

§ 21. (1) The date in Column 2c shall be the date of putting into use notified by the administration concerned. It is given for information only.

MOD **4630** 639DD Spa2

(2) If harmful interference is actually caused to the reception of any space radiocommunication station whose frequency assignment has been recorded in the Master Register as a result of a favourable finding with respect to Nos. **4587**/639BM, **4588**/639BN, **4589**/639BO, **4590**/639BP, **4591**/639BQ ~~and **4592**/639BR~~, as appropriate, by the use of a frequency assignment to a space radiocommunication station subsequently recorded in the Master Register in accordance with the provisions of No. **4616**/639CP, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

NOC **4631** 639DE Spa2

(3) If harmful interference to the reception of any station whose assignment is in accordance with Nos. **4296**/501, **4370**/570AB or **4587**/639BM, as appropriate, is actually caused by the use of a frequency assignment which is not in conformity with No. **4587**/639BM, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

NOC

Section V. Review of Findings

NOC 4632 639DF Spa2 § 22. (1) The review of a finding by the Board may be undertaken:

- at the request of the notifying administration;
- at the request of any other administration interested in the question, but only on the grounds of actual harmful interference;
- on the initiative of the Board itself when it considers this is justified.

MOD 4633 639DG Spa2 (2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account No. 4587/639BM and, where appropriate, Nos. 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~ and shall render an appropriate finding, informing the notifying administration prior either to the publication of its finding or to any recording action.

MOD 4634 639DH Spa2 § 23. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 4590/639BP, 4591/639BQ ~~or 4592/639BR~~, this administration may request the Board to review the finding. Thereupon, the Board shall review the matter, having first consulted the administrations concerned.

NOC 4635 639DI Spa2 (2) If the finding of the Board is then favourable it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

NOC **4636 639DJ Spa2** **(3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.**

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

/ ADD 4636A § 23A. The Board shall at intervals not exceeding two years request confirmation from the notifying Administration that its assignment has been and will continue to be in regular use in accordance with its recorded characteristics. /

NOC **4637 639DK Spa2** **§ 24. (1) Where the use of a recorded assignment to a space station is suspended for a period of eighteen months, the notifying administration shall, within this eighteen-month period, inform the Board of the date on which such use was suspended and of the date on which the assignment is to be brought back into regular use.**

NOC **4638 639DL Spa2** **(2) Whenever it appears to the Board, whether or not as a result of action under No. 4637/639DK, that a recorded assignment to a space station has not been in regular use for more than eighteen months, the Board shall inquire of the notifying administration as to when the assignment is to be brought back into regular use.**

NOC **4639 639DM Spa2** **(3) If no reply is received within six months of action by the Board under No. 4638/639DL, or if the reply does not confirm that the assignment to a space station is to be brought back into regular use within this six-month limit, a mark shall be applied against the entry in the Master Register. Thereafter, the assignment shall be treated in accordance with No. 4593/639BS as one which has been established as having been out of regular use for two years.**

NOC **4640** 639DN Spa2 **§ 25. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within ninety days of such discontinuance, whereupon the entry shall be removed from the Master Register.**

MOD **4641** 639DO Spa2 **§ 26. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics, is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall cancel, suitably modify the entry.**

or retain the basic characteristics of

MOD **4642** 639DP Spa2 **§ 27. If, in connection with an inquiry by the Board under No 4641/639DO, the notifying administration has failed to supply the Board within with the necessary or pertinent information, the Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation.**

/three months/ /from the date of the enquiry/

ADD 4642A §27A. (1) /A frequency assignment to a space station shall be deemed definitively discontinued after the expiry of the period of operation shown on the assignment notice, reckoned from the date on which the assignment was brought into service. The Board shall then invite the notifying Administration to take steps to cancel the assignment. If the Board receives no reply within ninety days following the expiry of the period of operation, the entry of the assignment in the Master Register shall be cancelled./

ADD 4642B (2) /If a notifying Administration which wishes to extend the period of operation originally shown on the assignment notice of a frequency assignment of an existing space station informs the Board accordingly more than 3 years before the expiry of the period in question and if all other basic characteristics of that assignment remain unchanged, the Board shall amend as requested the period of operation originally recorded in the Master Register and publish that information in a special section of the Weekly Circular./

ADD 4642C (3) /If, at least three years before the expiry of the period of operation recorded in the Master Register of a frequency assignment of an existing space station, an Administration initiates the coordination procedure to bring into service a new space station using the same assigned frequency and the same orbital position but with different technical characteristics, and if the Board finds that the new assignment conforms with the provisions of No. 4587/639BM and does not increase, in relation to the preceding assignment, the probability of interference to the detriment of a frequency assignment recorded in the Master Register, the new assignment shall be given a favourable finding and shall be entered in the Master Register with the notification date of the preceding assignment./

ADD 4642D (4) /A notifying Administration which wishes to modify a basic characteristic of a frequency assignment of a space station recorded in the Master Register shall initiate, in any case other than those covered by Nos. 4642B and 4642C, the appropriate modification procedure in accordance with Nos. 4619/639CS to 4622/639CV./

NOC **Section VII. Studies and Recommendations**

NOC 4643 639DQ Spa2 **§ 28. (1) If it is requested by any administration, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of cases of alleged contravention or non-observance of these Regulations, or of harmful interference.**

MOD 4644 639DR Spa2 (2) The Board shall thereupon prepare and forward to the Administrations concerned a report containing its findings and recommendations for the solution of the problem.

ADD 4644A (2A) On receiving the Board's recommendations for the solution of the problem, an Administration shall promptly acknowledge the receipt by telegram and shall subsequently indicate the action it intends to take. In cases when the Board's suggestions or recommendations are unacceptable to the Administrations concerned, further efforts should be made by the Board to find an acceptable solution to the problem.

MOD 4645 639DS Spa2 § 29. In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of four months the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer. If it was the requesting administration which failed to answer within this period, the Board shall close the study.

NOC **Section VIII. Miscellaneous Provisions**

MOD 4646 639DT Spa2 § 30. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, ~~and if the circumstances appear to warrant~~, the Board, using such means at its disposal as are appropriate in the circumstances, shall render ~~the following assistance:~~

~~a) computation of the increases in noise temperatures in accordance with No. 4115/639AK;~~

~~b) preparation of diagrams showing the co-ordination areas as in No. 4141/639AN;~~

~~c)~~ any ~~other~~ assistance of a technical nature ~~for completion of the procedures in~~ in the application of the provisions of this Article.

NOC **4647** **639DU** Spa2 (2) In making a request to the Board under No. **4646/639DT**, the administration shall furnish the Board with the necessary information.

NOC **4648** **639DV** Spa2 § 31. The technical standards of the Board shall be based upon the relevant provisions of these Regulations and the Appendices thereto, the decisions of Administrative Conferences of the Union, as appropriate, the Recommendations of the C.C.I.R., the state of the radio art and the development of new transmission techniques.

MOD **4649** **639DW** Spa2 § 32. The Board shall ~~promulgate to~~ administrations its findings and reasons therefor, together with all changes made to the Master Register, through its weekly circular. Such a publication shall be made ~~/ two months /~~ ~~from~~ the date of publication of the complete notice in the weekly circular referred to in No. 4292/497. When the Board is not in a position to comply with the time-limit referred to above it shall, as soon as possible, so inform the Administration concerned giving the reasons therefor.

inform all

of

the

within forty-five days of

MOD **4650** **639DX** Spa2 § 33. In case a Member ~~or Associate Member~~ of the Union avails itself of the provisions of Article 50 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

INTERNATIONAL TELECOMMUNICATION UNION

BLUE PAGES

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 523
12 November 1979

E

B.8

PLENARY MEETING

8th SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

Page B.8-6

Replace the text of No. **5000A** by the following:

ADD **5000A**

§ 5A. The out-of-band emissions of transmitting stations should not cause harmful interference to services which operate in adjacent bands in accordance with these Regulations and which use receivers in conformity with Nos. **3244**/669, **3249B**, **3249C**, **3249D**, and relevant CCIR Recommendations.

INTERNATIONAL TELECOMMUNICATION UNION

BLUE PAGES

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 523
7 November 1979

E

B.8

PLENARY MEETING

8th SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

Source	Document No.	Title
C.4	473 + 474	Art. 3; Art. 16

P. BASSOLE
Chairman of the
Editorial Committee

Annex: 7 pages

MOD

ARTICLE N3

NOC

Designation of Emissions

SUP **3209** to **3216** inclusive together with associated section headings.

ADD **3209A** § 1. (1) Emissions shall be designated according to their necessary bandwidth and their classification.

ADD **3209B** (2) Examples of emissions designated in accordance with this Article are given in Appendix **5**, Part [B]. [ ] Further examples may appear in the latest CCIR Recommendations. These examples may also be published in the Preface to the International Frequency List.

ADD

Section I. Necessary Bandwidth

ADD **3210A** § 2. The necessary bandwidth, as defined in No. **3140**/91 and determined in accordance with Appendix **5**, Part [B], [ ] shall be expressed by three numerals and one letter. The letter occupies the position of the decimal point and represents the unit of bandwidth. The first character shall be neither zero nor K, M or G.

Necessary bandwidths 1:

between .001 and 999 Hz shall be expressed in Hz (letter H),

between 1.00 and 999 kHz shall be expressed in kHz (letter K),

between 1.00 and 999 MHz shall be expressed in MHz (letter M),

between 1.00 and 999 GHz shall be expressed in GHz (letter G),

ADD **3210A.1** 1 Examples:

0.002	Hz	= H002	6	kHz	= 6K00	1.25	MHz	= 1M25
0.1	Hz	= H100	12.5	kHz	= 12K5	2	MHz	= 2M00
25.3	Hz	= 25H3	180.4	kHz	= 180K	10	MHz	= 10M0
400	Hz	= 400H	180.5	kHz	= 181K	202	MHz	= 202M
2.4	kHz	= 2K40	180.7	kHz	= 181K	5.65	GHz	= 5G65

ADD

Section II. Classification

ADD **3211A** § 3. The class of emission is a set of characteristics conforming to No. **3212A**.

ADD **3212A**

§ 4. Emissions shall be classified and symbolized according to their basic characteristics as given in No. **3213A** and any optional additional characteristics as provided for in Appendix **5**, Part [A]. [ ]

ADD **3213A**

§ 5. The basic characteristics (see Nos. **3214A**, **3215A**, **3216A**) are:

(1) First symbol - type of modulation of the main carrier;

(2) Second symbol - nature of signal(s) modulating the main carrier;

(3) Third symbol - type of information to be transmitted.

Modulation used only for short periods and for incidental purposes (such as, in many cases, for identification or calling) may be ignored provided that the necessary bandwidth as indicated is not thereby increased.

ADD **3214A**

§ 6. (1) First symbol - Type of modulation of the main carrier

(1.1)	Emission of an unmodulated carrier	N
(1.2)	Emission in which the main carrier is amplitude-modulated (including cases where sub-carriers are angle-modulated)	
(1.2.1)	Double-sideband	A
(1.2.2)	Single-sideband, full carrier	H
(1.2.3)	Single-sideband, reduced or variable level carrier	R
(1.2.4)	Single-sideband, suppressed carrier	J
(1.2.5)	Independent sideband	B
(1.2.6)	Vestigial sideband	C
(1.3)	Emission in which the main carrier is angle-modulated	
(1.3.1)	Frequency modulation	F
(1.3.2)	Phase modulation	G

(1.4) Emission in which the main carrier is amplitude- and angle-modulated either simultaneously or in a pre-established sequence D

(1.5) Emission of pulses [1]

(1.5.1) Unmodulated sequence of pulses P

(1.5.2) A sequence of pulses

(1.5.2.1) modulated in amplitude K

(1.5.2.2) modulated in width/duration L

(1.5.2.3) modulated in position/phase M

(1.5.2.4) in which the carrier is angle-modulated during the period of the pulse Q

(1.5.2.5) which is a combination of the foregoing or is produced by other means V

(1.6) Cases not covered above, in which an emission consists of the main carrier modulated, either simultaneously or in a pre-established sequence, in a combination of two or more of the following modes: amplitude, angle, pulse W

(1.7) Cases not otherwise covered X

ADD **3214A.1**

[1] Emissions, where the main carrier is directly modulated by a signal which has been coded into quantized form (e.g. pulse code modulation), should be designated under (1.2) or (1.3).

ADD **3215A**

(2) Second symbol - Nature of signal(s) modulating the main carrier

(2.1) No modulating signal 0

(2.2) A single channel containing quantized or digital information without the use of a modulating sub-carrier [2] 1

(2.3) A single channel containing quantized or digital information with the use of a modulating sub-carrier [2] 2

(2.4) A single channel containing analogue information 3

(2.5) Two or more channels containing quantized or digital information 7

(2.6) Two or more channels containing analogue information 8

(2.7) Composite system with one or more channels containing quantized or digital information, together with one or more channels containing analogue information 9

(2.8) Cases not otherwise covered X

ADD **3215A.1**

[2] This excludes time-division multiplex.

ADD **3216A**

(3) Third symbol - Type of information to be transmitted [3]

(3.1) No information transmitted N

(3.2) Telegraphy - for aural reception A

(3.3) Telegraphy - for automatic reception B

(3.4) Facsimile C

(3.5) Data transmission, telemetry, telecommand D

(3.6) Telephony (including sound broadcasting) E

(3.7) Television (video) F

(3.8) Combination of the above W

(3.9) Cases not otherwise covered X

ADD **3216A.1**

[3] In this context the word "information" does not include information of a constant, unvarying nature such as provided by standard frequency emissions, continuous wave and pulse radars, etc.

3217 to 3241

NOT allocated.

CHAPTER NV

NOC

Measures against Interference. Tests

ARTICLE N16

NOC

Interference

NOC **4996** 676 § 1. Administrations shall co-operate in the detection and elimination of harmful interference, employing where appropriate the facilities described in Article **N18**/13 and the procedures detailed in Article **N20**/15.

NOC

Section I. General Interference

MOD **4997** 693 § 2. All stations are forbidden to carry out:

- unnecessary transmissions;
- the transmission of superfluous signals and correspondence;
- the transmission of false or misleading signals;
- the transmission of signals without identification (except as provided for in Article **N23**/19).

SUP **4997.1** 693.1 1

NOC **4998** 694 § 3. All stations shall radiate only as much power as is necessary to ensure a satisfactory service.

MOD **4999** 695 Spa2 § 4. In order to avoid interference:

- locations of transmitting stations and, where the nature of the service permits, locations of receiving stations shall be selected with particular care;
- radiation in and reception from unnecessary directions shall be minimized by taking the maximum practical advantage of the properties of directional antennae whenever the nature of the service permits;

- the choice and use of transmitters and receivers shall be in accordance with the provisions of Article **N4**/12;

- the conditions specified under No. **6105**/470V shall be fulfilled.

ADD **4999A**

§ 4A. Special consideration shall be given to avoiding interference on distress and safety frequencies and those related to distress and safety identified in Article **N35**.

MOD **5000** 696

§ 5. The class of emission to be employed by a station should be such as to achieve minimum interference and to assure efficient spectrum utilization. In general this requires that in selecting the class of emission to meet these objectives every effort shall be made to minimize the bandwidth occupied, taking into account the operational and technical considerations of the service to be performed.

ADD **5000A**

§ 5A. The out-of-band emissions of transmitting stations shall not cause harmful interference to services which operate in adjacent bands in accordance with these Regulations and which use receivers in conformity with Nos. **3244**/669, **3249B**, **3249C**, **3249D**, and relevant CCIR Recommendations.

NOC **5001** 697

§ 6. If, while complying with the provisions of Article **N4**/12, a station causes harmful interference through its spurious emissions, special measures shall be taken to eliminate such interference.

MOD

Section II. Interference from Electrical Apparatus and Installations of any Kind except [Industrial, Scientific and Medical Equipment] [ ]

MOD **5002** 698

§ 7. Administrations shall take all practicable and necessary steps to ensure that the operation of electrical apparatus or installations of any kind, including power and telecommunication distribution networks, but excluding [Industrial, Scientific and Medical Equipment], [ ]
does not cause harmful interference to a {radiocommunication} { }
service and, in particular, to a [radionavigation or any safety [ ]
service] operating in accordance with the provisions of these Regulations. 1

ADD **5002.1** 698.1

1 In this matter, administrations should be guided by the latest relevant CCIR Recommendations.

ADD

Section IIA. Interference from [Industrial, Scientific and Medical Equipment] [ ]

ADD **5002A**

§ 7A. Administrations shall take all practicable and necessary steps to ensure that radiation from [industrial, scientific and medical equipment] is minimal and that, outside the bands designated for use by this equipment, radiation from such equipment is at a level that does not cause harmful interference to {radiocommunication} services and, in particular, to a [radionavigation or any {other} safety service] operating in accordance with the provisions of these Regulations. 2 [ ] { } [ ] { }

ADD **5002A.1**

2 In this matter, administrations should be guided by the latest relevant CCIR Recommendations.

MOD

Section III. Special Cases of Interference

MOD **5003** 699

§ 8. Administrations authorizing the use of frequencies below 9 kHz shall ensure that no harmful interference is caused thereby to the services to which the bands above 9 kHz are allocated.

5004
to
5028

NOT allocated.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 524-E
7 November 1979
Original : Spanish

COMMITTEE 7

Argentina

PROPOSALS CONCERNING THE WORK OF THE CONFERENCE

Introduction

This document constitutes a draft Resolution designed to enable the Conference to implement the provisions of Number 130 of the current International Telecommunication Convention.

All delegations which still need the HF band for national communication purposes should give this draft Resolution their closest attention and support it so far as possible.

1. Background

1.1 The Administrative Radio Conference (Geneva, 1959) adopted Resolution No. 3 creating a Group of Experts consisting of representatives of the following countries :

- Argentina (J. Etulain)
- France (Y. Place)
- Japan (H. Shirikawa)
- Mexico (C. Núñez Arellano)
- United Kingdom (Ch. Sowton)
- USSR (Kouzmine)
- United States of America (P. Miles)

1.2 Its Final Report (Geneva, 1963) drew special attention to the following points (Chapter II, Sections 1A and 1B) :

- Recommendation No. 9 - paragraph 1
- Recommendation No. 19
- Recommendation No. 21 - paragraph 2.

1.3 The following CCIR documents should also be taken into consideration :

- Report 299-3
- Report 472-1
- Report 744
- Recommendation 543
- Recommendation 544
- Programme of studies 33A-1/10.

2. Technical aspects

2.1 Spectrum economy policy

The introduction of the single sideband doubled the band capacities, increasing the world traffic capacity.

Introducing single sideband operation in the broadcasting service would provide an immediate solution to the problems of saturation within the broadcasting bands, as it did in other services (No. 5000/696-RR).

This would not affect services which have been shifted to the single sideband in the interests of other services which have not yet seriously contemplated the introduction of this technique as part of their planning beyond the year 2000.

2.2 Improved quality

The introduction of the single sideband technique makes for a better quality of service without requiring any increase in transmitter power.

This improvement consists of an increase in the signal-noise ratio and a reduced possibility of interference between adjacent channels owing to better receiver selectivity.

3. Economic aspects

3.1 Transmitters

Transmitters may be either adapted or replaced. Whichever alternative is chosen, the cost is not so high if it is borne in mind that :

- in percentage terms, such costs or investments are small compared with the overall cost of maintaining an international broadcasting organization;

- the high power levels involved make for major energy savings and thus for an obvious reduction in operating costs.

3.2 Receivers

The progress made with electrical components means that the increase in cost of adapting domestic receivers or incorporating new advances is insignificant compared with other sophisticated developments.

DRAFT RESOLUTION (DD)

Concerning the Introduction of Single Sideband Techniques
in the HF Bands between 5 950 and 26 100 kHz
Allocated to the Broadcasting Service

The World Administrative Radio Conference (Geneva, 1979),

considering

a) that the congestion of the HF bands which is constantly increasing as a result of the growing demand for radio frequencies in the various services;

b) that despite the intervening time, Administrations have not yet taken all the steps recommended by the Group of Experts set up under Resolution No. 3 of the Administrative Radio Conference, Geneva, 1959;

c) that various CCIR Recommendations and Reports recommend the use of single sideband emissions to allow a more rational utilization of the radio spectrum;

recognizing

a) that the introduction of single sideband techniques in the land fixed and mobile services No. 6323/465 Radio Regulations, the maritime mobile service (World Administrative Radio Conference, 1974) and the aeronautical mobile service (R) (World Administrative Radio Conference, 1978) enabled the number of channels existing before those conversions to be doubled;

b) that HF double sideband broadcasting is being affected by distortion owing to selective fading, atmospheric noise and the greater vulnerability of such services to interference, for which reason such broadcasting has been reduced to simple news services;

c) that the reduction in operating costs, particularly as regards energy savings, will soon off-set the cost of modifying transmitters;

resolves

1. that the preliminary studies and technical criteria to be taken into account at a world administrative conference for planning the HF broadcasting service should be conducted through the CCIR and that both those criteria and such as may be finally selected shall be adopted exclusively on the basis of the use of the single sideband technique;

2. that the said conference shall take into account a division of the service criterion, having regard to both national and international broadcasting;

3. that the date of implementation of the single sideband plan for transmission within the frontiers of each country shall be a matter for national Administrations;

4. to invite those Administrations which at present have international broadcasting stations to make the utmost effort to convert with the minimum delay to single sideband operation, subject to such channel arrangements or alternatives as may be envisaged in future planning.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 525-E
7 November 1979
Original : English

COMMITTEE 5

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

Subject : Your request in Document No. 423

Committee 4 has considered the question whether the limitation to 50 W mean power currently specified in footnote 3507/211 and applying to stations of the fixed service operated in the band 6 200 to 6 525 kHz allocated exclusively to the maritime mobile service is adequate. The conclusions given below are based on the following two considerations :

- possibility of sharing with the maritime mobile service in general, and
- possibility of sharing with the maritime mobile service on the carrier frequency 6 215.5 kHz (channel 606 : 6 215.5 to 6 218.6 kHz; see Appendices 15 Mar 2 and 17 Rev.) which is designated to supplement the carrier frequency 2 182 kHz for distress and safety purposes and for call and reply in the area specified in No. 6648/1351F (see also footnote 3508/211A).

Committee 4 concludes :

1. that a limitation to 50 W mean power for fixed stations is, in general, adequate for sharing with the maritime mobile service in the band 6 200 to 6 525 kHz, but

2. that the operation of fixed stations in the band 6 215.5 to 6 218.6 kHz should be excluded in order to give the necessary protection to the carrier frequency 6 215.5 kHz the use of which relates to the safety of life at sea.

If Committee 4 were posed a similar question concerning footnote 3504/209 the answer would be in principle the same as given in 1. and 2. above.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 526-E
7 November 1979
Original : French

COMMITTEE 6

SUMMARY RECORD

OF THE

SEVENTH MEETING OF COMMITTEE 6

(REGULATORY PROCEDURE)

Friday, 2 November 1979, at 1400 hrs

Chairman : Dr. M. JOACHIM (Czechoslovakia)

Subjects discussed	Document No.
1. Summary record of the fifth meeting of Committee 6	421
2. Fourth report of Working Group 6B	392
3. Second report of Working Group 6A	440
4. Report of ad hoc Group 1 of Committee 6	446
5. Allocation of documents to Committee 6	345(Rev.2) Corr.4(Rev.1)/48, 400, 425, 441 (Corr.1/149), 218

1. Summary record of the fifth meeting of Committee 6
(Document No. 421)

Document No. 421 was approved without comment.

2. Fourth report of Working Group 6B
(Document No. 393)

2.1 In introducing Document No. 393, the Chairman of Working Group 6B pointed out that the text contained a number of drafting errors which should be rectified in due course.

2.2 The Chairman invited the Committee to examine the text of the Annex to Document No. 392, paragraph by paragraph.

Appendix 6, Section I, paragraph 1

2.3 In reply to a comment by the delegate of Oman, concerning the date of the measurement (sub-paragraph b)), the Chairman requested the Chairman of Working Group 6B to confirm that a relevant ISO standard did in fact exist.

2.4 At the proposal of the delegate of France, it was decided to remove the square brackets around the expression "power flux-density" in paragraph 2, as well as in sub-paragraph g) of that paragraph and in sub-paragraph i) of paragraph 3.

Appendix 6, Section II

2.5 At the suggestion of the USSR delegate, supported by the United Kingdom delegate, it was decided to reverse the order of sub-paragraphs e) and f) of paragraph 3.1, and to delete the square brackets around the expression "power flux-density" throughout the section.

Appendix 7

2.6 Referring to the tile of the Appendix, the delegate of Spain pointed out that the words "Réglements" and "Reglamentos" in the French and Spanish versions should be in the singular since the Conference would probably decide that there should be only one set of Radio Regulations in future (English text not affected).

2.7 The Chairman said that the text would be amended accordingly as soon as Committee 8 had taken a decision.

2.8 At the suggestion of the delegate of China, it was decided that the Drafting Group would amend the text of note 7 (page 9 of the document) to accommodate the concept of measurement of the date.

Appendix 8

2.9 Appendix 8 was approved without comment.

Document No. 392 was approved, subject to subsequent drafting changes.

2.10 Pointing out that Document No. 392 would be the last report from Working Group 6B, the Chairman thanked that Working Group and its Chairman for its admirable contribution.

3. Second report of Working Group 6A
(Document No. 440)

3.1 In introducing Document No. 440, the Chairman of Working Group 6A explained that the periods and dates mentioned in the text should be regarded as provisional until the entire publication schedule had been considered. Similarly, the final working of certain provisions would depend on decisions taken by other Committees, particularly Committees 4 and 5. Such provisions included No. 4114A.1, sub-paragraph b) of No. 4115, the framed text in No. 4118, notes 4124.1, 4145.1 and 4160.1, No. 4139, and notes 4139.1, 4141.1 and 4160.1.

3.2 The Chairman invited the Committee to examine the document page by page.

Pages 1, 2, 3 and 4 were approved without amendment.

Page 5 was approved subject to the replacement of the words "et de fournir" by "et fournit" in the French text.

Page 6 was approved without amendment.

Page 7 was approved subject to the replacement of the words "five months" by "six months" in the fourth line.

Page 8 was approved without amendment.

Page 9 :

3.3 At the request of the delegate of France, it was decided that Working Group 6A1 would review sub-paragraph c).

3.4 The delegate of Spain requested that the original text of sub-paragraph e) should be maintained in the Spanish version.

Page 9 was approved, with the exception of sub-paragraph c) and subject to the amendment of the Spanish text of sub-paragraph e).

3.5 Pages 10 and 11 were approved without amendment.

Page 12 :

3.6 The delegate of Iran, supported by the delegate of Malawi, pointed out that some Administrations might not be able to meet the deadline of four months stipulated in the amended text of No. 4120.

3.7 After a discussion in which the delegates of the United Kingdom, Algeria, Federal Republic of Germany, Italy, Ireland and Iran participated, it was decided not to specify a particular period and to maintain only the first sentence of the framed text added to No. 4120,

Page 12, as amended, was approved.

Page 13 :

3.8 The representative of the IFRB enquired whether the phrases between square brackets in provision 4124.1 639A0 should be retained or deleted.

3.9 The Chairman of Working Group 6A replied that whether the words "accepted in application of Resolution No. Spa2 - 6"were kept or not would depend on the decision adopted on the Resolution. Similarly, the phrase "unless otherwise agreed between the Administrations concerned" was not related to the words preceding it in square brackets and the Working Group had decided to keep the matter in abeyance for the time being.

In the light of those explanations, page 13 was approved.

3.10 Pages 14, 15 and 16 were approved without amendment.

Page 17 :

3.11 The delegate of Spain pointed out that in the Spanish version of provision 4139 639AR Spa 2, the text between square brackets should be aligned with sub-paragraph c).

Subject to that comment, page 17 was approved.

Page 18 :

3.12 The delegate of France said that, in provision 4141 639AN Spa 2, he would prefer the words "/ of in the space station service area in which the mobile Earth station might operate /" instead if "/ or of the mobile Earth station service area /" to avoid any misunderstanding.

3.13 The representative of the IFRB pointed out that in some cases mobile Earth stations operated in only a part of the space station service area.

3.14 The delegate of the Federal Republic of Germany proposed, since Working Group 6A had reached no conclusion, that the words "or of the mobile Earth station service area" should be left between square brackets, but the words "service area" should be replaced by "operating area".

3.15 The representative of the IFRB pointed out that the words "service area" were precisely defined in Appendix 1 and should not be changed.

3.16 The delegate of Italy fully supported the IFRB representative and said he was in favour of maintaining the square brackets.

It was decided to keep in square brackets the phrase as amended by the delegate of France.

Page 18, as amended, was approved.

Pages 19 - 25 were approved without amendment.

Page 26 :

3.17 With reference to No. 4161, the delegate of the Federal Republic of Germany said that the original text should be maintained, since the delegate of Colombia had withdrawn his proposed amendment.

Pages 27, 28, 29, 30 and 31 were approved without amendment.

Page 32 :

3.18 The delegate of Iran proposed that the words "and if the circumstances appear to warrant" should be deleted from paragraph 30 1) of provision 4179 492GA.

The delegates of Iraq and Algeria supported the Iranian proposal.

Page 32, as amended, was approved.

Document No. 467

3.19 The Chairman suggested that the consideration of Document No. 467 should be postponed until the Committee's next meeting.

It was so decided.

4. Report of ad hoc Group 1 of Committee 6
(Document No. 446)

4.1 The Chairman suggested that consideration of Document No. 446 and of the report of ad hoc Group 2 should be postponed until the Committee's next meeting.

It was so decided.

5. Allocation of documents to Committee 6
(Documents No. 345(Rev.2), Corr.4(Rev.1)/48, 400, 425, 441, 149 and Corr.1, 218)

5.1 The Chairman proposed that Documents Nos. 345(Rev.2) and Corr.4(Rev.1)/48 should be referred to Working Group 6A and Document No. 400 to ad hoc Group 2.

It was so decided.

Document No. 425

5.2 The Chairman expressed the view that it was for the IFRB to update the Master Register in the light of the Conference's decisions.

5.2.1 The representative of the IFRB said that, while the Conference's decisions would clearly have to be applied, the task was not an easy one. The IFRB was not in a position to amend the present entries in the Master Register simply by referring to the summary records; consultations would be needed between the various Administrations and the IFRB.

5.2.2 The United Kingdom delegate agreed.

5.2.3 The Chairman suggested that Document No. 425 should be referred to Working Group 6A for consideration.

It was so decided.

Document No. 149 and Corr.1

5.3 The Chairman recalled that it had been decided at the previous meeting to refer to Committee 6, for consideration, the Resolution on the use of the computer in spectrum management. He therefore suggested that the document in question should be referred to Working Group 6A.

It was so decided.

Document No. 218

5.4 The Chairman of Working Group 6A said that the document in question was a Note from ICAO to Committees 5 and 6 and that he saw no reason why it should be discussed in Committee 6.

It was decided that Document No. 218 would not be considered by Committee 6.

The meeting rose at 1600 hours.

The Secretary :
R. PLUSS

The Chairman :
M. JOACHIM

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 527-E
8 November 1979
Original: English

COMMITTEE 6

Note by the Chairman of Working Group 6A

Working Group 6A has agreed on the following draft note, which it requests Committee 6 to transmit to the Chairman of Committee 5:

"DRAFT NOTE TO THE CHAIRMAN OF COMMITTEE 5

Committee 6 has considered Document No. 376 in which Committee 5 requests the advice of Committee 6 on the definitions of the terms "standard earth station" and "transportable earth station".

Committee 6 has decided that a definition of the term "standard earth station" was not required but has no objection for a definition of the term "transportable earth station", it being understood that such a station may either be part of a satellite network in the Fixed Satellite Service or of a satellite network in the Mobile Satellite Service."

J.K. BJORNSJO
Chairman of Working Group 6A

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 528-E
8 November 1979
Original: English

COMMITTEE 7

THIRD AND FINAL REPORT OF THE CHAIRMAN OF WORKING GROUP 7B TO COMMITTEE 7

1. Committee 7 is invited to consider and adopt the terms and definitions set out in the Annex, which were unanimously adopted by Working Group 7B.

2. The additional terms and definitions in the provisions 3021A, 3021B, 3021C and 3021D should be brought to the attention of Committee 4.

A.L. WITHAM
Chairman of Working Group 7B

Annex : 1

A N N E X

MOD 3017/15

~~Telemetering~~ Telemetry: The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.

MOD 3018/16

~~Radiotelemetering~~-Radiotelemetry: ~~Telemetering~~ Telemetry by means of radio waves.

ADD 3018A

Telecommand : The use of telecommunication for the transmission of signals to initiate, modify or terminate functions of the equipment at a distance.

Telemetry telemetry

MOD 3095/84AW Spa

Space ~~Telemetering~~: The use of ~~telemetering~~ for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.

SUP 3096/84AX Spa

NOC 3097/84AY Spa

Space Telecommand: The use of radiocommunication for the transmission of signals to a space station to initiate, modify or terminate functions of the equipment on a space object, including the space station.

NOC 3019/4

Simplex Operation: Operating method in which transmission is made possible alternately in each direction, for example, by means of manual control.[1]

NOC 3020/5

Duplex Operation: Operating method in which transmission is possible simultaneously in both directions.[1]

NOC 3021/6

Semi-duplex Operation: Operating method which is simplex at one end of the circuit and duplex at the other.[1]

NOC 3022/26

Tropospheric Scatter: The propagation of radio waves by scattering as a result of irregularities or discontinuities in the physical properties of the troposphere.

NOC 3023/27

Ionospheric Scatter: The propagation of radio waves by scattering as a result of irregularities or discontinuities in the ionization of the ionosphere.

ADD 3021A

Single-sideband transmission : An amplitude modulated transmission with one sideband.

ADD 3021B

Full carrier single-sideband transmission : A single-sideband transmission without suppression of the carrier.

[1] In general, duplex and semi-duplex operation require two frequencies in radiocommunication: simplex may use either one or two.

ADD 3021C

Reduced carrier single-sideband transmission : A single-sideband transmission in which the degree of carrier suppression could enable it to be reconstituted and to be used for reception.

ADD 3021D

Suppressed carrier single-sideband transmission : A single-sideband transmission in which the carrier is practically suppressed and not intended to be used for reception.

Note to Editorial Committee : Attention is drawn to the use of the word "transmission" in these provisions. The Editorial Committee is requested to consider whether to replace the word "transmission" by the word "emission" according to the results of considerations on these terms in Committee 4.

ADD 3006A

Class of emission : The set of characteristics of an emission, i.e. type of modulation, modulating signal, type of information to be transmitted, and also (if appropriate) any additional signal characteristics, designated by standard symbols.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 529-E
7 November 1979
Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

FOURTH MEETING OF COMMITTEE 4

(TECHNICAL REGULATIONS)

Monday, 22 October and Tuesday, 23 October 1979, at 0900 hrs

Chairman : Mr. N. MORISHIMA (Japan)

Subjects discussed		Document No.
1.	Second report of Working Group 4A to Committee 4	241
2.	Third report of Working Group 4A to Committee 4	307
3.	Draft note from the Chairman of Committee 4 to the Chairman of Committee 6	DT/91
4.	First report of Working Group 4B to Committee 4	269
5.	Second report of Working Group 4C to Committee 4	270
6.	Third report of Working Group 4C to Committee 4	293
7.	Note from the Vice-Chairman of Committee 7 to the Chairmen of Committees 4, 5, 6, 8 and 9	267
8.	Note from the Vice-Chairman of Committee 7 to the Chairman of Committee 4	276
9.	Note from the Vice-Chairman of Committee 7 to the Chairmen of Committees 4, 5 and Working Group 7B	285
10.	Draft note from the Chairman of Committee 4 to the Chairman of Committee 6	DT/94

1. Second report of Working Group 4A to Committee 4 (Document No. 241)

1.1 The Chairman of Working Group 4A introduced the Working Group's second report to Committee 4.

1.2 The Chairman invited the Committee to consider the annex to that report provision by provision.

1.3 Provision 3133 was approved.

1.4 Provision 3133A

The Chairman reconfirmed the approval of provision 3133A on which decision had been taken in the second meeting of Committee 4.

1.5 Provision 3133B

1.5.1 The Chairman of Working Group 4A, replying to a question by the delegate of Yugoslavia, said that it had been decided, following considerable discussion in the Working Group, that "transport d'énergie" was a suitable French translation of the words "the outward flow".

1.5.2 The delegates of the Ivory Coast and the United Republic of Cameroon disagreed with that translation, and felt that the wording adopted should correspond precisely to the English and Spanish texts.

1.5.3 The delegate of France said that the word "transport" had been chosen since the word "flux" in French had a precise mathematical meaning inappropriate to the text concerned. Moreover, it was necessary in French to note that "rayonnement" could mean not only the act of radiation but the energy radiated; for that reason, the words "ou cette énergie elle-même" had been added to the proposed French text.

In reply to a suggestion by the Chairman, he said he did not see to which editorial committee the matter could be referred; certainly Committee 9 would not be competent to give a ruling.

1.5.4 The Chairman, supported by the delegate of the United Kingdom, suggested that the only solution was to refer the matter to the Editorial Committee.

1.5.5 Provision 3133B was approved and referred to the Editorial Committee.

1.6 Provision 3133C

1.6.1 The Chairman of Working Group 4A pointed out that the word "radioélectrique" had been inadvertently omitted from the French text and should be inserted.

1.6.2 The delegate of France noted that, in general, great care must be taken to avoid, as far as possible, future difficulties stemming from the problem of making a clear distinction between radiation and emission.

1.6.3 Provision 3133C, as amended, was approved.

1.7 Provision 3133D

1.7.1 The Chairman noted that, in the second line of the English text, the word "band" should be "bandwidth".

1.7.2 The delegate of France said that, in the French text, the words "de la bande" were sufficient; a translation of the word "width" would be superfluous.

1.7.3 The delegate of Mexico thought that, in the Spanish text, the words "de la anchura" should follow the word "fuera".

1.7.4 The delegate of Argentina supported that view.

1.7.5 The delegate of Spain disagreed. The matter had been already discussed at length in the Drafting Group, where it had been noted that the existing Radio Regulations referred simply to "banda". He suggested an informal exchange of views among the interested Spanish-speaking delegations.

1.7.6 The delegate of Papua New Guinea thought it important that all three language versions should be aligned, since the matter was one of substance.

1.7.7 The Chairman of Working Group 4A said that, whilst he appreciated that the wording "en dehors de la largeur de la bande" might be cumbersome, it would be exact. On the other hand, the word "width" could not be omitted from the English text.

In reply to a question by the Chairman, he thought that the alternative headings in the French and Spanish text would have to remain in square brackets for the time being, until the relevant working group had defined the word "canal".

1.7.8 The Chairman invited the Committee to approve provision 3133D on that understanding.

Provision 3133D was so approved.

1.8 Provision 3141

1.8.1 The Chairman noted that, in that provision also, the word "band" should be replaced by "bandwidth" in the English text.

1.8.2 The delegate of France said that the French text as shown in Document No. 241 was correct and should remain as it stood.

1.8.3 The delegate of Mexico said that, as in the case of provision 3133D, his delegation advocated insertion of the words "anchura de" in the Spanish text.

1.8.4 The delegate of Papua New Guinea pointed out that in any case the text must be aligned with that of provision 3133D.

1.8.5 The Chairman said that, since it had already been decided that the Spanish text could remain as shown for the time being, he would take it that provision 3141 could be approved.

Provision 3141 was approved.

1.9 Provision 3133F

1.9.1 The Chairman of Working Group 4A, replying to a question by the delegate of New Zealand, said that the word "includes" should be deleted from the English text, as already agreed.

1.9.2 The delegate of Yugoslavia agreed with the deletion but thought that the remaining text, as it stood, was inconsistent with the usual style.

1.9.3 The delegate of the United States suggested that the word "includes" might be replaced by "consists of".

That suggestion was approved.

1.9.4 The delegate of France thought that, in the heading, the words "non désirées" in the French text should be placed within square brackets, since a better translation of "spurious" might be found. Perhaps "indésirable" would be preferable.

1.9.5 The delegate of Algeria, supported by the delegate of the Ivory Coast, saw no reason for inserting square brackets; the term "non désirées" had in any case already been accepted.

1.9.6 The Chairman proposed that the words "non désirées" should be retained, and that provision 3133F should be approved on the understanding that the Editorial Committee would review the text, the English version in particular.

Provision 3133F was approved.

1.10 Provision 3139 was approved.

1.11 Provision 3140 was approved.

1.12 Provision 3140A was approved.

1.13 Terms not to be included in the new Radio Regulations

1.13.1 The Chairman noted the recommendation of Working Group 4A that the terms Interfering Source, Out-of-band Spectrum (of an emission), Harmonic Emissions and Parasitic Emissions, as shown in the Annex to Document No. 241, should not be included in the new Radio Regulations.

It was so agreed.

The second report of Working Group 4A to Committee 4, contained in Document No. 241, and the annexed texts as amended, were approved and referred to the Editorial Committee.

2. Third report of Working Group 4A to Committee 4 (Document No. 307)

2.1 The Chairman of Working Group 4A introduced the third report of that Working Group to Committee 4.

2.2 The Chairman invited the Committee to consider in the first place the term "harmful interference" (MOD 3142).

2.2.1 The delegate of the Ivory Coast doubted whether the Committee was competent to change the wording in the French text from "nuisible" to "préjudiciable", since such an alteration would surely require a recommendation to the next Plenipotentiary Conference.

2.2.2 The Chairman said that, since other committees would face the same problem with the Convention, the matter should perhaps be left for discussion in a plenary session, the more so since the matter was of a legal rather than a technical nature.

2.2.3 The delegate of the USSR strongly supported the Chairman's proposal.

2.2.4 The delegate of the United Republic of Cameroon said his delegation failed to understand why the French delegation had advocated the term "préjudiciable".

2.2.5 The delegate of France said that the matter had been fully discussed not only in the Working Group but also at the Special Preparatory Meeting.

2.2.6 The delegate of Iraq said that the contrast between the proposed definitions of harmful interference and permissible interference was too strong; therefore, unless an intermediate term, "accepted interference" could be adopted and defined, his delegation proposed that the words "seriously" and "repeatedly", in the third line relating to provision 3142 in the annex to Document No. 307, should be placed in square brackets.

2.2.7 The delegates of Jordan and Algeria supported that proposal.

2.2.8 The delegate of France thought that the matter could not be solved by means of simple definitions, since what constituted serious interference for some services did not do so for others.

2.2.9 The representative of the IFRB drew the Committee's attention to the fact that the words in question already appeared in relevant definitions in the Convention.

2.2.10 The delegate of the United Kingdom noted that the words in question appeared in the Radio Regulations in the current definition of harmful interference, and his delegation was strongly opposed to any alteration to that definition.

2.2.11 The Chairman of Working Group 4A said that his Working Group had discussed that definition at length and the matter had been well documented. In his view harmful interference meant catastrophic interference, hence interference that was seriously degrading. The term had been defined both in the Convention and the Radio Regulations, and he would prefer to see it left as it stood, rather than to have it handled by a group larger than the Working Group.

2.2.12 The delegate of France supported the view that harmful interference meant catastrophic interference. However, the notion of harmful interference to some delegates was the same as permissible, hence the general misunderstanding. It was essential that the Committee as a whole should agree first of all that harmful interference was of a level that prevented transmission entirely.

2.2.13 The delegate of Iraq said that he was prepared to go along with the present wording of the definition in view of the fact that "accepted interference" was to be discussed. However he could not support the view of the Chairman of Working Group 4A, that the definition should not be discussed in a larger forum, since members of small delegations were frequently unable to attend the smaller group meetings.

2.2.14 The Chairman of Working Group 4A, replying to a question raised by the delegate of New Zealand, said that the square brackets had been retained around terms still to be defined by other Committees. They would be removed when those definitions had been completed.

2.2.15 The Chairman, referring to a point raised by the representative of IATA, said that the square brackets would have to remain until Committee 4 had formally been informed of the definition of "radionavigation service" by Committee 5.

MOD 3142 was approved.

2.3 The Chairman invited the Committee to consider the definition of permissible interference (ADD 3142A).

2.3.1 The delegate of Argentina drew the Committee's attention to Document No. 267 in which it was suggested under paragraph 1 that the letters (CONV.) should be placed at the end of the definitions, in parentheses. He therefore proposed that that practice be followed in respect of the definitions currently before the Committee.

The Chairman said that that was an editorial matter to which the Committee would undoubtedly agree.

ADD 3142A was approved.

2.4 The Chairman invited the Committee to consider the term "accepted interference".

2.4.1 The Chairman of Working Group 4A said that Working Group 4A had decided that the term should not be included in Article N1, which was not to be considered as a glossary of technical terms. The concept of the term appeared in Article N11, and had existed for the past eight years. If, however, Committee 6 was to request a definition, it could be discussed at a later stage on the basis of Document No. DL/57.

2.4.2 The delegate of the USSR proposed that Committee 6 should be asked whether or not a definition of the term "accepted interference" would be required, since Committee 4 was not itself competent to decide whether or not the term should be defined.

2.4.3 The delegates of India and Iraq supported that proposal.

It was so decided.

3. Draft note from the Chairman of Committee 4 to the Chairman of Committee 6 (Document No. DT/91)

3.1 The Chairman of Committee 4B, introducing the note, said that during its consideration of Appendix 29, his Working Group had considered that a number of items from Appendix 1B to the Radio Regulations might be included in Article N11 rather than in an appendix. Committee 4 was invited to refer the matter to Committee 6.

Document No. DT/91 was approved.

4. First report of Working Group 4B to Committee 4 (Document No. 269)

4.1 The Chairman of Working Group 4B said that a detailed background to the changes made in Article N25 appeared on page 1 of the report. All proposals had been agreed upon unanimously by the Working Group with the exception of a reservation by the Indian Administration, which had had difficulties with ADD 6009.1. He drew particular attention to the references to square brackets in paragraphs 2 and 3 of the report. In connection with 6002.2, one Administration had asked whether the text would still be relevant if and when the CCIR changed its texts. Since the matter was probably covered by normal CCIR practices, and since it was basically an editorial matter, he suggested that it should be submitted to the Editorial Committee. Working Group 4B, in any event, considered the text without the square brackets to be appropriate.

Page 4 of the report drew attention to a new factor introduced by one Administration concerning possible interference from one region to another. Since there was not enough information for a definitive note, he believed that the matter should be referred to the CCIR.

4.2 The Chairman invited the Committee to consider Article N25 as it appeared in Document No. 269, with the exception of the references to Part B and Chapter NVIII.

4.3 The Title of the Article and the Title of Section I were approved.

4.4 Nos. 6001, 6002, 6002.1

Approved.

4.5 No. 6002.2

4.5.1 The delegate of France said that if CCIR Report 393 were eventually deleted or converted into a Recommendation, there would be difficulties with the footnote reference. As the problem could not be solved by merely deleting the square brackets, he wondered whether any other Committee was dealing with the same problem, or whether the CCIR could provide a solution.

4.5.2 The Director of the CCIR said that the reference should cause no difficulties. If there was a change in the report number, or if the report itself should disappear, the CCIR would provide a definite guide as to its replacement.

4.5.3 The Chairman suggested that since there were no specific difficulties with the footnote, it could be left to the Editorial Committee.

No. 6002.2 was approved.

4.6 Nos. 6003, 6004, 6005, 6006, 6007, 6008, 6003.1, 6003.2

Approved.

4.7 The Title of Section II was approved.

4.8 ADD 6004.1

4.8.1 The delegate of the Netherlands proposed that the word "shall" be replaced by the word "should" in the English text.

4.8.2 The Chairman observed that the words "as far as practicable" appeared in Nos. 6002 and 6003.

4.8.3 The Chairman of Working Group 4B said that ADD 6004.1 had been discussed at length by a special drafting group. It was not known precisely what recommendations the CCIR would make, but, since it had been felt necessary to ensure that Administrations made every effort to meet the limits, the word "shall" had been used. However, it had also been recognized that there were cases where it might be difficult or even impossible for some Administrations to meet those limits, hence the qualifying clause "as far as practicable".

4.8.4 The delegate of the Netherlands said that in the light of that explanation, he could agree to the text as it stood.

4.8.5 The Chairman proposed that since the word "should" had been used in Nos. 6002 and 6003, the footnote should be changed accordingly.

4.8.6 The Chairman of Working Group 4B said that he would agree to such a change if necessary, although he would prefer to retain the word "shall".

4.8.7 The delegate of India supported the Chairman's proposal.

It was so decided.

4.8.8 The delegate of Yugoslavia said that while he had no specific proposal to make, he wondered what would happen to the words "power" and "radiated power" if SSB radio links above 1 GHz were used in the near future.

4.8.9 The Chairman said that while there was such a possibility, in the absence of a specific proposal the text would have to remain as it was.

No. 6004.1, as amended, was approved.

4.9 Nos. 6006.1, 6009, 6010 and 6011

Approved.

4.10 ADD 6009.1

The delegate of India informed the Committee that his Administration no longer had problems with the wording of 6009.1.

No. 6009.1 was approved.

4.11 Nos. 6010.1, 6011.1

Approved.

4.12 The Chairman said that the Editorial Committee would be asked to review the wording of the most recent version of CCIR Report 393 and that the Committee would include a reference to numbers 6004.1, 6009.1, 6010.1 and 6011.1 in its general recommendation to the CCIR, as mentioned in paragraph 4 of the report.

The meeting was suspended at 1215 hours and resumed on Tuesday, 23 October 1979 at 0900 hours.

5. Second report of Working Group 4C to Committee 4 (Document No. 270)

5.1 The Chairman of Working Group 4C introduced that working group's second report to Committee 4, including the revised Article N16.

He proposed that the square brackets should be removed from the words "harmful interference" wherever they occurred, since that term had now been defined. He also suggested that all the square brackets could be removed from the texts relating to provisions 5000A and 5001. No doubt the square brackets could likewise be deleted from the words "emission/radiation" in the text for provision 4999, since the Committee would doubtless decide to delete one of those words when it came to consider that provision. However, with regard to provisions 5002 and 5002A, it was felt that the square brackets should be retained for the time being around the words "radionavigation or any other safety service" and "industrial, scientific and medical equipment".

The Editorial Group had removed the relevant Spa references from the revised text, but they had been retained in certain other texts; the Committee would therefore have to decide whether they should be retained in the revised Article N16.

The report and its annex had been approved unanimously by the Working Group, except for a majority decision taken in respect of provision 5001, concerning which there had been a proposal to replace the word "spurious" by "unwanted".

A proposal had been submitted for a new provision - a possible 4998A - regarding additional protection for distress and safety frequencies. The proposal, when drafted, could perhaps be considered under Article N35; but in any case one Administration thought that Article N16 too should contain a reference to such provisions. Therefore, the Committee should perhaps withhold submission of Article N16 to Committee 9 pending possible further proposals.

5.2 The Chairman invited the Committee to consider the text of Article N16 provision by provision, beginning with the title.

5.3 The title was approved.

5.4 Provision 4996

5.4.1 The delegate of France repeated his earlier remarks concerning confusion about the notion of harmful interference. He thought that the words "harmful interference or interference in excess of the permissible", as contained in proposal CAN/60A/167, would clarify matters. The notion of permissible interference should also be introduced into Article N16.

5.4.2 The delegate of Canada noted that the question of defining permissible interference had proved very controversial in the Working Group and the Committee. Therefore, in view of the difficulties which would be raised for many Administrations, he now felt that no reference should be made to permissible interference in the present text of No. 4996.

5.4.3 The Chairman invited the Committee to approve provision 4996 on the understanding that the square brackets were removed from the term "harmful interference".

Provision 4996 was so approved.

5.5 Section I - General Interference

The title was approved.

5.6 Provision 4997

5.6.1 The delegate of Finland wondered whether the word "signals" in the third sub-paragraph should be "identification".

5.6.2 The Chairman of Working Group 4C said that the text as shown was correct; the term used had a wider sense, which embraced identification signals.

Provision 4997 was approved.

5.7 Provision 4997.1

The deletion was approved.

5.8 Provision 4998 was approved.

5.9 Provision 4999

5.9.1 The Chairman suggested that the existing Spa2 should be added to the reference 4999/695.

It was so agreed.

5.9.2 The delegate of the Netherlands said that, if the square brackets were to be removed from the words "emission/radiation", it was the word "emission" which should be retained.

5.9.3 The delegate of the United Kingdom thought that "radiation" was the better word, since it conformed to the existing Radio Regulations and was a broader term.

5.9.4 The delegate of France said that, in the French text, a distinction was made between transmission and reception. In reception, the properties of directional antennae affected both emission and radiation. Perhaps the English text could usefully be expanded on the lines of the French version. However, if a choice had to be made, the word "radiation" must be retained, because, in the French text, the use of the word "rayonnement" with reference to reception was unavoidable.

5.9.5 The delegates of the United States, Japan, Mexico and New Zealand advocated use of the word "emission".

5.9.6 The delegates of Algeria and Iraq thought that the word "radiation" should be retained.

5.9.7 The Chairman said that, if there was no objection, he would take it that the Committee agreed to remove the square brackets and retain the word "radiation".

It was so agreed.

Provision 4999, as amended, was approved.

5.10 Provision 5000 was approved.

5.11 Provision 5000A

5.11.1 The proposal by the Chairman of Working Group 4C that the square brackets should be removed from the expression "out-of-band emissions" was approved.

5.11.2 The delegate of Iraq supported by the delegates of Algeria and India thought that the term "harmful interference" should be replaced by "interference in excess of the permissible".

5.11.3 The delegate of the United Kingdom, supported by the delegates of Argentina, the United States and Mexico said that the term "harmful interference" should be retained, the more so since there was as yet no definition of permissible interference.

5.11.4 The delegate of Canada recalled that discussions in the relevant drafting group had dwelt on the importance of stressing receiver characteristics in conformity with provisions 3244 and 3249. The term "harmful interference" was correct in that it implied the need for correct receiver characteristics.

5.11.5 The delegate of France said that, since the question of permissible interference had not yet been fully discussed, perhaps the square brackets should be left in the text for a few more days at least. In view of the importance of Article N16, care must be taken not to make any mistake which would be difficult to correct later.

The delegate of Iraq supported the delegate of France.

5.11.6 The delegates of the United Kingdom and Argentina felt that the Committee should not delay matters any longer but should delete the square brackets now.

Following a show of hands, it was decided to retain the words "harmful interference" and delete the square brackets.

5.11.7 The delegate of France said that the decision just taken revealed that the Committee had failed to grasp the distinction between harmful and permissible interference.

Provision 5000A, as amended, was approved.

5.12 Provision 5001

5.12.1 The delegate of the Ivory Coast said that a decision by the Committee to remove the square brackets from the term "harmful interference" must remain subject to any decision subsequently taken in plenary session on that term.

Provision 5001, with the deletion of the square brackets from the terms "harmful interference" and "spurious emissions", was approved.

5.13 Section II - Interference from Electrical Apparatus and Installations of any Kind

The title was approved.

5.14 Provision 5002

5.14.1 The Chairman said that, if there was no objection he would take it that the Committee agreed that the square bracket should be removed from the term "harmful interference" but retained for the time being around the words "radionavigation or any other safety service".

It was so agreed.

5.14.2 The delegate of the United States thought that the text should contain a reference to CCIR recommendations on that topic. He therefore proposed the addition of a sentence : "In this matter, Administrations should be guided by the latest CCIR recommendations".

The delegate of Japan supported that proposal; the delegate of Papua New Guinea supported it in substance; and the delegate of Australia suggested that the word "latest" should be followed by "relevant".

5.14.3 The delegate of the Netherlands thought that the sentence proposed by the United States delegation should appear in provision 5002A also, since the same CCIR recommendations were relevant to the use of ISM equipment.

5.14.4 The delegate of Roumania said that care must be taken in referring to such recommendations, which were subject to modification every four years whereas the Articles now being prepared would remain in force for some 20 years. Perhaps the proposed additional text should contain the word "may" instead of "should".

5.14.5 The representative of the IFRB thought that the proposed additional sentence was appropriate to provisions 5002 and 5002A alike but might be better in the form of a footnote.

5.14.6 The Chairman said that, if there was no objection, he would take it that the Committee agreed to adopt in substance the text proposed by the United States delegation, as a footnote, subject to editorial review.

It was so agreed.

Provision 5002, as amended, was approved.

5.15 Section III - Interference from [Industrial, Scientific and Medical Equipment]

5.15.1 The Chairman of Working Group 4C, in reply to a question by the delegate of the United Kingdom, said that, in his view, Section III was an important part of Article N16 and should be retained even if no definition of ISM equipment was included in Article N1; the square brackets in the title were not intended to imply the possible deletion of Section III.

5.15.2 The delegate of the United Kingdom reserved his delegation's right to raise the matter later if no definition of ISM equipment was agreed upon.

The title was approved.

5.16 Provision 5002A

Provison 5002A, with the deletion of the square brackets from the words "harmful interference" and the addition of a footnote with the wording proposed by the delegation of the United States in respect of provision 5002, was approved.

5.17 Section IV - Special Cases of Interference

The title was approved.

5.18 Provision 5003

Provision 5003, with the square brackets removed from the words "harmful interference", was approved.

5.19 The Chairman said that, if there was no objection, he would take it that Committee authorized him to draw the attention of Committees 5 and 7 to the decisions contained in paragraphs 3 and 4 respectively of the second report of Working Group 4C to Committee 4.

It was so agreed.

The second report of Working Group 4C to Committee 4, and its annex, as amended, were approved.

6. Third report of Working Group 4C to Committee 4 (Document No. 293)

6.1 The Chairman of Working Group 4C introduced the third report of that Working Group to Committee 4, consisting of a draft recommendation requesting the IFRB to produce explanatory information on the application of the new method of designating emissions as it applied to the notification procedures detailed in the Radio Regulations.

He pointed out that in the operative part of the recommendation, the paragraphs should be designated 1) and 2) instead of a) and b).

6.2 The Chairman said that, if there was no objection, he would take it that the Committee authorized him and the Chairman of Working Group 4C to give the draft recommendation a title.

It was so agreed.

6.3 The preambular and operative parts of the draft recommendation were approved.

6.4 The delegate of Canada, referring to paragraph 3 of the report, said that the words "at a date immediately following the signature of the Final Acts of this Conference" might cause difficulties in view of the time the Secretariat would require to prepare the Final Acts and send them to Administrations. The wording should therefore be amended.

6.5 The Chairman of Working Group 4C said that, if the action was not immediate, it would be too late for the IFRB to carry out the task. The Deputy Secretary-General had said, moreover, that the proposed wording would be in order.

6.6 The representative of the IFRB said that in any case the IFRB would act immediately once the recommendation had been issued, regardless of whether the Administrations had received the Final Acts or not.

6.7 The delegate of Canada said that he would not object to the wording as it stood.

6.8 It was agreed that the Chairman should communicate to Committee 7 the substance of paragraph 3 of the report.

6.9 The delegate of Switzerland, referring to paragraph 4 of the report, said that, although some difficulties might be experienced in applying the new method for designating emissions, his delegation thought it would be possible, using the guidelines, to apply the new methods without undue difficulty no later than the entry into force of the new Radio Regulations.

6.10 The delegate of Papua New Guinea thought it premature to take a decison concerning the date of entry into force of the new method, since it was not yet known when the Final Acts would come into force.

6.11 The delegates of Mexico and Cuba said that they shared the reservations referred to in paragraph 4 of the report.

6.12 The delegate of Argentina wondered whether Committee 4 was competent to decide on a date for entry into force of the new method; perhaps Committee 6 should be asked first of all whether it thought that Administrations would have to adopt the new method.

6.13 The Chairman, at the suggestion of the delegate of Switzerland, proposed that the Committee establish an informal contact with Committee 6 for that purpose.

It was so agreed.

The third report of Working Group 4C to Committee 4 was approved.

7. Note from the Vice-Chairman of Committee 7 to the Chairmen of Committees 4, 5, 6, 8 and 9 (Document No. 267)

The Committee took note of Document No. 267.

8. Note from the Vice-Chairman of Committee 7 to the Chairman of Committee 4 (Document No. 276)

The Committee took note of Document No. 276.

9. Note from the Vice-Chairman of Committee 7 to the Chairmen of Committee 4 and Committee 5 and Working Group 7B (Document No. 285)

The Chairman took note of Document No. 285.

10. Draft note from the Chairman of Committee 4 to the Chairman of Committee 6 (Document No. DT/94)

Document No. DT/94 was approved.

The meeting rose at 1050 hours.

The Secretary :

C. GLINZ

The Chairman :

N. MORISHIMA

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 530-E
23 November 1979
Original : English

COMMITTEE 4

SUMMARY RECORD OF THE FIFTH MEETING OF THE COMMITTEE 4

Paragraph 8.1

Insert the workd "almost before the word "identical" in the second line.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 530-E
7 November 1979
Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

FIFTH MEETING OF COMMITTEE 4

(TECHNICAL REGULATIONS)

Tuesday, 30 October 1979, at 0900 hrs

Chairman : Mr. N. MORISHIMA (Japan)

Subjects discussed		Document No.
1.	Summary record of the third meeting of Committee 4	314
2.	Draft note to the Chairman of Committee 5	385
3.	Fourth report of Working Group 4C	365
4.	Fifth report of Working Group 4C	366
5.	Ninth report of Working Group 4C	396
6.	Draft note to the Chairman of Committee 6	407
7.	Draft note to the Chairman of Committee 6	DT/143
8.	Sixth report of Working Group 4C	404
9.	Seventh report of Working Group 4C	405
10.	Eighth report of Working Group 4C	406
11.	Verbal report of the Chairman of Working Group 4A	-
12.	Verbal report of the Chairman of Working Group 4B	-
13.	Note from the Chairman of Committee 8 to the Chairmen of Committees 4, 5, 7 and 9	342
14.	Notes from the Chairman of Committee 6 to the Chairman of Committee 4	369, 370, 371, 372, 373
15.	Note from the Chairman of Committee 5 to the Chairman of Committee 4	379
16.	Note from the Chairman of Committee 4	DT/133

1. Summary record of the third meeting of Committee 4 (Document No. 314)

1.1 The delegate of India proposed an amendment to paragraph 3.15. (See Corrigendum No. 1 to Document No. 314.)

Document No. 314, as amended, was approved.

2. Draft note to the Chairman of Committee 5 (Document No. 385)

2.1 The Chairman of Working Group 4B introduced Document No. 385, which had been prepared in his Working Group following lengthy discussion of a proposal by one Administration to insert in the Radio Regulations sharing criteria for the situations outlined in the document.

2.2 The draft note in Document No. 385 was approved for transmission to Committee 5 under a new number.

3. Fourth report of Working Group 4C (Document No. 365)

3.1 The Chairman of Working Group 4C introduced the report in Document No. 365, which proposed the addition of a new provision, No. 4999A, in Article N16 and should be read in conjunction with the fifth report of the Working Group to the Committee (Document No. 366).

The addition of provision 4999A, as set out in Document No. 365, was approved.

4. Fifth report of Working Group 4C (Document No. 366)

4.1 The Chairman of Working Group 4C introduced Document No. 366, pointing out that proposal GRC/86A/472A was covered in considering c) of the draft Recommendation in the Annex.

4.2 The Chairman invited the Committee to consider the draft Recommendation (Document No. 366, page 2).

4.3 Following a comment by the delegate of Iran, it was agreed to delete the square brackets from round the word "unanimous" in considering b).

4.4 The delegate of Roumania, supported by the delegate of France, proposed that the word "améliorer" in the French language version of considering c) should be replaced by the words "contribuer à l'amélioration de".

4.5 The proposal was approved on the understanding that the English and Spanish texts would be aligned with the French by the Editorial Committee.

The draft Recommendation, as amended, was approved.

5. Ninth report of Working Group 4C (Document No. 396)

5.1 The Chairman of Working Group 4C introduced the report in Document No. 396, pointing out that draft Recommendation No. 4 in the Annex was, for the most part, an amalgamation of Appendix A, whose deletion was proposed by the Working Group, and existing Recommendation No. 4. The only new material was found in paragraph 1 under both invites the CCIR and and recommends.

5.2 The Chairman said that if he heard no objection he would take it that the Working Group's proposal to delete Appendix A (Document No. 396, page 2) was acceptable to the Committee.

It was so agreed.

5.3 The Chairman invited the Committee to consider draft Recommendation No. 4 section by section.

5.4 The delegate of France said that the substance of sub-paragraph g) and paragraph 4 of the first operative section of the Recommendation were the same, and it might therefore be better to delete sub-paragraph g) entirely.

5.5 The Chairman of Working Group 4C said that although the report had been adopted unanimously in the Working Group, his Administration could support the deletion.

The deletion of sub-paragraph g) was approved.

The introductory section of the Recommendation was approved.

5.6 The delegate of Iraq proposed that the words "and assist in initiating" should be inserted after the word "encourage" in paragraph 1 of the section headed "invites the CCIR".

5.7 The delegate of Gabon said that paragraphs 1 and 2 of that section, which invited the CCIR, respectively, "to encourage the study ..." and "to continue the studies ...", were a little ambiguous when read together. Perhaps the two paragraphs should be merged.

5.8 The delegate of France considered that there would be little point in inviting the CCIR Secretariat to perform work which was not within its purview; studies, for example, could be undertaken only by Administrations themselves.

5.9 The delegate of Algeria supported the proposal by the delegate of Iraq. On the other hand, his delegation did not favour merging paragraphs 1 and 2, as suggested by the delegate of Gabon.

5.10 The Director of the CCIR expressed the hope that the clear, separate objective stated in paragraph 1 would not be lost as a result of any redrafting of that and/or the following paragraph. He observed that there were many ways in which the CCIR could encourage and assist studies through the provision of technical advice; indeed, some specific examples were given in CCIR Resolution No. 33. However, it was true that no financial resources were available for the actual funding of studies, and the word "assistance" should therefore not be interpreted to mean financial support.

5.11 The delegate of Gabon, replying to a question by the Chairman, said that he did not object to leaving the text of the two paragraphs unchanged, even though he would prefer the ambiguity to be removed, possibly by means of a minor amendment to paragraph 2.

5.12 The delegates of Jordan, Papua New Guinea, Kenya and Nigeria supported the proposal by the delegate of Iraq.

5.13 The delegate of the United Kingdom considered that the wording proposed by the Iraqi delegate might lead to misunderstanding as to the extent of the assistance in question. Consequently, he did not favour the amendment.

5.14 The delegate of Canada said that his delegation fully shared the previous speaker's concern; there was a real danger that confusion would arise as to the respective functions of the CCIR and the Union's Technical Cooperation Department if the Iraqi amendment were to be approved. A cautious approach should be adopted when inviting the CCIR to take certain types of action.

5.15 The Director of the CCIR, replying to a question by the Chairman, said that the limits of CCIR assistance were defined both in the latter's terms of reference and in the texts adopted by its Plenary Assembly. Accordingly, he did not envisage that any major problems would arise with regard to the interpretation of the word "assist" in the specific context of the CCIR.

5.16 The Chairman observed that the Iraqi proposal appeared to command majority support. If no delegation had very strong objections, he suggested that it should be approved.

It was so decided.

The section headed "invites the CCIR", as amended, was approved.

5.17 The delegate of France suggested that the heading of the second operative section should be "and recommends to Administrations", to avoid repetition of the word "Administrations" in each sub-paragraph, and to bring the section into line with the first operative section.

5.18 The Chairman suggested that since the Committee appeared to agree to that change in principle, it should be passed to the Editorial Committee.

It was so agreed.

5.19 The delegate of France, supported by the delegates of Argentina and Iraq, referring to the first sub-paragraph said that it was no use stating that Administrations should initiate studies unless it was made clear that the international community, through the CCIR, would benefit from the results. The basic documents of the CCIR were in any event based on the contributions of Administrations. He therefore proposed that the words "and transmit the results of these studies to the CCIR" should be added after the word "established".

The delegate of the Ivory Coast said that he could support the French proposal but felt that a more suitable form of wording would be "recommend that Administrations should undertake the study ...".

After a brief discussion the French proposal was approved.

The second operative section of the Recommendation, as amended, was approved.

5.20 The delegate of Kenya suggested that in the interests of consistency the words "invites the CCIR" should be changed to "recommends the CCIR".

The Chairman observed that that was basically a question of style.

5.21 The Chairman of Working Group 4C said that it was not absolutely necessary to use the word "recommends" in a recommendation, quoting Recommendations 4, 5, 6 and 7 as specific examples.

5.22 The delegate of Roumania said that in his view the suggestion by the delegate of Kenya was a relevant one since desirable changes in the Union were made by way of recommendations. However, the words "requests the CCIR" might be more appropriate.

The delegate of the Ivory Coast supported that proposal.

5.23 The representative of the IFRB pointed out that it was normal to use a different word at the beginning of the various sections for ease of referencing. To use the word "recommends" in both sections could lead to a certain amount of confusion later on.

The proposal to change the word "invites" to "requests" was approved.

Recommendation No. 4, as a whole, as amended, was approved.

6. Draft note to the Chairman of Committee 6 (Document No. 407)

6.1 The Chairman of Working Group 4C, introducing the document, said that in considering Article N3 the question had been raised as to the symbols to be used by monitoring stations when certain characteristics could not be unambiguously identified, and it had been agreed that although it was not a matter to be tackled in connection with Article N3, it did affect Appendices 6, 7 and 8 relating to monitoring services. The square brackets relating to the document number should be removed and the number 406 inserted.

Document No. 407 was approved.

7. Draft note to the Chairman of Committee 6 (Document No. DT/143)

7.1 The Chairman of Working Group 4C said that the Working Group had raised the problem of updating entries in the Master International Frequency Register to take account of the new method of indicating necessary bandwidth and classification of emissions. The Working Group had approved the note unanimously (now contained in Document No. 406).

Document No. DT/143 was approved.

8. Sixth report of Working Group 4C (Document No. 404)

8.1 The Chairman of Working Group 4C said that discussions in the Group had been straightforward due to the fact the submissions had tended to be identical, and proposed unanimous

thanks to the work of the Special Preparatory Meeting. The presentation of the document had been taken from the existing Appendix 3. It had been agreed that the new middle column should be the same as the existing right-hand column and that no change should be made to the figures, thus preserving the continuity of the present applicable tolerances until such time as transition took place. The same applied to the notes. Only minor editorial changes had been made. Square brackets in the text indicated decisions on frequency bands still to be taken by Committee 5.

8.2 The delegate of Argentina, referring to MOD 1 on page 2 of the Spanish text only said that the words "a menos que se indique otra cosa" should be changed to "a menos que se indique de otro modo".

It was so agreed.

Document No. 404 was approved.

9. Seventh report of Working Group 4C (Document No. 405)

9.1 The Chairman of Working Group 4C introduced the Working Group's seventh report to Committee 4.

The report was approved.

10. Eighth report of Working Group 4C (Document No. 406)

10.1 The Chairman of Working Group 4C presented the eighth report of Working Group 4C and indicated that in addition to all the proposals concerning Article N3, the Group's work had been based on CCIR Recommendation No. 507.

10.2 In reply to an observation by the delegate of Iran, the Chairman of the Working Group explained that the examples at the foot of page 2 were in fact correct. Under No. 3210 only three numerals and one letter were to be used in the system of designation and a fourth numeral had therefore been rounded up or down to the nearest figure.

10.3 The delegate of Cuba proposed an amendment affecting only the Spanish text of ADD 3212, which was approved.

10.4 The delegate of France said that it should be pointed out to the Editorial Committee that Nos. 3210 to 3216 had been re-used but the new provisions did not necessarily correspond to the old ones.

10.5 The Chairman said that that would be done.

The eighth report of Working Group 4C to Committee 4 was approved.

11. Verbal report by the Chairman of Working Group 4A

11.1 The Chairman of Working Group 4A said that his Group hoped to complete the majority of its work by the end of the week.

11.2 In reply to the delegate of Iraq who asked, with reference to Document No. 372, whether the Working Group would provide a definition of the expression "acceptable level of interference" or only of "accepted interference", the Chairman of Working Group 4A said that the matter would be considered that afternoon.

12. Verbal report by the Chairman of Working Group 4B

12.1 The Chairman of Working Group 4B said that the Working Group had completed most of its work on Articles N26 and N27. Some problem areas still remained which would be dealt with as soon as possible. Sub-Working Group 4B7, which was considering Article N27A, would meet the following afternoon and Appendices 28 and 29 would be discussed that afternoon by the Working Group itself. A document on Appendices 1A and 1B, which had been transmitted to the Working Group as a result of a note from the Chairman of Committee 6, would be available that afternoon and work on the outstanding points remaining, namely the consideration of Resolutions and Recommendations referred to the Working Group, would be completed as soon as possible.

13. Note from the Chairman of Committee 8 to the Chairmen of Committees 4, 5, 7 and 9 (Document No. 342)

13.1 The Committee took note of Document No. 342.

14. Notes from the Chairman of Committee 6 to the Chairman of Committee 4 (Document Nos. 369, 370, 371, 372 and 373)

Document No. 369

14.1 The Chairman said that he would invite Working Group 4C to consider Appendix 1 and Working Group 4B to consider Appendices 1A and 1B.

The Committee took note of Document No. 369.

Document No. 370

14.2 The Chairman said that he would invite Working Group 4B to consider Document No. 370.

The Committee took note of Document No. 370.

Document No. 371

14.3 The Chairman suggested that Document No. 371 might be referred to Working Group 4A.

14.4 The representative of the IFRB said that the expression "in the same band" was not strictly speaking a technical expression. It was used in connection with procedure under Nos. 4114 or 4138. Those provisions related in the first case to coordination between space stations or Earth stations in geostationary satellite networks and in the second case to coordination between Earth stations and terrestrial services. In his view, the matter could more appropriately be considered by Committee 6 and should be referred back to that Committee by Committee 4.

14.5 The delegate of Iran, drawing attention to the last paragraph on page 1 of Document No. 371, suggested that Committee 4 should confirm whether or not it accepted the IFRB interpretation of the expression as given in Annex A.

14.6 After a further discussion in which the delegates of Canada and Iraq endorsed the IFRB representative's suggestion, while the delegate of the USSR, supported by the delegates of France, Japan and Syria said that it would be preferable for the matter to be studied by Working Group 4B, since it related to coordination, it was agreed to refer Document No. 371 to Working Group 4B on the understanding that if, after consideration, the latter thought it more appropriate, it might transmit the document to Working Group 4A.

Document No. 372

14.7 The Chairman said that Working Group 4A would discuss Document No. 372 that afternoon.

The Committee took note of Document No. 372.

Document No. 373

14.8 The Committee took note of Document No. 373, and the Chairman said that he would refer it to Working Group 4B for consideration.

15. Note from the Chairman of Committee 5 to the Chairman of Committee 4 (Document No. 379)

15.1 The Chairman said that he would invite Working Group 4B to consider Document No. 379.

It was so agreed.

16. Note from the Chairman of Committee 4 (Document No. DT/133)

16.1 The Secretary of the Committee said that on page 3 of Document No. DT/133 a headline "Recommendations" should be inserted after the first three lines.

16.2 The Chairman said that he would invite each Working Group to consider the relevant Resolutions and Recommendations as listed in Document No. DT/133.

16.3 The delegate of Canada asked that Proposal CAN/60A/205 on page 5 of Document No. DT/133 should be assigned to Working Group 4C.

It was so agreed.

The meeting rose at 1205 hours.

The Secretary : The Chairman :

C. GLINZ N. MORISHIMA

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 531-E
8 November 1979
Original : French

PLENARY MEETING

THIRD REPORT OF COMMITTEE 6

Committee 6 adopted revised texts on the following items (see Document No. 532), which have been transmitted to the Editorial Committee for submission to the Plenary Meeting :

- Resolution No. /COM6 - 3/
- Resolution No. /COM6 - 4/

Committee 6 also agreed on the measures to be taken with regard to certain existing Resolutions and Recommendations.

These texts were adopted unanimously.

M. JOACHIM
Chairman of Committee 6

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 532-E
8 November 1979
Original : French

COMMITTEE 9

THIRD SERIES OF TEXTS SUBMITTED BY COMMITTEE 6

TO THE DRAFTING COMMITTEE

The texts indicated in Document No. 531 and contained in the following Annexes are hereby submitted to the Drafting Committee :

Annex 1 : Resolution No. /COM6 - 3/

Annex 2 : Resolution No. /COM6 - 4/

Annex 3 : Decision on existing Resolutions and Recommendations.

Dr. M. JOACHIM
Chairman of Committee 6

Annexes : 3

ANNEX 1

RESOLUTION No. [COM6 - 3]

Relating to the circulation of current information on
CCIR Recommendations referred to in the
Radio Regulations

The World Administrative Radio Conference, Geneva, 1979,

noting

a) that reference is made in the Radio Regulations to specific CCIR Recommendations as well as to "relevant CCIR Recommendations";

b) that Resolution Spa2 - 6 provides for consultation on the applicability of those CCIR Recommendations relating to the technical criteria for sharing frequency bands between space radiocommunication and terrestrial radiocommunication services or between space radiocommunication services;

c) that the CCIR Recommendations may be revised by CCIR Plenary Assemblies, with consequent changes of reference numbers;

considering

a) that a correct application of the Radio Regulations requires the identification by Administrations of the relevant CCIR Recommendations to be taken into account;

b) that information on the up-dating of these Recommendations is of the utmost importance;

invites the CCIR

1. to identify and list those provisions of the Radio Regulations containing a reference to a specific CCIR Recommendation or to a "relevant CCIR Recommendation" together with the reference numbers and titles of those Recommendations;

2. to instruct the Director of the CCIR to provide the Secretary-General with information required to up-date the list;

requests the Secretary-General to transmit to all Administrations the list of these Recommendations as well as any subsequent up-dating thereof.

ANNEX 2

RESOLUTION No. [COM6 - 4]

Relating to the use of frequency assignments to terrestrial and space radiocommunication stations in the band 11.7 - 12.2 GHz in Region 3 and in the band 11.7 - 12.5 GHz in Region 1

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977, adopted Resolution No. Sat-2;

b) that [No. 405BA] of the Radio Regulations provides that in the band 11·7-12·2 GHz in Region 3 and in the band 11·7-12·5 GHz in Region 1, existing and future fixed, mobile and broadcasting services shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the decisions of that Conference;

c) that the decisions of that Conference included a Plan for stations in the Broadcasting-Satellite Service;

d) that the coordination procedures described in Resolution No. Spa2 – 3 are to be applied only until the entry into force of plans pursuant to Resolution No. Spa2 – 2;

resolves

1. that all administrations using or intending to use frequency assignments to terrestrial stations in the bands covered by the Plan shall decide as soon as possible, whether or not these assignments will affect frequency assignments in accordance with the Plan (if necessary, with the assistance of the IFRB);

2. that administrations may continue to use frequency assignments which are not in accordance with the Plan, provided that agreement is reached with the administration whose broadcasting-satellite stations are affected;

3. that the administrations seeking agreement shall inform the IFRB of the terms of the agreement reached;

4. that, upon receipt of such information, the IFRB shall insert a symbol in the Remarks column of the Master Register indicating the duration specified in the agreement. The duration specified shall also be published in a special section of its weekly circular;

5. that Resolution No. Sat-2 is abrogated and superseded by the present Resolution;

invites the IFRB

to assist administrations in implementing the provisions of this Resolution.

Note to Editorial Committee :

The drafting of the present Resolution does not prejudge a decision by this Conference concerning the form in which existing Resolutions are maintained, wholly or in part.

Explanatory Note

This Resolution contains the sections of Resolution No. Sat-2 that remain relevant. In particular, "considerings" b) and d) of the present Resolution follow from "considerings" b) and c) of Resolution No. Sat-2, respectively; "resolves" 1, 2, 3 and 4 follow from "resolves" 1, 3, 4 and 5 of Resolution No. Sat-2, respectively.

ANNEX 3

NOC

RESOLUTION No. 15[1) 2)]

Relating to Inter-ship Frequencies in the Bands between 1 605 and 3 600 kHz in Region 1

NOC

RESOLUTION No. Mar 5[1) 2) 3)]

Relating to the Use of Single Sideband Technique in the Radiotelephone Maritime Mobile Service Bands between 1 605 and 4 000 kHz

NOC

RESOLUTION No. Mar 19

Relating to the Manner in which the I.F.R.B. shall treat Notifications dealing with Frequency Assignments to Oceanographic Stations

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1) Note to Editorial Committee:
This Resolution should be brought in line with the decisions taken in other Committees of this Conference, in particular with respect to decisions taken in Committee 5 with respect to frequency allocations.

2) It was noted in the Sub-Working Group that final consideration of this Resolution should best occur at the next appropriate specialist Conference.

3) Note to Editorial Committee:
Committee 6 noted proposals made to this Conference relating to the use of A3J emissions on the carrier frequency 2182 kHz (e.g. NZL/51/168 to 173). When a decision is made on this matter at WARC-79 it may be necessary to modify this Resolution accordingly.

NOC

RESOLUTION No. Spa2 – 1

Relating to the Use by all Countries, with equal Rights, of Frequency Bands for Space Radiocommunication Services

NOC

RESOLUTION No. Mar2 – 7

Relating to the Use and Notification of Paired Frequencies Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems in the HF Bands allocated to the Maritime Mobile Service

NOC

RESOLUTION No. Mar2 – 8

Relating to the Notification of Non-Paired Ship Station Frequencies used for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems

NOC

RESOLUTION No. Mar2 – 14

Relating to the Channel Spacing of Frequencies allocated to the Maritime Mobile Service in the Band 156-174 MHz

NOC

RESOLUTION No. Sat – 5

Relating to the coordination, notification and recording in the Master International Frequency Register of frequency assignments to stations in the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Sat – 6

Relating to the coordination, notification and recording in the Master International Frequency Register of assignments to stations in the fixed-satellite service with respect to stations in the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Sat – 9

Relating to the submission of requirements for the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Aer2 – 2 [1)]

Relating to the Unauthorized Use of Frequencies in the Bands Allocated to the Aeronautical Mobile (R) Service

NOC

RESOLUTION No. Aer2 – 3 [1)]

Relating to the Implementation of the New Arrangement Applicable to Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

NOC

RESOLUTION No. Aer2 – 4 [1)]

Relating to the Treatment of Notices Concerning Frequency Assignments to Aeronautical Stations in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

NOC

RESOLUTION No. Aer2 – 5 [1)]

Relating to the Implementation of the Frequency Allotment Plan in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service Between 2 850 and 17 970 kHz

NOC

RECOMMENDATION No. 21 [1)]

Relating to Technical Provisions for Maritime Radiobeacons in the African Area

NOC

RECOMMENDATION No. Spa2 – 1

Relating to the Examination by World Administrative Radio Conferences of the Situation with Regard to Occupation of the Frequency Spectrum in Space Radiocommunications

NOC

RECOMMENDATION No. Aer2 – 3[1)]

Relating to Cooperation in the Efficient Use of World-Wide Frequencies in the Aeronautical Mobile (R) Service

NOC

RECOMMENDATION No. Aer2 – 4[1)]

Relating to the Transition from the Present to the New Frequency Allotment Plan in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

SUP

RESOLUTION No. Sat – 1

Relating to the preparation and publication of information not contained in the broadcasting-satellite Plan for Regions 1 and 3

SUP

RESOLUTION No. Sat – 2

(replaced by Resolution No. /COM6 - 4/7 which appears in Annex 2)

Relating to the updating of the Master International Frequency Register for Regions 1 and 3 on the date of entry into force of the Final Acts

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 4

TWELFTH REPORT OF WORKING GROUP 4C TO COMMITTEE 4

Subject : MOD Recommendation No. 8

1. The Annex contains Recommendation No. 8 as revised consequential to decisions taken in connection with the revision of Article N3 and Appendix 5.

2. In revising Article N3 (see Document No. 406) and Appendix 5 (see Document No. 462) the following equivalent terms were adopted :

"additional characteristics" (English)

"caractéristiques supplémentaires" (French)

"características suplementarias" (Spanish)

In MOD Recommendation No. 8 the English term "supplementary additional characteristics" is used. If here the equivalent terms given above still were used this would pose great difficulties for translation into French and Spanish. To overcome this difficulty MOD Recommendation No. 8 uses the following equivalent terms :

"additional characteristics" (English)

"caractéristiques additionnelles" (French)

"características adicionales" (Spanish)

Therefore, it is proposed, that the French and Spanish texts of Article N3 and Appendix 5 be amended accordingly.

3. This report and its Annex have been approved unanimously.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

ANNEX

RECOMMENDATION No. 8

Supplementing the Additional Characteristics for
Classifying Emissions and Providing Additional Examples
for the Full Designation of Emissions,
Both as Given in Appendix 5

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that this Conference has adopted in Article N3 a new method for designating emissions based on CCIR Recommendation 507, Kyoto, 1978;

b) that an essential part of this new method is the classification of emissions;

c) that the new method of classifying emissions distinguishes between basic characteristics (first, second and third symbol) the use of which is mandatory, and additional characteristics (fourth and fifth symbol) the use of which is optional;

d) that the full classification of emissions consists of all of these five symbols;

e) that the list of the additional characteristics given in Appendix 5, Part A, may not be sufficiently complete to take account of future new technologies and may require relatively frequent supplementing;

f) that a CCIR Recommendation would provide a suitable means for such supplementing;

considering further

a) that a list of examples for the full designation of emissions is given in Appendix 5, Part B;

b) that this list, however, is not exhaustive and that for this reason No. 3209 of these Regulations stipulates that further examples may appear in the latest Recommendations of the CCIR and that these examples may also be published in the Preface to the International Frequency List;

invites the CCIR

1. to continue its studies on the classification of emissions with a view to supplementing the list of additional characteristics in order to cater for new technologies without, however, changing those additional characteristics which have already been agreed upon and which are contained in Appendix 5, Part A;

2. to provide examples for the full designation of emissions which are not contained in Appendix 5, Part B, taking also account of the supplementing mentioned in 1. above;

requests the International Frequency Registration Board to publish the supplementary additional characteristics and the additional examples mentioned in 1. and 2. above in the Preface to the International Frequency List as soon as they are available in relevant CCIR Recommendations;

and recommends that Administrations use the additional characteristics referred to in 1. above where appropriate.

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COMMITTEE 4

THIRTEENTH REPORT OF WORKING GROUP 4C TO COMMITTEE 4

Subject : MOD Appendix 4

1. Working Group 4C, having considered all proposals concerning Appendix 4, submits this Appendix as revised for consideration in Committee 4 (see Annex).

2. The levels in Column A of the Table are identical to those at present in Column B. The same applies to the corresponding notes, notwithstanding editorial amendments without changing the substance.

3. Since certain decisions on frequency band limits have not yet been taken in Committee 5, frequencies, where relevant, have been enclosed in square brackets.

4. A majority decision was taken on the inclusion of levels for the band [960] MHz to [17.7] GHz. French speaking delegations objected against the translation into French of the terms "spurious emission" and "spurious component" as given in the Annex.

5. Except as stated in item 4 above, this report and its Annex have been approved unanimously.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

A N N E X

MOD

APPENDIX 4

MOD

Table of Maximum Permitted Spurious Emission Power Levels

(See Article N4)

MOD

1. The following table indicates 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.

MOD

2. Spurious emission from any part of the installation other than the antenna and its transmission line, shall not have an effect greater than would occur if this antenna system were supplied with the maximum permitted power at that spurious emission frequency.

MOD
(PNG/111/377
as modified)

3. These levels shall not, however, apply to emergency position indicating radio beacon stations, emergency locator transmitters, ship's emergency transmitters, lifeboat transmitters, survival craft stations or maritime transmitters when used in emergency situations.

MOD
(PNG/111/377
as modified)

4. For technical or operational reasons, specific services may demand more stringent levels than those specified in the Table. The levels applied to these services shall be those agreed upon by the appropriate Administrative Radio Conference. More stringent levels also can be fixed by specific agreement between Administrations concerned.

MOD
(≈ SPM 8,
SPM Report p.8.8)

5. For radiodetermination stations, until acceptable methods of measurement exist, the lowest practicable power of spurious emission should be achieved.

SUP

6. (transferred to Column A of the Table)

MOD

Assigned Frequency Band (lower limit exclusive, upper limit inclusive)	For any spurious component the attenuation (mean power within the necessary bandwidth relative to the mean power of the spurious component concerned) shall be at least that specified in Columns A and B below and the absolute mean power levels given shall not be exceeded (Note 1).	
	A	B
	Levels applicable until 1 January 1994 to transmitters now in use and to those installed before 2 January 1985	Levels applicable to transmitters installed after 1 January 1985 and to all transmitters after 1 January 1994
9 kHz to 30 MHz	40 decibels 50 milliwatts (Notes 2,3,4)	40 decibels 50 milliwatts (Notes 4, 7, 8)
30 to /¯235_/ MHz		
- mean power above 25 watts	60 decibels 1 milliwatt (Note 5)	60 decibels 1 milliwatt (Note 9)
- mean power 25 watts or less	40 decibels 25 microwatts (Notes 5,6)	40 decibels 25 microwatts

/235/ to /960/ MHz - mean power above 25 watts - mean power 25 watts or less	No level is specified for transmitters operating on assigned frequencies above /235/ MHz. For these transmitters the power of spurious emissions shall be as low as practicable.	60 decibels 20 milliwatts (Notes 10,11) 40 decibels 25 microwatts (Note 11)
/960/ MHz to /17.7/ GHz - mean power above 10 watts - mean power 10 watts or less		50 decibels 100 milliwatts (Notes 10,11,12,13) 100 microwatts (Notes 10,11,12,13)
Above /17.7/ GHz		Due to the diverse nature of technologies employed by services operating above /17.7/ GHz further study by the CCIR is required prior to specification of levels. To the extent possible, the values to be observed should be those shown in appropriate CCIR Recommendations. Until suitable Recommendations have been adopted, the lowest possible values achievable shall be employed (see Recommendation No. / /)

ADD

Notes referring to the Table of Maximum Permitted Spurious Emission Power Levels

MOD
(= SPM 11)

1. When checking compliance with the provisions of the Table, it shall be verified that the bandwidth of the measuring equipment is sufficiently wide to accept all significant components of the spurious emission concerned.

MOD
(= (MOD) ex.1)

2. For transmitters of mean power exceeding 50 kilowatts and which operate below 30 MHz over a frequency range approaching an octave or more, a reduction below 50 milliwatts is not mandatory, but a minimum attenuation of 60 decibels shall be provided and every effort should be made to comply with the level of 50 milliwatts.

MOD
(= (MOD) ex.2)

3. For hand-portable equipment of mean power less than 5 watts which operates in the frequency band below 30 MHz, the attenuation shall be at least 30 decibels, but every effort should be made to attain 40 decibels attenuation.

MOD
(= (MOD) ex.3)

4. For mobile transmitters which operate below 30 MHz any spurious component shall have an attenuation of at least 40 decibels without exceeding the value of 200 milliwatts, but every effort should be made to comply with the level of 50 milliwatts wherever practicable.

ADD
(= (MOD) ex.4)

5. For frequency modulated maritime mobile radio-telephone equipment which operates above 30 MHz, the mean power of any spurious emission falling in any other international maritime mobile channel, due to products of modulation, shall not exceed a level of 10 microwatts and the mean power of any other spurious emission on any discrete frequency within the international maritime mobile band shall not exceed a level of 2.5 microwatts. Where, exceptionally, transmitters of mean power above 20 watts are employed, these levels may be increased in proportion to the mean power of the transmitter.

ADD

6. For transmitters having a mean power of less than 100 milliwatts it is not mandatory to comply with an attenuation of 40 decibels provided that the mean power level does not exceed 10 microwatts.

ADD

7. For transmitters of a mean power exceeding 50 kilowatts which can operate on two or more frequencies covering a frequency range approaching an octave or more, whilst a reduction below 50 milliwatts is not mandatory, a minimum attenuation of 60 decibels shall be provided.

ADD

8. For hand-portable equipment of mean power less than 5 watts, the attenuation shall be 30 decibels, but every practicable effort should be made to attain 40 decibels attenuation.

ADD

9. Administrations may adopt a level of 10 milliwatts provided that harmful interference is not caused.

ADD 10. Where several transmitters feed a common antenna or closely spaced antennae on adjacent frequencies, every practicable effort should be made to comply with the levels specified, although this may not always be achievable.

ADD 11. Since these levels may not provide adequate protection for receiving stations in the radio astronomy and space services, more stringent levels might be considered in each individual case in the light of the geographical position of the stations concerned.

ADD 12. These levels are not applicable to systems using digital modulation techniques, but may be used as a guide. Values for these systems may be provided by the relevant CCIR Recommendations (see Recommendation No. / _/).

ADD 13. These levels are not applicable to stations in the space services, but the levels of their spurious emissions should be reduced to the lowest possible values compatible with the technical and economic constraints to which the equipment is subject.

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COMMITTEE 4

FOURTEENTH REPORT OF WORKING GROUP 4C

TO COMMITTEE 4

Subject : MOD Article N33, Section IV, B

1. Working Group 4C, having considered all proposals concerning Article N33, Section IV, B, submits this text as revised for consideration in Committee 4 (see Annex).

2. The square brackets in No. 6476 indicate that a decision on this frequency band for aeronautical beacons is not yet available from Committee 5.

3. This report and its Annex have been approved unanimously, except that a majority decision was taken not to include proposal CAN/60A Add.1/133A.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

ANNEX

MOD

ARTICLE N33

NOC

Radiodetermination Service and Radiodetermination-Satellite Service

NOC

Section IV. Radiobeacon Stations

NOC **6475**

B. Aeronautical Radiobeacons

MOD **6476 433** § 15. (1) The assignment of frequencies to aeronautical radiobeacons operating in the bands between / 160 and 415 / kHz shall be based on a protection ratio against interference of at least 15 dB for each beacon throughout its service area.

MOD **6477 434** **(2)** The radiated power should be kept to the minimum value necessary to give the desired field strength at the service range.

NOC **6478 435** **(3) The daylight service range of radiobeacons referred to in No. 6476/433 shall be based on the following field strengths:**

NOC **6479 436** **(4) *Regions 1 and 2***

- **70 microvolts per metre for radiobeacons north of 30° N.**
- **120 microvolts per metre for radiobeacons between 30° N and 30° S.**
- **70 microvolts per metre for radiobeacons south of 30° S.**

NOC **6480 437** **(5) *Region 3***

- **70 microvolts per metre for radiobeacons north of 40° N.**
- **120 microvolts per metre for radiobeacons between 40° N and 50° S.**
- **70 microvolts per metre for radiobeacons south of 50° S.**

INTERNATIONAL TELECOMMUNICATION UNION

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COMMITTEE 6

NOTE FROM THE CHAIRMAN OF WORKING GROUP 6B TO THE CHAIRMAN OF COMMITTEE 6

The informal drafting group of Committee 6 reexamining Appendices 6, 7 and 8, is of the opinion that definitions [or regulations] for the use of the general terms, date and time should be included [by Committee 7] in the Radio Regulations for general application. There is general consensus to adopt U.T.C. as time (see CCIR Recommendation No. 535 and Document No. 492 of the WARC 1979) and its presentation by a group of four figures (0001-2400).

It is proposed that the date should be defined in line with the following concept:

1. The Gregorian calendar should be specified as the standard. The general use of that calendar is laid down in the "International Standard ISO 2014 - 1976" of the International Organization of Standardization.

2. Wherever a date in connection with the time U.T.C. is used, the date shall be the date at the prime meridian for that time.

3. There should be a fixed sequence of figures representing the day, month and the last two digits for the year. The figures 01 through 12 may be used for the month position.

Liliana GARCIA de DAVIS
Chairman of Working Group 6B

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

NOTE FROM THE CHAIRMAN OF WORKING GROUP 5BA
TO THE CHAIRMAN OF COMMITTEE 5

Working Group 5BA discussed the band 415 - 495 kHz in Region 1 on several occasions without reaching a consensus on allocations.

Three possibilities were established :

1) 415 - 495 kHz MARITIME MOBILE

Footnote to allow the operation of aeronautical radionavigation stations in the band 415 - 435 kHz by agreement among the Administrations whose services operate in accordance with the Table and may be affected. 435 - 495 kHz - note similar to 3481/188 allowing the operation of stations in the aeronautical radionavigation service.

2) 415 - 435 kHz AERONAUTICAL RADIONAVIGATION

/MARITIME MOBILE/

435 - 495 kHz MARITIME MOBILE

Aeronautical radionavigation

3) 415 - 495 kHz MARITIME MOBILE

Footnote : Alternative allocation for aeronautical radionavigation in some countries of Region 1.

The three above possibilities were submitted to the Working Group for consideration without the final wording of the notes having been discussed in detail. They have been listed above by order of preference by the Working Group : Solution No. 1 is slightly preferred to No. 2 and the first two solutions are more distinctly preferred to the third.

Since no solution was adopted, it was agreed to refer the matter to Committee 5 for final decision.

Leopoldo COOK
Chairman of Working Group 5BA

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

Subject : Your request in Document No. 369 concerning Appendix 1

The comments from Committee 4 on technical matters involved in Appendix 1 are contained in the Annex.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

A N N E X

TECHNICAL COMMENTS ON APPENDIX 1

SECTION E.II

1. In order to make the calculations to ensure compliance with Article N.25, Committee 4 has the following comments :

a) Column 4c and 5a (geographical coordinates)

In the shared bands (space and terrestrial systems) above 1 GHz, it is recommended that the geographical coordinates be supplied to an accuracy of one tenth of a minute or, as an alternative, the azimuth and elevation of maximum directivity of the antenna be supplied to an accuracy of one tenth of a degree.

b) Column 8 (power)

In the shared bands (space and terrestrial systems above 1 GHz), it is recommended that the e.i.r.p. be notified. In the event that Committee 6 decides not to require the e.i.r.p. to be notified, it is necessary that the antenna gain, transmitter power and transmission line loss be notified. It is noted that with the present Note 2 to Column 8 it is not possible to calculate the e.i.r.p. as the transmission line loss is not required to be notified.

c) Column 9 (antenna characteristics)

As the power limits of Article N.25 are given in terms of e.i.r.p., it is necessary that the notified antenna gain be clearly indicated as to the reference antenna (half-wave dipole or isotropic). Committee 4 recommends that the antenna gain for the bands above 1 GHz should likewise be relative to an isotropic antenna in Appendix 1.

In addition in order to calculate the direction of an antenna relative to the geostationary orbit, the elevation angle of the antennae is required.

Please refer to paragraph 1.a) above about the accuracy of the azimuth and elevation angle.

2. Additional comments

a) Column 1 (assigned frequency)

Committee 4 has /adopted/ in Article N2 (Document No. 453) the manner in which frequencies shall be expressed.

b) Column 8 (power)

Committee 4 has agreed to definitions of e.r.p. and e.i.r.p. (Document No. 452) and Note 3 to this column does not provide for the use of e.i.r.p.

In addition Committee 4 has /adopted/ additional symbols for representing power. (Document No. / /)

c) Column 9 (antennae characteristics)

Committee 4 has considered the comments on this column as contained in IFRB Circular-letter No. 411 and agrees with the substance of these comments (see, however, Notes 1 to 3 from Committee 4). These comments are attached as an Appendix to this Annex.

Appendix : 1

Appendix

Extract from IFRB Circular-letter No. 411

Column 9 - Antenna characteristics

General comments

In respect of the sub-columns of Column 9 listed below the following are suggested :*)

9a - Azimuth of maximum directivity
9b - Elevation angle of maximum directivity
9c - Beamwidth (3 dB) in azimuth
9d - Beamwidth (3 dB) in elevation
9e - Polarization
9f - Effective height of antenna
9g - Maximum (isotropic) antenna gain.1)

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*) Extract from IFRB Comment No. 13 - The Board considers that instead of one sub-column concerning altitude or effective height of antenna above mean sea level (9f) three sub-columns are required, 9e bis for LF/MF BC, 9e ter for VHF/UHF BC as defined in the European VHF/UHF Broadcasting Plan, Stockholm, 1961 and in the African VHF/UHF Broadcasting Plan, Geneva, 1963 and 9f for Earth stations (Appendix 1A, sections B and C). The list should therefore read :

9a - Azimuth of maximum directivity
9b - Elevation angle of maximum directivity
9c - Beamwidth (3 dB) in azimuth
9d - Beamwidth (3 dB) in elevation
9e - Polarization
9e bis - Height of antenna (metres) for a simple vertical antenna (LF/MF BC)
9e ter - Maximum effective height of antenna (VHF/UHF BC)
9f - Altitude (metres) of antenna above mean sea level (Appendix 1A, Sections B and C)
9g - Maximum (isotropic) antenna gain1)
9h - Azimuth of limited radiation sector
9i - Maximum agreed radiation in 9h sector
9j - Type of antenna CCIR.2)

Rule 1 For notices concerning non-directional antennae :
Insert in Column 9a 'ND';

Rule 2 For notices concerning assignments below 28 MHz excluding those relating to LF/MF Broadcasting :
Complete Columns 9a, 9c, 9g;

Rule 3 For notices relating to No. 490 :
Complete Column 9g only;

Rule 4 For notices relating to LF/MF Broadcasting :
Complete Columns 9a, 9b, 9c, 9g;**) 3)

Rule 5 For notices relating to VHF/UHF FM/TV Broadcasting :
Complete Columns 9a, 9c, 9e, 9f, 9g;***) 3)

Rule 6 For notices relating to the shared terrestrial/space bands :
Complete Columns 9a, 9b, 9e, 9g;

Rule 7 For notices relating to radio astronomy :
Complete Columns 9b, 9g;

Rule 8 For notices relating to all other cases :
Complete Column 9g only.

**) IFRB Comment No. 14 - Reference to sub-column 9b should be deleted but reference to sub-column 9e bis should be included (see IFRB Comment No. 13).

***) IFRB Comment No. 15 - Reference to sub-column 9f should be deleted and reference to sub-column 9e ter should be included (see IFRB Comment No. 13).

Committee 4 comments :

1) Column 9g should read :

Maximum antenna gain (isotropic, relative to a short vertical antenna or relative to a half-wave dipole, as appropriate).

2) Column 9j should read :

Type of antenna (see CCIR Book "Antenna Diagrams").

3) Rules 4 and 5 :

Reference to sub-columns 9h and 9i should be added.

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COMMITTEE 7

NOTE FROM THE CHAIRMAN OF COMMITTEE 6

TO THE CHAIRMAN OF COMMITTEE 7

During examination of the existing Resolutions and Recommendations, Committee 6 decided that Resolution No. Mar2 - 13 should in principle be abrogated but Committee 7 is asked to give its opinion on this decision, bearing in mind the problems arising in operation.

Committee 6 has decided to retain Resolution No. Sat-3 until Committee 7 has taken a decision on Resolution No. Sat-4.

Dr. M. JOACHIM
Chairman of Committee 6

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 7

Greece

REQUEST FOR ALLOCATION OF ADDITIONAL CALL SIGN SERIES

We would like to inform you that as a result of the development of the maritime communications in Greece, the call sign series allocated to our Administration have been used up.

Our Administration accordingly requests the allocation of at least five new call sign series to Greece.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 4

NOTE BY THE CHAIRMAN OF WORKING GROUP 4C

Subject : Radio Regulations in which mention is made of specific classes of emission

Committee 4 has adopted in Article N3 (see Document No. 474) a new method of classifying emissions. In this connection it has to be made sure that the appropriate amendments be made to all relevant provisions of the Radio Regulations, including Appendices, Resolutions and Recommendations.

It is for this reason that the list given in the Annex, which the delegation of the United States of America was so kind as to draw up, is submitted to Committee 4 in order that appropriate action be taken on this issue.

A complete set of all relevant provisions with the corresponding amendments, also prepared by the above-mentioned delegation, has already been handed over to the Chairman of Committee 4.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

A N N E X

RADIO REGULATIONS IN WHICH MENTION IS MADE OF SPECIFIC CLASSES OF EMISSIONS

Article 2

3209/104
3210/105
3211/106
3212/107
3213/108
3214/109
3215/110
3216/111
3183/112

Article 5

3452/158
3461/167
3495/200
3521/224
3529/232

Article 7

8032/437A
8044/445
8057/452B
8060/453
6487/463
6324/466

Article 28

6652/969
7932/974
7933/975
7934/976
7945/984
7946/985
7946.1/985.1
7947/986
7950/988
6602/992
6665/995
6666/996
6667/997
6668/998
6669/998A

Article 28A

8170/999I
8170.1/999I.1
8173/999K
8176/999M

Article 29A

8590/1062AH
8595/1062AL
8598/1062AN
8620/1062BH

Article 32

8086/1121
6700/1134
8104/1145
8105/1146
8107/1148
8129/1173A
8132/1174
8147/1182
8161/1196

Article 35

8188/1322B
8191/1322D
6633/1323
8192/1323
6633.1/1323.1
8192.1/1323.1
8196/1329A
8203/1336A
8204/1337
8210/1344
8211/1345
8217/1351A
8219/1351C
8220/1351D
8217.1/1351A.1
8217.2/1351A.2
8219.1/1351C.1
8220.1/1351D.1
6644/1351I
6656/1359
8232/1359

App. 1
p. 11 1a), 1c)

App. 3
p. 4 3a)
p. 10 p), q)

App. 5
Total

App. 15C--Title
p. 3 a)

App. 15D--Title

App. 17
p. 3 7b)

App. 17 Rev.
p. 7 6a)
DNA

App. 17A
p. 1 1a)
p. 2 1b)
p. 2 6

App. 20
p. 1 1a)

App. 20A
p. 1 d)

App. 20B
p. 1 c)

App. 20D
p. 2 5

Res. No. Mar 4
p. 2 2.

Res. No. Mar 5
p. 2 3
p. 2 4
p. 2 5

Res. No. Mar 15
Note 1

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Res. No. Mar 2-20
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INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 542-E
8 November 1979
Original : English

WORKING GROUPS 5BA, 5BB AND 5C

Report of Sub-Working Group 5BA9 to Working Groups 5BA, 5BB and 5C

USE OF RADIOCOMMUNICATIONS IN THE EVENT OF NATURAL DISASTERS

Sub-Working Group 5BA9 has held two meetings.

It considered the proposals concerning the use of radiocommunications at the scene of natural disasters and associated proposals related to the provisions of a safety service allocation as proposed by Papua New Guinea. The Sub-Working Group decided unanimously that the problem could best be solved by a reference footnote to an associated draft Resolution as given in the Annex to this Report.

H.A. KIEFFER
Chairman of Sub-Working Group 5BA9

Annex : 1

ANNEX

ADD 3500A For the use of the bands allocated to the amateur service at /3.5 MHz/ /7.0 MHz/ /10.1 MHz/ /14.0 MHz/ /18.068 MHz/ /21.0 MHz/ and 144 MHz in the event of natural disasters, see Resolution /.../

DRAFT RESOLUTION /.../

Relating to the International Use of Radiocommunications in Frequency Bands Allocated to the Amateur Service in the Event of Natural Disasters

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that in the event of natural disaster normal communication systems are frequently overloaded, damaged, or completely interrupted;

b) that rapid establishment of communication is essential to facilitate world-wide relief actions;

c) that the amateur bands are not bound by international service plans or notification procedures, and are therefore well adapted for short-term use in emergency cases;

d) that international disaster communications would be facilitated by temporary use of certain frequency bands allocated to the amateur service;

e) that under those circumstances the stations of the amateur service, because of their widespread distribution, can assist in meeting essential communications needs;

f) that national and regional amateur emergency networks exist that use frequencies throughout the bands allocated to the amateur service;

g) that in the event of a natural disaster direct communication between amateur stations and other stations might also be useful so that vital communications can be carried out until normal communications are restored;

resolves

1. that Administrations provide for the needs of international disaster communications within certain bands allocated to the amateur service;

2. that such use of the bands allocated to the amateur service shall be only for communications in relation to relief operations in connection with natural disasters;

3. that use of specified bands allocated to the amateur service by non-amateur stations for disaster communications shall be for limited periods of time and for specific geographical areas;

4. that disaster communications take place within the disaster area and between the disaster area and the permanent location of the organization providing relief;

5. that such communications shall be carried out only with the consent of the Administration of the country in which the disaster has occurred;

6. that relief assistance from a source outside the country in which the disaster has occurred shall not replace existing national or international amateur emergency networks;

7. that close cooperation is desirable between amateur stations and the stations of other services which may find it necessary to use amateur frequencies in disaster communications;

8. that such international relief communications shall avoid as far as practicable interference to the amateur service networks;

9. that Administrations provide for the needs of emergency communications within their national regulations.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 543-E
8 November 1979
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COMMITTEE 7

State of Israel

PROPOSALS FOR THE WORK OF THE CONFERENCE

ISR/543/31 MOD

RECOMMENDATION No. Mar 2 - 20

No change, up to "having noted" d).

ADD e) that guidelines have been issued by the Secretary-General to facilitate this presentation;

recommends

NOC 1. that Administrations be invited to present their proposals in a uniform manner;

SUP 2.

MOD ~~3.~~ 2. that a uniform presentation be used, through the different stages of preparing texts ~~up-to-working-group-level~~ at forthcoming Administrative Radio Conferences.

Reasons : 1. The uniform method of presentation of amendments has proven to be of great assistance to delegations, and to the work of conferences; this should therefore be further encouraged and carried up as much as possible through the different stages of the conferences.

2. See also Proposal No. ISR/413/22.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 544-E
8 November 1979
Original : English

COMMITTEE 5

United Kingdom

PROPOSALS FOR THE WORK OF THE CONFERENCE

The sixth report of Working Group 5C (Document No. 409) contains a modified text in square brackets for footnote 3564/265. It was agreed in Working Group 5C that the United Kingdom would consult with other Administrations and produce a revised text. These consultations have now taken place and the following proposal is submitted for consideration by the Conference :

G/544/987 MOD 3564/265 Additional allocation : in the United Kingdom the band 97.6 - 102.1 MHz is also allocated to the land mobile service on a permitted basis, until 31 December 1989. The use of this band by the land mobile service is restricted to those stations in operation on 1 January 1980. The withdrawal of land mobile stations will be arranged in consultation with the Administrations concerned and affected.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 545-E
8 November 1979
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English

COMMITTEE 5

European Broadcasting Union

European Space Agency

OBSERVATIONS REGARDING A NEW SOUND BROADCASTING SATELLITE SYSTEM

The European Broadcasting Union and the European Space Agency feel that it would be highly desirable for an appropriate allocation to be made so that countries interested in the implementation of a sound broadcasting satellite system would be enabled to start development of the space segment. The feasibility of such a system, anywhere within the frequency range between 0.5 and 2.0 GHz, was confirmed by the SPM - Report. The envisaged system would permit individual reception. Some economical aspects regarding the attractiveness of this system for national coverage are still questioned today by some Administrations. However, it should not be overlooked that a major advantage is that the public could make use of cheap portable and automobile receivers similar to those used at present for VHF/FM broadcasting. Such a system is clearly attractive in areas where the development of broadcasting networks is at an early stage or where there may be other difficulties in terrestrial broadcasting.

It would be helpful to recall that during the 1971 Conference, the same type of problems concerning the feasibility and economics of the 12 GHz television satellite broadcasting system were raised, and it is due to the fact that an allocation was made for this service that the necessary investments and technological developments were undertaken. In consequence, such systems exist now on an experimental basis and will become operational in the next few years.

It is therefore important that the Conference allocates at least a small frequency band. Such a minimal allocation (about 8 to 10 MHz) should have, on a regional basis, an exclusive status after 1990, and experiments within this band should be permitted with the agreement of all Administrations concerned from 1985 onwards. Provisions should also be made to extend this band at the next appropriate conference in order to enable the implementation of an operational service with about 5 programmes per country.

In conclusion, if no frequency band is indicated, it is emphasized that it is highly improbable that countries or industries would invest in technological developments merely on the expectation that a future conference would eventually allocate frequencies for this service.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 546-E
7 November 1979
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COMMITTEE 2

Second Report by Working Group 2A

CREDENTIALS

1. The Working Group of Committee 2 met on Wednesday, 7 November 1979.

The meeting was attended by representatives of the Federal Republic of Germany, Hungarian People's Republic, and Thailand.

The Chairman of Committee 2, who is also Chairman of the Working Group, and the Vice-Chairman of the Committee were present.

2. During the meeting the Working Group examined the credentials of the 19 delegations listed in the Annex.

It was acknowledged that these credentials were in order.

3. The Working Group proposes to meet immediately before the meeting of Committee 2 (probably on 16 November 1979). Delegations which have not yet deposited their credentials are requested to do so as soon as possible.

C.J. MARTINEZ
Chairman of Working Group 2A

Annex : 1

A N N E X

LIST OF THE CREDENTIALS EXAMINED AT THE SECOND MEETING OF WORKING GROUP 2A

Saudi Arabia (Kingdom of)
Australia
Austria
Burundi (Republic of)
Cyprus (Republic of)
Ecuador
Spain
France
Ghana
Upper Volta (Republic of)
Mali (Republic of)
Pakistan (Islamic Republic of)
Syrian Arab Republic
Democratic People's Republic of Korea
Roumania (Socialist Republic of)
Somali Democratic Republic
Tonga (Kingdom of)
Yemen Arab Republic
Zaire (Republic of)

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 7

SUMMARY RECORD

OF THE

EIGHTH MEETING OF COMMITTEE 7

(GENERAL ADMINISTRATION)

Wednesday, 31 October 1979, at 1130 hrs

Acting Chairman : Mr. H.L. VENHAUS (Federal Republic of Germany)

Subjects discussed		Document No.
1.	Consideration of the decisions of Committees 4, 5 and 6 relating to the definitions of "radio amateur", "harmful interference", "radiodetermination", "standard frequency and time signals service", etc., for Articles left pending	307, 324, 382
2.	Consideration of Provisions 5228 and 5228A	DL/158
3.	Report of ad hoc Drafting Group	DL/166
4.	Consideration of the draft first report of Committee 7 to Plenary and the first series of texts from Committee 7 to the Editorial Committee	DT/145

1. Consideration of the decisions of Committees 4, 5 and 6 relating to the definitions of "radio amateur", "harmful interference", "radiodetermination", "standard frequency and time signals service", etc., for Articles left pending (Documents Nos. 307, 324 and 382)

Document No. 307

1.1 The Committee noted the third report of Working Group 4A to Committee 4 and its Annex (Document No. 307).

Document No. 324

1.2 The Committee took note of the note from the Chairman of Committee 4 to the Chairman of Committee 6 on the term "accepted interference" (Document No. 324).

Document No. 382

1.3 The Committee took note of the sixth report of Working Group 5A to Committee 5 (Document No. 382).

2. Consideration of Provisions 5228 and 5228A (Document No. DL/158)

2.1 The delegate of France, speaking as Convenor of the ad hoc Drafting Group, introduced the Group's proposals as shown in Document No. DL/158, which were that Provision 5228 should remain unchanged and that a new Provision 5228A, consisting of the amended paragraph 2 of French Proposal F/82/854, should be added.

The Committee approved the proposed texts for Provisions 5228 and 5228A.

3. Report of ad hoc Drafting Group (Document No. DL/166)

3.1 The delegate of France, speaking as Convenor of the ad hoc Drafting Group, introduced the Drafting Group's report in Document No. DL/166, and indicated that any further editorial changes which it might be necessary to make to Articles N22, N30, N32 and N33, would be for the Editorial Committee to decide.

The Committee noted the ad hoc Drafting Group's report (Document No. DL/166).

4. Consideration of the draft first report of Committee 7 to Plenary and the first series of texts from Committee 7 to the Editorial Committee (Document No. DT/145)

4.1 The Chairman invited the Committee to consider its draft first report.

4.2 The delegate of France said, in connection with paragraph 2.2 of Document No. DT/145, that Committee 9 had already considered a number of documents and had decided to keep the words "agreement" and "arrangement" in square brackets until the texts had been submitted to the Plenary.

4.3 The Chairman said that a decision on the title and headings of Article N31 had now been taken so the text of paragraph 4.1 could be amended by the Secretariat. The text of paragraph 5.1 referring to Article N32 also required some amendment.

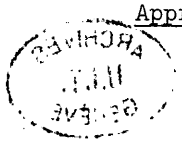
4.4 The Secretary of the Committee said, in connection with paragraph 6.1, that the title and the text of Section II of Article N33 would be considered at another meeting of Committee 7.

The Committee approved pages 1 and 2 of Document No. DT/145, subject to the appropriate amendments being made by the Secretariat and the square brackets in paragraph 9 being deleted.

4.5 Annex to Document No. DT/145 - Chapter NVI

4.5.1 Article N21/17

Approved.



4.5.2 Article N22/18

Approved.

4.5.3 Article N30/41

4.5.3.1 The delegate of Norway asked, in connection with Provisions 6357 and 6358, whether the Drafting Group had taken into consideration his delegation's note suggesting that the phrase "any person operating or intending to operate" might be incorporated in those provisions.

4.5.3.2 The Convenor of the ad hoc Drafting Group, said that the Drafting Group had noted the comments made by the Norwegian delegate at an earlier meeting and he believed the text now proposed should satisfy him.

4.5.3.3 The delegate of Norway said that while he did not oppose the proposed text, he still had some doubts regarding it. The problem might merely be one of language, but it appeared to his delegation that Provision 6357 removed the responsibility incumbent on an Administration to verify the operational qualifications of a radio amateur at a later stage after a licence had been issued to him. He could accept the wording of Provision 6358.

4.5.3.4 The delegate of Papua New Guinea said that he had the same difficulties regarding Provision 6357 as the Norwegian delegate. He would prefer the wording "wishing to operate" rather than "seeking a licence to operate" since that would in his view cover the situation both before and after the issue of a licence. In any event, the two provisions should be aligned.

4.5.3.5 The Convenor of the ad hoc Drafting Group said that there had been a lengthy discussion of those two provisions in the Drafting Group. There was a certain logical progression in the two provisions in that a person wishing to operate an amateur station should request a licence from his Administration and the Administration would then ask him to prove that he was capable of operating the station. Once the licence had been received, the operator could be supervised at any later stage by his Administration, which could check on his operational qualifications.

4.5.3.6 The delegate of Ireland drew attention to the record of the discussion on the point in the summary record of the sixth meeting. His delegation had proposed the wording "seeking a licence" because it wished to ensure that the operator's ability to send and receive in Morse code was checked by his Administration before a licence was issued. He hoped that the wording of Provision 6357 in Document No. DT/145 would be retained.

4.5.3.7 The delegate of Norway proposed that the words "operational and" should be inserted after the words "to verify the" in Provision 6358 and that the remainder of the text of Provisions 6357 and 6358 should be left unchanged.

It was so agreed.

4.5.3.8 The Chairman invited the Committee to consider the title of Article N30 and the inclusion of the word "radio" elsewhere in the text.

The Convenor of the Drafting Group explained that since no decision had been taken in Committee 5 on the matter, and as Working Group 5A had only produced a draft report at the time of the relevant drafting group meeting, the modified title had been retained.

The Chairman said that in the absence of a decision by Committee 5, the title as it stood in the text could be adopted at Committee level by Committee 7.

4.5.3.9 The delegate of the United Kingdom drew attention to the fact that if the word "radio" were retained in the text and in the title it would be necessary to consider the Article N1 definitions for radio amateur service and radio amateur satellite service, which at present remained unchanged.

4.5.3.10 The delegate of Australia, supported by the delegate of Ireland, said that in view of the status of Document No. 382 in Committee 5, the square brackets should be retained round the word "radio" for the time being.

It was so agreed.

4.5.3.11 The Chairman, replying to a point raised by the delegate of Argentina, said that although it had been decided in Working Group 5A that the word "radio" should not be included in spite of strong arguments in favour, the situation in Committee 7 was that at its fifth meeting a proposal to include the word "radio" had been approved; that position should henceforth be communicated to the Editorial Committee, leaving that Committee to make the necessary changes in the light of the decisions of Committee 5.

Article N30 was approved except for Provision 6362 which was left pending a decision by Committee 4 on terms and definitions.

4.5.4 Article N31

4.5.4.1 The delegate of Cuba reminded the Committee that at its fifth meeting his delegation had stated that the text as it stood implied an obligation on the part of Administrations to coordinate the standard frequency service and time signals service, and therefore caused problems for his Administration. The present wording had clearly been approved subsequently, at a time when his delegation had clearly been unable to attend. The Cuban delegation still had difficulties in accepting the present wording, having hoped for something more flexible which would not create additional problems for countries planning to set up such services. While he appreciated the spirit of the Article, he felt that the coordination referred to should not be made compulsory at world level.

The Chairman confirmed that the present wording had been adopted at the Committee's seventh meeting.

4.5.4.2 The delegate of the United States said that as he remembered it, there had been great reluctance at the meeting in question to require Administrations to establish such a service, but there had been general agreement that if an Administration were to do so, then coordination would take place. At that point the problem had been passed to the Drafting Group.

4.5.4.3 The representative of the CCIR said that the CCIR would be in favour of the present wording. CCIR Study Group 7 had great difficulties throughout the world in coordinating services, in view of the tremendous problems of mutual interference. Provision 6390 already made coordination compulsory, so nothing new had been added. The CCIR would be most grateful if Committee 7 could accept Provisions 6389 and 6390 as they stood.

4.5.4.4 The delegate of Papua New Guinea asked what the intention of the Drafting Group had been in respect of the word "coordinate". Did an agreement have to be reached in respect of the establishment of a station or on the modulation characteristics, or both ?

4.5.4.5 The representative of the CCIR replied that coordination as far as Study Group 8 was concerned would be in respect of frequencies, time scales, modulation, and in fact all technical aspects of the station.

4.5.4.6 The delegate of Cuba suggested that Provision 6389 might be more acceptable to his delegation if the words "should endeavour to coordinate" were inserted before the words "standard frequency and time signals service transmissions" and the words "shall coordinate" deleted.

4.5.4.7 The representative of the IFRB said that when the matter had been discussed in the Working Group, the point had been made that Provision 6389 would call for coordination, not the sophisticated coordination procedures established elsewhere in the Radio Regulations but coordination in relation to frequency management; such coordination would be detailed in Provision 6390 where the words "shall coordinate" of 6389 would be somewhat toned down. Delegates having difficulties with the apparent obligation on the part of Administrations, had been able to accept the text as it stood after that explanation had been provided.

4.5.4.8 The delegate of Cuba said that he had not been able to make his opinion known at that particular Working Group meeting. He was not sure that the present wording did not have serious implications for his Administration, and the point would have to be brought up at the Plenary Meeting.

4.5.4.9 The Chairman suggested that the present text be adopted, and that a note be included noting Cuba's reservations.

It was so agreed.

4.5.5 Article N32

4.5.5.1 The delegate of Norway suggested that Provision 6423 be brought into line with 6358 in Article N30 by inserting the words "operational and" before "technical point of view".

It was so agreed.

4.5.5.2 The representative of the IFRB said that he had not been present at the meeting in which the word "research" had been added in the title or the text. He emphasized that there were no allocations nor proposed allocations to a service with a similar name, so that what currently applied under the present Regulations to experimental stations would undoubtedly also apply to experimental research stations after the adoption of the new Radio Regulations, notably that they would operate on frequencies allocated to the service with which they were connected and in that service exclusively. Any notification of such use, therefore, would have to show the service defined in Article 1 to which the allocations were made, as well as to the experimental research stations themselves. Furthermore, if the word "research" was included in the title, consequential changes would probably have to be made to Appendix 10, since a symbol for an experimental station existed but did not exist for an experimental research station.

4.5.5.3 The delegate of Papua New Guinea observed that his delegation had proposed for Article N1 a definition for an experimental research service. As Working Group 5A had not accepted those proposals, the discussion in Committee 7 was irrelevant, since the word would probably be deleted at a later stage by the Editorial Committee.

In view of the comments by the representative of the IFRB and the delegate of Papua New Guinea, it was decided that the word "research" would be deleted.

Article N32, as amended, was approved.

4.5.6 Article N33

Approved.

4.5.7 Article N37

4.5.7.1 The delegate of Norway proposed that the title of the Article should be changed to "Urgency, medical transports and safety transports".

4.5.7.2 The delegate of Papua New Guinea supported that proposal, on the grounds that the present wording was too cumbersome.

4.5.7.3 The delegate of Cuba said that he was concerned by the speed with which the Committee was having to analyse the document, which might result in some delegations having to raise points unnecessarily in Plenary. The Committee should be given more time to study the document more thoroughly.

4.6 The Chairman proposed that Document No. DT/145 up to and including Article N33 should be adopted.

It was so agreed.

The meeting rose at 1300 hours.

Secretary :
A. ZACCAGNINI

Acting Chairman :
H.L. VENHAUS

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 548-E
8 November 1979
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COMMITTEE 4

FIFTEENTH REPORT OF WORKING GROUP 4C TO COMMITTEE 4

Subject : New Recommendation

1. Working Group 4C submits, for consideration in Committee 4, the text of a new Recommendation given in the Annex.

2. French speaking delegations objected to the translation into French of the terms "spurious emission" and "spurious component" as given in the Annex.

3. Except as indicated in item 2 above, this Report and its Annex have been approved unanimously.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

ANNEX

RECOMMENDATION NO. /- -/

To the CCIR Relating to Studies of
Maximum Permitted Levels of Spurious Emissions

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that Appendix 4 to these Regulations specifies 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 this Appendix is to provide 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 this Appendix applies only to the mean power of the transmitter and the spurious emissions, there is a variety of emissions where the interpretation of the term "mean power" and its consequential measurement is difficult;

e) that whilst CCIR is studying this problem, it has not yet furnished adequate Recommendations pertaining to this Appendix 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 wideband amplifiers which cannot be adjusted after launch;

g) that spurious emissions from Earth stations also require particular study;

h) that no information is available from the CCIR regarding spurious emissions from stations employing digital modulation techniques in the frequency bands above /-960-/ MHz; and,

noting

that in large metropolitan areas radio spectrum usage above /-960-/ MHz is extensive and rapidly growing and that much of this growth in urban areas is now taking place above 10 GHz;

recommends that the CCIR

1. studies on an urgent basis, the question of spurious emissions resulting from space services transmissions, and, based on those studies, develops 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. continues the study of spurious emission levels in all frequency bands, emphasizing study of those frequency bands, services and modulation techniques not presently covered by Appendix 4;

3. establishes appropriate measurement techniques for spurious emissions, including the determination of reference levels for wide band transmissions as well as applicability of reference measurement bandwidths;

4. studies the categorizing of emissions and spurious emissions in terms of "mean power" and develops appropriate Recommendations to facilitate the interpretation and measurement of this term as it applies to the various classes of emissions.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 549-E
8 November 1979
Original : English

COMMITTEE 4

SIXTEENTH REPORT OF WORKING GROUP 4C TO COMMITTEE 4

Subject : New Recommendation

Working Group 4C submits, for consideration in Committee 4, the text of a new Recommendation as given in the Annex, which has been approved unanimously by the Working Group.

E. GEORGE
Chairman of Working Group 4C

Annex : 1

ANNEX

RECOMMENDATION No. /7

To the CCIR Relating to the Provision of Formulae and Examples for the Calculation of Necessary Bandwidths

The World Administrative Radio Conference, Geneva 1979,

considering

a) that Article N3 of these Regulations requires that the necessary bandwidth be part of the full designation of emissions;

b) that Appendix 5, Part B, gives a partial list of examples and formulae for the calculation of the necessary bandwidth of some typical emissions;

c) that sufficient information is not available for the determination of the K-factors used throughout the table of examples of the necessary bandwidth in Appendix 5;

d) that especially in view of the efficient utilization of the radio frequency spectrum, of monitoring and of notification of emissions it is required that necessary bandwidths for the individual classes of emission be known;

e) that for reasons of simplification and international uniformity it is desirable that measurements for determining the necessary bandwidth should have to be made as seldom as possible;

recommends that the CCIR

1. provides additional formulae for the determination of necessary bandwidth for common classes of emission and provides examples to supplement those given in Appendix 5, Part B, from time to time;

2. studies and provides values for supplementary K-factors required for the calculation of the necessary bandwidth for common classes of emission.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 550-E
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English
Spanish

COMMITTEE 6

FIFTH REPORT OF WORKING GROUP 6A

1. Working Group 6A has considered the proposals submitted relating to Article N13. The results of the Working Group's consideration of these proposals are shown in the Annex.

2. Square brackets have been put around provisions in cases where decisions from other Committees are awaited, in particular around the whole of Section VI, pending the result of decisions of Working Group 6A3 and Group 6 ad hoc 2.

3. The attention of Committee 6 is drawn to the following :

- No. 4579/639BE will possibly have to be reviewed in the light of decisions to be taken by Working Group 6A3 on Appendix 1A;

- No. 4618/639CR will possibly have to be reviewed if Committee 4 decides to replace the term "radio astronomy station" by "passive station".

J.K. BJÖRNSJÖ
Chairman of Working Group 6A

Annex : 1

ANNEX

DRAFT

Spa2 **ARTICLE N13/9A**

MOD **Notification and Recording in the Master International Frequency Register of Frequency Assignments[1] to ~~Radio Astronomy~~ and Space / passive / Radiocommunication Stations except Stations in the Broadcasting-Satellite Service**

(Note : Deferred until decision of Committee 5)

NOC A.N13/9A [1] The expression *frequency assignment*, wherever it appears in this Article, shall be understood to refer either to a new frequency assignment or to a change in an assignment already recorded in the Master International Frequency Register (hereinafter called *Master Register*).

NOC **Section I. Notification of Frequency Assignments**

MOD 4575 639BA Spa2 **§ 1. (1) Any frequency assignment to be used for transmission or reception by an earth or space station shall be notified to the Board**

a) if the use of the frequency concerned is capable of causing harmful interference to any service of another administration; *or*

b) if the frequency is to be used for international radiocommunications: *or*

c) if it is desired to obtain international recognition of the use of the frequency.

SUP 4576 639BB (2)
Spa2

MOD **4577** **639BC** (3) ~~Similar notice may be given for any~~ Any frequency or frequency band to be used for
Spa2 reception by a particular ~~radio astronomy~~ station, if it is desired that such data should be
included in the Master Register. may be notified
/ passive /

(Note : Deferred until decision of Committee 5)

ADD 4577A (3A) Frequency assignments to an Earth station shall be notified by the Administration of the country on whose territory[1] the Earth station is located, unless specifically stipulated otherwise by special arrangements in accordance with Article 31 of the Convention communicated to the Union by the Administrations. Frequency assignments to a space station shall be notified by the Administration (or one acting on behalf of a group of named Administrations) for which the space station is to be brought into use.

/ ADD 4577A.1 [1]If a notice is received from an Administration for a frequency assignment to an Earth station situated on a territory over which there is a dispute of sovereignty, an entry in the Master Register, after examination by the Board, does not signify recognition of the sovereignty of a country over the territory in question. /

ADD 4577B (3B) [2]When the Board receives from one Administration a notice containing a modification or deletion of a space station assignment already recorded in the Master Register on behalf of a group of Administrations, it shall be assumed, in the absence of information to the contrary, that the notice of modification or deletion is submitted on behalf of all the Administrations which were associated with the original notification.

MOD **4578 639BD Spa2** **(4) A notice submitted in accordance with No. 4575/639BA ~~or 4576/639BB~~ and relating to a frequency assignment to mobile earth stations in a satellite system shall include the technical characteristics either of each mobile earth station, or of a typical mobile earth station, and an indication of the service area within which these stations are to be operated.**

/ transportable earth stations or / / transportable or /

(Note : Deferred until decision of Committee 5)

MOD **4579** 639BE Spa2

§ 2. For any notification under Nos. **4575**/639BA, ~~**4576/639BB**~~, **4577**/639BC, or **4578**/639BD an ~~individual~~ notice for each frequency assignment shall be drawn up as prescribed in Appendix **1A**, the various Sections of which specify the basic characteristics to be furnished according to the case. It is recommended that the notifying administration should also supply the additional data called for in Section A of that Appendix, together with such further data as it may consider appropriate.

shall | shall be submitted in order to

MOD **4580** 639BF Spa2

§ 3. (1) For a frequency assignment to an earth or space station, each notice ~~must~~ reach the Board not earlier than three years before the date on which the assignment is to be brought into use. The notice ~~must~~ reach the Board in any case not later than ninety days[1] before this date, except in the case of assignments in the space research service in bands allocated exclusively to this service or in shared bands in which this service is the sole primary service. In the case of such an assignment in the space research service, the notice should, whenever practicable, reach the Board before the date on which the assignment is brought into use, but it ~~must~~ in any case reach the Board not later than thirty days after the date it is actually brought into use.

shall

NOC **4580.1** 639BF.1 Spa2

[1] The notifying administration shall take this limit into account when deciding, where appropriate, to initiate the co-ordination procedure(s).

NOC **4581** 639BG Spa2

(2) Any frequency assignment to an earth or space station, the notice of which reaches the Board after the applicable period specified in No. **4580**/639BF, shall, where it is to be recorded, bear a mark in the Master Register to indicate that it is not in conformity with No. **4580**/639BF.

NOC

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

MOD 4582 639BH Spa2

§ 4. Any notice which does not contain at least those basic characteristics specified in Appendix 1A shall be returned by the Board ~~immediately~~, by airmail, to the notifying administration with the reasons therefor

unless the information not provided is immediately forthcoming in response to an enquiry of the Board. The Board shall advise the Administration by telegram when a notice is returned under this provision.

MOD 4583 639B1 Spa2

§ 5. Upon receipt of a complete notice, the Board shall include the particulars thereof, including diagrams, with the date of receipt, in the weekly circular referred to in No. 4292/497 to be published within a period of forty days after receipt of the notice. When the Board is not in a position to comply with this time-limit, it shall, as soon as possible, so inform the Administrations concerned giving the reasons therefor.

MOD 4584 639BJ Spa2

§ 6. The circular shall contain the full particulars, of all such notices received since the publication of the previous circular and shall constitute the acknowledgement to each notifying Administration of the receipt of the complete notice.

taking into account the time-limit referred to in No. 4649/639DW.

MOD 4585 639BK Spa2

§ 7. Complete notices shall be considered by the Board in the order of their receipt. The Board shall not postpone the formulation of a finding unless it lacks sufficient data to render a decision in connection therewith: moreover, the Board shall not act upon any notice which has a technical bearing on an earlier notice still under consideration by the Board, until it has reached a finding with respect to such earlier notice.

NOC 4586 639BL Spa2 § 8. **The Board shall examine each notice:**

MOD 4587 639BM Spa2 *a)* with respect to its conformity with the Convention, the Table of Frequency Allocations and the other provisions of the Radio Regulations (with the exception of those relating to the co-ordination procedures and the probability of harmful interference),

which are the subject of the following sub-paragraphs;

MOD 4588 639BN Spa2 *b)* ~~where appropriate,~~ (with respect to its conformity with the provisions ~~of No. 4114/639AJ~~, relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-à-vis space radiocommunication stations,

in cases where the provisions of No. 4114/639AJ or No. 4115/639AK are applicable;

MOD 4589 639BO Spa2 *c)* ~~where appropriate,~~ (with respect to its conformity with the provisions ~~of No. 4138/639AN~~, relating to the co-ordination of the use of the frequency assignment with the other administrations concerned vis-à-vis terrestrial radiocommunication stations)

in cases where the provisions of No. 4138/639AN are applicable;

MOD 4590 639BP Spa2

d) with respect to the probability of harmful interference, when the coordination under No. 4114/639AJ has not been successfully effected;[1] this examination shall take into account the frequency assignments for transmit or receive already recorded in the Master Register :

- in application of Nos. 4604/639CD, 4607/639CG, 4611/639CK, or 4615/639CO, or

- in application of No. 4616/639CP, if that frequency assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 4587/639BM;

ADD 4590.1

[1] The examination of such a notice with respect to any other frequency assignment published under No. 4118D but not yet notified, shall be deferred until both assignments have been notified; the Board shall then examine them in the order of their publication under No. 4118D;

MOD 4591 639BQ Spa2

e) with respect to the probability of harmful interference, when the coordination under No. 4138/639AN has not been successfully effected; this examination shall take into account the frequency assignments for transmit or receive already recorded in the Master Register :

- in application of No. 4303/508, or

- in application of Nos. 4384/570AM, 4387/570AP, 4391/570AT, or 4394/570AW, or

- in application of No. 4395/570AX if that assignment has not in fact caused harmful interference to any other previously recorded frequency assignment which is in conformity with No. 4587/639BM.

SUP 4592 639BR

NOC **4593** 639BS Spa2

§ 9. When, following an examination of a notice with respect to No. 4590/639BP, the Board reaches an unfavourable finding based upon the probability of harmful interference to a recorded assignment for a space station which the Board has reason to believe may not be in regular use, the Board shall forthwith consult the administration responsible for the registered assignment. If it is established, after such consultation and on the basis of the information available, that the recorded assignment has not been in use for two years, it shall not be taken into account for the purposes of the examination in progress or any other further examination under No. 4590/639BP conducted before the date on which the assignment is brought back into use. Before the assignment is brought back into use, it shall be subject to further co-ordination in accordance with the provisions of No. 4114/639AJ or further examination by the Board with respect to No. 4590/639BP, as appropriate. The date on which the assignment is brought back into use shall then be entered in the Master Register.

MOD **4594** 639BT Spa2

§ 10. Depending upon the findings of the Board subsequent to the examination prescribed in Nos. 4587/639BM, 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~, as appropriate, further action shall be as follows:

and

MOD **4595** 639BU Spa2

§ 11. (1) *Finding Favourable with Respect to No. 4587/639BM in cases where the Provisions of Nos. 4588/639BN and 4589/639BO are not applicable* (space station on board a non-geostationary satellite).

NOC **4596** 639BV Spa2

(2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

ADD 4596A

§ 11A. (1) Finding unfavourable with respect to No. 4587/639BM in cases where the provisions of Nos. 4588/639BN and 4589/639BO are not applicable (space station on board a non-geostationary satellite).

ADD 4596B

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

ADD 4596C

(3) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be returned immediately by airmail to the notifying Administration with the reasons of the Board for this finding together with such suggestions as the Board is able to offer with a view to the satisfactory solution of the problem.

MOD 4597 639BW Spa2

§ 12. (1) Finding unfavourable with respect to No. 4587/639BM in cases where the provisions of Nos. 4588/639BN and 4589/639BO are applicable.

and

MOD 4598 639BX Spa2

(2) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. **3279/115**, and the finding is favourable with respect to Nos. **4588/639BN**, **4589/639BO**, **4590/639BP**, **4591/639BQ** ~~**and 4592/639BR**~~, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

or

MOD 4599 639BY Spa2

(3) Where the notice includes a specific reference to the fact that the station will be operated in accordance with the provisions of No. **3279/115** and the finding is unfavourable with respect to Nos. **4588/639BN**, **4589/639BO**, **4590/639BP**, **4591/639BQ** ~~**or 4592/639BR**~~, as appropriate, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding. Should the administration insist upon reconsideration of the notice, the assignment shall be recorded in the Master Register, ~~**However, this entry shall be made only if the notifying administration informs the Board that the assignment has been in use for at least one hundred and twenty days without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column.**~~

with the understanding that the provisions of No. 4631/639DE shall be applied. The date of receipt by the Board of the original notice shall be entered in Column 2d.

SUP 4600 639BZ (4)

MOD **4601** 639CA Spa2 **(5) Where the notice does not include a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding ~~and~~ with such suggestions as the Board ~~may be~~ able to offer with a view to the satisfactory solution of the problem.**

together

is

NOC **4602** 639CB Spa2 **(6) If the notifying administration resubmits the notice unchanged, it shall be treated in accordance with the provisions of No. 4601/639CA. If it is resubmitted with a specific reference to the fact that the station will be operated in accordance with the provisions of No. 3279/115, it shall be treated in accordance with the provisions of Nos. 4598/639BX or 4599/639BY, as appropriate. If it is resubmitted with modifications which, after re-examination, result in a favourable finding by the Board with respect to No. 4587/639BM, it shall be treated as a new notice.**

NOC **4603** 639CC Spa2 § 13. (1) *Finding Favourable with Respect to No.* **4587**/639BM *in cases where the Provisions of Nos.* **4588**/639BN *or* **4589**/639BO *are applicable.*

NOC **4604** 639CD Spa2 (2) Where the Board finds that the co-ordination procedures mentioned in Nos. **4588**/639BN or **4589**/639BO have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.

MOD **4605** 639CE Spa2 (3) Where the Board finds that either of the co-ordination procedures mentioned in Nos. **4588**/639BN and **4589**/639BO has not been applied, and ~~the notifying administration requests the Board to effect the required co-ordination, the Board shall take appropriate action and shall inform the administrations concerned of the results obtained. If the Board's efforts are successful, the notice shall be treated in accordance with No. 4604/639CD. If the Board's efforts are unsuccessful, the notice shall be examined by the Board with respect to the provisions of Nos. 4590/639BP, 4591/639BQ and 4592/639BR, as appropriate~~.

ADD 4605A a) if the notifying Administration requests the Board to effect the coordination the Board shall take appropriate action; if the Board's efforts toward securing agreement are successful, it shall so inform the Administrations concerned and shall treat the notice in accordance with No. 4604/639CD;

ADD 4605B b) if the Board's efforts toward securing agreement in application of Nos. 4605A or 4127/639AS or 4149/639AS are unsuccessful, or if, when notifying the assignment, the Administration states that it has been unsuccessful and does not request the Board to effect the required coordination, the Board shall examine the notice with respect to the provisions of Nos. 4590/639BP and 4591/639BQ, as appropriate. At the same time, the Board shall so inform the Administrations concerned.

c) if

MOD **4606** 639CF
Spa2

~~(4) Where the Board finds that either of the co-ordination procedures mentioned in Nos. 4588/639BN and 4589/639BO has not been applied, and~~ the notifying administration does not request the Board to effect the required co-ordination, the notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this action ~~and~~ with such suggestions as the Board ~~may be~~ is able to offer with a view to the satisfactory solution of the problem.

together

NOC **4607** 639CG
Spa2

(5) Where the notifying administration resubmits the notice and the Board finds that the co-ordination procedures mentioned in Nos. **4588**/639BN and **4589**/639BO have been successfully completed with all administrations whose space or terrestrial radiocommunication stations may be affected, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

NOC **4608** 639CH
Spa2

(6) Where the notifying administration resubmits the notice with a request that the Board effect the required co-ordination under Nos. **4114**/639AJ or **4138**/639AN, it shall be treated in accordance with the provisions of No. **4605**/639CE. However, in any subsequent recording of the assignment, the date of receipt by the Board of the resubmitted notice shall be entered in the Remarks Column.

, 4605A or 4605B.

SUP **4609** 639CI

MOD **4610** 639CJ Spa2 **§ 14. (1)** ***Finding Favourable with Respect to Nos.*** **4587/639BM, 4590/639BP** and **4591/639BQ** ~~***and 4592/639BR,***~~ ***as appropriate.***

NOC **4611** 639CK Spa2 **(2) The assignment shall be recorded in the Master Register. The date of receipt by the Board of the notice shall be entered in Column 2d.**

NOC **4612** 639CL Spa2 **(3) However, should the examination show that the level of the interference noise and the percentage of time during which it is likely to occur have values slightly greater than those used for assessing the probability of harmful interference (extreme propagation conditions, abnormal atmospheric humidity, etc.), a remark shall be included in the Master Register to show that there may be a slight risk of harmful interference and hence additional precautions must be taken in the use of the assignment to avoid harmful interference to assignments already recorded in the Master Register.**

ADD 4612A

only if there is continuing disagreement,

(3A) In addition to the examination of a frequency assignment to an Earth station under No. 4591/639BQ, the Board shall examine that frequency assignment with respect to the probability of harmful interference caused to, or caused by, those assignments to terrestrial stations communicated to the Board in application of No. 4146/639AQ and which are to be brought into use in the next three years.

ADD 4612B

(3B) Following the examination under No. 4612A, the Board shall, where appropriate :

- inform the Administrations concerned of any unfavourable findings;
- enter a remark indicating such an unfavourable finding against the assignments to the Earth station recorded in the Master Register;
- record the assignments to terrestrial stations in the Master Register with a remark indicating any unfavourable finding; the date of receipt of the information communicated under No. 4146/639AQ shall be entered in Column 2d.

MOD **4613** 639CM Spa2 § 15. (1) *Finding Favourable with Respect to No.* **4587**/639BM *but Unfavourable with Respect to Nos.* **4590/639BP, 4591/639BQ ~~or 4592/639BR~~**, *as appropriate.*

or

MOD **4614** 639CN Spa2 (2) The notice shall be returned immediately by airmail to the notifying administration with the reasons of the Board for this finding ~~and~~ with such suggestions as the Board ~~may be~~ able to offer with a view to the satisfactory solution of the problem.

together

is

MOD **4615** 639CO Spa2 (3) Should the notifying administration resubmit the notice with modifications which result, after re-examination, in a favourable finding by the Board with respect to Nos. **4590/639BP, 4591/639BQ ~~and 4592/639BR~~**, as appropriate, the assignment shall be recorded in the Master Register. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the resubmitted notice shall be indicated in the Remarks Column.

and

MOD **4616** 639CP Spa2 (4) Should the notifying administration resubmit the notice, either unchanged, or with modifications which decrease the probability of harmful interference, but not sufficiently to permit the provisions of No. **4615**/639CO to be applied, and should that administration insist upon reconsideration of the notice, but should the Board's finding remain unchanged, the assignment shall be recorded in the Master Register. However, this entry shall be made only if ~~the notifying administration informs the Board~~ that the assignment has been in use for at least ~~one hundred and twenty days~~ without any complaint of harmful interference having been received. The date of receipt by the Board of the original notice shall be entered in Column 2d. The date of receipt by the Board of the advice that no complaint of harmful interference has been received shall be indicated in the Remarks Column. ~~The period of one hundred and twenty days shall count from the date indicated in No. 4600/639BZ.~~

new

the Board is informed

four months

, provided that the earlier assignment is brought into use within the additional period mentioned in No. 4621A.

together with the frequency assignment to the station which was the basis for the unfavourable finding,

MOD **4617** 639CQ **Spa2** § 16. (1) ***Notices relating to ~~radio astronomy~~ passive stations.***

(Note : Deferred until decision of Committee 5)

4587/639BM only. / passive /

MOD **4618** 639CR **Spa2** (2) A notice relating to a radio astronomy station shall ~~not~~ be examined by the Board with respect to No. ~~**4588**/639BN, **4589**/639BO, **4590**/639BP, **4591**/639BQ and **4592**/639BR~~. Whatever the finding, the assignment shall be recorded in the Master Register with a date in Column 2c. The date of receipt by the Board of the notice shall be recorded in the Remarks Column.

NOC **4619** 639CS **Spa2** § 17. (1) ***Change in the Basic Characteristics of Assignments already recorded in the Master Register.***

MOD **4620** 639CT **Spa2** (2) A notice of a change in the basic characteristics of an assignment already recorded, as specified in Appendix **1A** (except the name of the station or the name of the locality in which it is situated) shall be examined by the Board according to No. **4587**/639BM, and, where appropriate, Nos. **4588**/639BN, **4589**/639BO, **4590**/639BP, and **4591**/639BQ ~~and **4592**/639BR~~, and the provisions of Nos. **4595**/639BU to **4618**/639CR inclusive shall apply. Where the change should be recorded, the ~~original~~ assignment shall be amended according to the notice.

or the date of bringing into use)

recorded

MOD **4621** 639CU Spa2

(3) However, in the case of a change in the characteristics of an assignment which is in conformity with No. **4587**/639BM, should the Board reach a favourable finding with respect to Nos. **4588**/639BN, **4589**/639BO, **4590**/639BP, **4591**/639BQ and ~~**4592**/639BR~~, where appropriate, or find that the changes do not increase the probability of harmful interference to assignments already recorded, the amended assignment shall retain the original date in Column 2d. The date of receipt by the Board of the notice relating to the change shall be entered in the Remarks Column.

ADD 4621A

(3A) The projected date of bringing into use of a frequency assignment may be extended on request of the notifying Administration by four months. In the case where the Administration states that, due to exceptional circumstances, it needs a further extension of this period, such extension may be provided but it shall in no case exceed eighteen months from the original projected date of bringing into use.

NOC **4622** 639CV Spa2

§ 18. In applying the provisions of this section, any resubmitted notice which is received by the Board more than two years after the date of its return by the Board, shall be considered as a new notice.

NOC **4623** 639CW Spa2

§ 19. (1) ***Recording of Frequency Assignments notified before being brought into use.***

MOD **4624** 639CX Spa2

(2) If a frequency assignment notified in advance of bringing into use has received a favourable finding by the Board with respect to No. **4587**/639BM and, where appropriate, Nos. **4588**/639BN, **4589**/639BO, **4590**/639BP, **4591**/639BQ and ~~**4592**/639BR~~, it shall be entered provisionally in the Master Register with a special symbol in the Remarks Column indicating the provisional nature of that entry. and

MOD 4625 639CY Spa2

(3) Within as thirty days after as the date of bringing into use, either originally notified or modified in application of No. 4621A, the notifying Administration shall confirm that the frequency assignment has been brought into use. When the Board is informed that the assignment has been brought into use, the special symbol shall be deleted from the Remarks column.

ADD 4625A Spa2

(3A) If the Board does not receive this confirmation within the period referred to in No. 4625/639CY, the entry concerned shall be cancelled. The Board shall consult the Administration concerned before taking such action.

MOD **4626** 639CZ Spa2

(4) In the circumstances described in Nos. **4599**/639BY and **4616**/639CP, and as long as an assignment which received an unfavourable finding cannot be resubmitted with a statement relating to operation without interference, the notifying administration may ask the Board to enter the assignment provisionally in the Master Register, in which event a special symbol to denote the provisional nature of the entry shall be entered in the Remarks Column. The Board shall delete this symbol when it receives from the notifying administration, at the end of the period specified in Nos. **4599**/639BY or **4616**/639CP, as appropriate, the information relating to the absence of complaint of harmful interference.

SUP 4627 639DA (5)

NOC **Section III. Recording of Findings in the Master Register**

NOC **4628** 639DB Spa2 § 20. In any case where a frequency assignment is recorded in the Master Register, the finding reached by the Board shall be indicated by a symbol in Column 13a. In addition, a remark indicating the reasons for any unfavourable finding shall be inserted in the Remarks Column.

NOC

Section IV. Categories of Frequency Assignments

NOC **4629** 639DC Spa2 § 21. (1) The date in Column 2c shall be the date of putting into use notified by the administration concerned. It is given for information only.

MOD **4630** 639DD Spa2 (2) If harmful interference is actually caused to the reception of any space radiocommunication station whose frequency assignment has been recorded in the Master Register as a result of a favourable finding with respect to Nos. **4587**/639BM, **4588**/639BN, **4589**/639BO, **4590**/639BP, **4591**/639BQ ~~and 4592/639BR~~, as appropriate, by the use of a frequency assignment to a space radiocommunication station subsequently recorded in the Master Register in accordance with the provisions of No. **4616**/639CP, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

and

NOC **4631** 639DE Spa2 (3) If harmful interference to the reception of any station whose assignment is in accordance with Nos. **4296**/501, **4370**/570AB or **4587**/639BM, as appropriate, is actually caused by the use of a frequency assignment which is not in conformity with No. **4587**/639BM, the station using the latter frequency assignment must, upon receipt of advice thereof, immediately eliminate this harmful interference.

NOC

Section V. Review of Findings

NOC 4632 639DF Spa2 § 22. (1) The review of a finding by the Board may be undertaken:

- at the request of the notifying administration;
- at the request of any other administration interested in the question, but only on the grounds of actual harmful interference;
- on the initiative of the Board itself when it considers this is justified.

MOD 4633 639DG Spa2 (2) The Board, in the light of all the data at its disposal, shall review the matter, taking into account No. 4587/639BM and, where appropriate, Nos. 4588/639BN, 4589/639BO, 4590/639BP, 4591/639BQ ~~and 4592/639BR~~ and shall render an appropriate finding, informing the notifying administration prior either to the publication of its finding or to any recording action.

MOD 4634 639DH Spa2 § 23. (1) After actual use for a reasonable period of an assignment which has been entered in the Master Register on the insistence of the notifying administration, following an unfavourable finding with respect to Nos. 4590/639BP, 4591/639BQ ~~or 4592/639BR~~, this administration may request the Board to review the finding. Thereupon, the Board shall review the matter, having first consulted the administrations concerned.

NOC 4635 639DI Spa2 (2) If the finding of the Board is then favourable it shall enter in the Master Register the changes that are required so that the entry shall appear in the future as if the original finding had been favourable.

NOC **4636** 639DJ Spa2 (3) If the finding with regard to the probability of harmful interference remains unfavourable, no change shall be made in the original entry.

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

ADD 4636A § 23A. The Board shall at intervals not exceeding two years request confirmation from the notifying Administration that its assignment has been and will continue to be in regular use in accordance with its recorded characteristics.

NOC **4637** 639DK Spa2 § 24. (1) Where the use of a recorded assignment to a space station is suspended for a period of eighteen months, the notifying administration shall, within this eighteen-month period, inform the Board of the date on which such use was suspended and of the date on which the assignment is to be brought back into regular use.

NOC **4638** 639DL Spa2 (2) Whenever it appears to the Board, whether or not as a result of action under No. **4637**/639DK, that a recorded assignment to a space station has not been in regular use for more than eighteen months, the Board shall inquire of the notifying administration as to when the assignment is to be brought back into regular use.

NOC **4639** 639DM Spa2 (3) If no reply is received within six months of action by the Board under No. **4638**/639DL, or if the reply does not confirm that the assignment to a space station is to be brought back into regular use within this six-month limit, a mark shall be applied against the entry in the Master Register. Thereafter, the assignment shall be treated in accordance with No. **4593**/639BS as one which has been established as having been out of regular use for two years.

NOC **4640** 639DN Spa2 § 25. In case of permanent discontinuance of the use of any recorded frequency assignment, the notifying administration shall inform the Board within ninety days of such discontinuance, whereupon the entry shall be removed from the Master Register.

MOD **4641** 639DO Spa2 § 26. Whenever it appears to the Board from the information available that a recorded assignment has not been brought into regular operation in accordance with the notified basic characteristics is not being used in accordance with those basic characteristics, the Board shall consult the notifying administration and, subject to its agreement, shall cancel, suitably modify the entry.

or retain the basic characteristics of

MOD **4642** 639DP Spa2 § 27. If, in connection with an inquiry by the Board under No **4641/639DO**, the notifying administration has failed to supply the Board within with the necessary or pertinent information, the Board shall make suitable entries in the Remarks Column of the Master Register to indicate the situation.

/three months/ /from the date of the enquiry/

ADD 4642A §27A. (1) /A frequency assignment to a space station shall be deemed definitively discontinued after the expiry of the period of operation shown on the assignment notice, reckoned from the date on which the assignment was brought into service. The Board shall then invite the notifying Administration to take steps to cancel the assignment. If the Board receives no reply within ninety days following the expiry of the period of operation, the entry of the assignment in the Master Register shall be cancelled./

ADD 4642B (2) /If a notifying Administration which wishes to extend the period of operation originally shown on the assignment notice of a frequency assignment of an existing space station informs the Board accordingly more than 3 years before the expiry of the period in question and if all other basic characteristics of that assignment remain unchanged, the Board shall amend as requested the period of operation originally recorded in the Master Register and shall → publish that information in a special section of the Weekly Circular./

ADD 4642C (3) /If, at least three years before the expiry of the period of operation recorded in the Master Register of a frequency assignment of an existing space station, an Administration initiates the coordination procedure to bring into service a new space station using the same assigned frequency and the same orbital position but with different technical characteristics, and if the Board finds that the new assignment conforms with the provisions of No. 4587/639BM and does not increase, in relation to the preceding assignment, the probability of interference to the detriment of a frequency assignment recorded in the Master Register, the new assignment shall be given a favourable finding and shall be entered in the Master Register with the notification date of the preceding assignment./

ADD 4642D (4) / A notifying Administration which wishes to modify a basic characteristic of a frequency assignment of a space station recorded in the Master Register shall initiate, in any case other than those covered by Nos. 4642B and 4642C, the appropriate modification procedure in accordance with Nos. 4619/639CS to 4622/639CV./

NOC **Section VII. Studies and Recommendations**

NOC **4643** 639DQ Spa2 § 28. (1) If it is requested by any administration, and if the circumstances appear to warrant, the Board, using such means at its disposal as are appropriate in the circumstances, shall conduct a study of cases of alleged contravention or non-observance of these Regulations, or of harmful interference.

MOD **4644** 639DR Spa2 (2) The Board shall thereupon prepare and forward to the Administrations concerned a report containing its findings and recommendations for the solution of the problem.

ADD 4644A (2A) On receiving the Board's recommendations for the solution of the problem, an Administration shall promptly acknowledge the receipt by telegram and shall subsequently indicate the action it intends to take. In cases when the Board's suggestions or recommendations are unacceptable to the Administrations concerned, further efforts should be made by the Board to find an acceptable solution to the problem.

MOD **4645** 639DS Spa2 § 29. In a case where, as a result of a study, the Board submits to one or more administrations suggestions or recommendations for the solution of a problem, and where no answer has been received from one or more of these administrations within a period of four months the Board shall consider that the suggestions or recommendations concerned are unacceptable to the administrations which did not answer, If it was the requesting administration which failed to answer within this period, the Board shall close the study.

NOC **Section VIII. Miscellaneous Provisions**

MOD **4646** 639DT Spa2 § 30. (1) If it is requested by any administration, particularly by an administration of a country in need of special assistance, ~~and if the circumstances appear to warrant~~, the Board, using such means at its disposal as are appropriate in the circumstances, shall render ~~the following assistance:~~

~~a) computation of the increases in noise temperatures in accordance with No. 4115/639AK;~~

~~b) preparation of diagrams showing the co-ordination areas as in No. 4141/639AN;~~

~~c)~~ any ~~other~~ assistance of a technical nature ~~for completion of the procedures in~~ this Article. in the application of the provisions of

NOC **4647** 639DU Spa2 (2) In making a request to the Board under No. **4646/639DT**, the administration shall furnish the Board with the necessary information.

NOC **4648** 639DV Spa2 § 31. The technical standards of the Board shall be based upon the relevant provisions of these Regulations and the Appendices thereto, the decisions of Administrative Conferences of the Union, as appropriate, the Recommendations of the C.C.I.R., the state of the radio art and the development of new transmission techniques.

MOD **4649** 639DW Spa2 § 32. The Board shall ~~promulgate to~~ administrations its findings and reasons therefor, together with all changes made to the Master Register, through its weekly circular. Such a publication shall be made ~~/ two months / from~~ the date of publication of the complete notice in the weekly circular referred to in No. 4292/497. When the Board is not in a position to comply with the time-limit referred to above it shall, as soon as possible, so inform the Administration concerned giving the reasons therefor.

inform all

of

the

within forty-five days of

MOD **4650** 639DX Spa2 § 33. In case a Member ~~or Associate Member~~ of the Union avails itself of the provisions of Article 50 of the Convention, the Board shall, upon request, make its records available for such proceedings as are prescribed in the Convention for the settlement of international disputes.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 551-E
8 November 1979
Original : Spanish

COMMITTEE 5

Spain

E/551/112 ADD

DRAFT RESOLUTION

Concerning the Concentration in the Radio Spectrum of Systems Using Tropospheric Scatter

The World Administrative Radio Conference (Geneva, 1979),

considering

a) that technical difficulties encountered in the frequency bands shared by tropospheric scatter systems, space systems and other terrestrial systems;

b) that increasing use of space systems expected in the future;

c) that need for frequency bands imposing no serious constraints on space systems;

d) that Recommendation No. Spa2 - 2 of the 1971 Space Conference, having regard to the improved utilization of the spectrum from the standpoint of compatibility of installations, invited the Administrative Council to arrange that a future WARC consider which frequency bands of the fixed service shall be preferably used by new tropospheric scatter systems;

e) the lack, in either the Radio Regulations or within the IFRB, of any specific criteria for sharing between systems using tropospheric scatter and space or other terrestrial systems;

f) the under-utilization of the spectrum resulting from the lack of uniformity between tropospheric scatter systems and other terrestrial systems;

g) that one means of reducing this under-utilization would be to concentrate tropospheric scatter systems within the spectrum;

and recognizing

that tropospheric scatter systems will continue to be used for some time to meet certain telecommunication requirements;

resolves

a) that tropospheric scatter systems established in future shall so far as possible use a single frequency band;

b) that this frequency band shall preferably be that between 1 700 and 2 300 MHz;

c) that Administrations shall take the necessary steps to ensure that within, /...../ years of the entry into force of this Regulation, all tropospheric scatter systems shall use this frequency band.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 552-E
8 November 1979
Original : English

COMMITTEE 6

FOURTH REPORT OF WORKING GROUP 6A

In Document No. 425, reference is made to updating the present entries in the Master International Frequency Register according to the new method for designating emissions (Article N3 and Appendix 5 revised by WARC-79).

The draft Resolution in the attached Annex which incorporates Recommendation A appearing in B.1 page 7 (Blue Document No. 424) and extends the subject of preparation of explanatory information on the new method of designating emissions to include a procedure for updating the Master Register, has been agreed by Working Group 6A and is presented to Committee 6.

J.K. BJÖRNSJÖ
Chairman of Working Group 6A

Annex : 1

ANNEX

DRAFT

RESOLUTION No. /6A-2/

/ex-Rec.A Blue Doc. 424 B.1-7/ ADD

Relating to the Preparation of Explanatory Information by the International Frequency Registration Board of the Application of the New Method for Designating Emissions in Notification Procedures and the Consequential Revision of the Master International Frequency Register

The World Administrative Radio Conference, Geneva, 1979,

having adopted

/ex-Rec.A cons.a)/ Article N3 and Appendix /5 MOD/ containing a new system for the designation of emissions;

considering

/ex-Rec.A cons.b)/ a) that such designations are fundamental to the notification procedures detailed in the Radio Regulations;

ADD b) that it is essential for this new system of designating emissions to be applied not only to new frequency assignments but also to existing entries;

ADD c) that certain new designations are more detailed than the former designations;

ADD d) that the IFRB does not have the means to replace automatically all former designations by the new designations;

noting

/ex-Rec.A noting a)/ a) that some Administrations may have difficulties in implementing the new method of designating emissions when it first comes into use; and

/noting b)/ b) that these Administrations need explanatory information well in advance of the entry into force of the Final Acts of this Conference;

resolves

/ex-Rec.A requests 1 and 2/ 1. that the IFRB shall prepare explanatory information on the application of the new method of designation, including examples, as it applies to the notification procedures specified in the Radio Regulations and shall make this information available to Administrations before 1 October 1980;

ADD 2. that the IFRB shall proceed with the conversion of the data appearing in the Master Register in consultation with Administrations;

ADD 3. that if the Board does not receive from an Administration, within a reasonable time, the information required in application of paragraph 2, it shall convert the data appearing in the Master Register as accurately as possible and insert in the Remarks Column a remark referring to the fact that the conversion was made under the terms of the present sub-paragraph;

ADD 4. that, with effect from the entry into force of the present revision of the Radio Regulations, the IFRB shall accept in the coordination and notification procedures only designations contained in the revised Article N3. If however the Board receives, after this date, information or notification containing the old type of designation, the Board shall not consider it as incomplete only for this reason. The Board shall, when practicable, modify the designation and if clarification is required, it shall consult the Administrations concerned.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 553-E
8 November 1979
Original : English

COMMITTEE 6

NOTE TO THE CHAIRMAN OF COMMITTEE 6

In considering further the proposals concerning the reallocation to the broadcasting or maritime mobile service of some parts of the bands presently allocated to the fixed service, Working Group 5BB agreed on the following principles which should serve as guidelines for Committee 6 in the development of procedures concerning the transfer of assignments to fixed stations :

1) the transfer procedures should be compatible with the objectives mentioned in the two footnotes which appear in the Annex and which would apply to each of the bands concerned;

2) the status of transferred assignments should be maintained;

3) the Master Register should be brought up to date in order to reflect actual frequency usage in the bands concerned;

4) requests for assignments of frequencies in the bands concerned and subject to the transfer procedure should continue to be accepted until the commencement of the application of these procedures;

5) in the period between the commencement of the application of the procedures of transfer and the date of completion only the urgent requirements for new assignments in these bands identified as urgent by the Administrations concerned should be accepted by the IFRB;

6) it should be noted that some Administrations also use frequencies for national purposes in accordance with the Radio Regulations but which have not been notified to the IFRB.

If feasible, a graphic presentation of the procedures might be useful.

P.D. BARNES
Chairman of Working Group 5BB

Annex : 1

A N N E X

ADD 3511A The use of the bands / / by the broadcasting service will be subject to provisions to be established by the World Administrative Radio Conference for the planning of high frequency bands allocated to the broadcasting service / see Recommendation No. /. Within these bands, the date of commencement of operations in the broadcasting service on a given channel shall not be earlier than the date of completion of satisfactory transfer, according to the procedure described in / Resolution No. /, of all assignments to fixed stations operating in accordance with the Table and other provisions of the Radio Regulations / and recorded in the Master Register / and which may be affected by broadcasting operations on that channel.

ADD 3511B The use of the bands / / by the maritime mobile service will be subject to provisions to be decided by a competent World Administrative Radio Conference. The date of commencement of operations in the maritime mobile service on a frequency in accordance with the above-mentioned provisions shall not be earlier than the date of completion of satisfactory transfer, in accordance with the procedure described in / Resolution No. /, of all assignments to fixed stations operating in accordance with the Table and other provisions of the Radio Regulations / and recorded in the Master Register / and which may be affected by maritime mobile operations on that frequency.

UNION INTERNATIONALE DES TELECOMMUNICATIONS

CONFERENCE ADMINISTRATIVE MONDIALE DES RADIOCOMMUNICATIONS

(Genève, 1979)

Document N° 554-F/E/S
8 novembre 1979
Original : français
anglais
espagnol

COMMISSION 4
COMMITTEE 4
COMISIÓN 4

RAPPORT DU GROUPE DE TRAVAIL 4 AD HOC 1 A LA COMMISSION 4

MOD 3143/94 et ADD 3143.1 : Puissance

Le Groupe de travail 4 ad hoc 1, composé de délégués de l'Algérie, du Canada, de la Côte d'Ivoire, de Cuba, des Etats-Unis, de la France, du Mexique et de la Suède ainsi que de représentants de l'IFRB et du CCIR, a décidé à l'unanimité de soumettre, pour adoption à la Commission 4, le texte figurant dans l'Annexe (au verso).

REPORT BY WORKING GROUP 4 AD HOC 1 TO COMMITTEE 4

MOD 3143/94 and ADD 3143.1 : Power

Working Group 4 ad hoc 1 consisted of delegates from Algeria, Canada, the Ivory Coast, Cuba, the United States, France, Mexico and Sweden and representatives of the IFRB and the CCIR. The Working Group unanimously agreed to submit the text contained in the Annex overleaf for adoption by Committee 4.

INFORME DEL GRUPO DE TRABAJO 4 AD HOC 1 A LA COMISIÓN 4

MOD 3143/94 y ADD 3143.1: Potencia

El Grupo de Trabajo 4 ad hoc 1 estaba compuesto por delegados de Argelia, Canadá, Costa de Marfil, Cuba, Estados Unidos, Francia, México y Suecia, y representantes de la IFRB y del CCIR. El Grupo de Trabajo acordó por unanimidad someter a la Comisión 4 para su adopción el texto que figura en anexo.

Le Président du Groupe de travail 4 ad hoc 1
R. MAYHER

Annexe : 1

ANNEXE - ANNEX - ANEXO

MOD 3143/94

Puissance [1]: Chaque fois que la puissance d'un émetteur radioélectrique, etc. est mentionnée, elle doit être exprimée sous l'une des formes ci-dessous, selon la classe d'émission :

- puissance en crête (PX ou pX);
- puissance moyenne (PY ou pY);
- puissance de la porteuse (PZ ou pZ).

Pour différentes classes d'émission, les rapports entre la puissance en crête, la puissance moyenne et la puissance de la porteuse, dans les conditions de fonctionnement normal et en l'absence de modulation, sont indiqués dans des Avis du CCIR, lesquels peuvent être utilisés comme guides.

---

[1] Power : Whenever the power of a radio transmitter etc. is referred to it shall be expressed in one of the following forms, according to the class of emission :

MOD 3143/94

- peak envelope power (PX or pX);
- mean power (PY or pY);
- carrier power (PZ or pZ).

For different classes of emissions, the relationships between peak envelope power, mean power and carrier power, under the conditions of normal operation and of no modulation, are contained in Recommendations of CCIR which may be used as a guide.

---

[1] Potencia: Siempre que se haga referencia a la potencia de un transmisor radioeléctrico, etc, se expresará en una de estas formas, según la clase de emisión:

MOD 3143/94

- potencia en la cresta de la envolvente (PX o pX);
- potencia media (PY o pY);
- potencia de la portadora (PZ o pZ).

Las relaciones entre la potencia en la cresta de la envolvente, la potencia media y la potencia de la portadora, para las distintas clases de emisiones, en condiciones normales de funcionamiento y en ausencia de modulación, se indican en las Recomendaciones del CCIR que pueden tomarse como guía para determinar tales relaciones.

3143.1 Dans les formules le symbole p indique la puissance en watts et le symbole P la puissance en décibels.

3143.1 For use in formula, the symbol p denotes power expressed in watts and the symbol P denotes power expressed in decibels.

3143.1 En las formulas el símbolo p indica la potencia en vatios y el símbolo P la potencia en decibelios.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 555-E
8 November 1979
Original : French

COMMITTEE 7

United Republic of Cameroon

RESOLUTION

Relating to the Transfer of Technology

The World Administrative Radio Conference, Geneva, 1979,

considering

1. the terms of the Resolution relating to International Economic Development and Cooperation (No. 3362.S-VII) adopted by the United Nations General Assembly at its Seventh Extraordinary Session, and the terms of Section III of this Resolution, which emphasizes the role of science and technology in development;

2. the terms of General Assembly Resolution 32/160, which proclaims a Transport and Communications Decade in Africa in the period 1978 - 1987, during which a World Communications Year is scheduled to be proclaimed;

3. the decisions of the General Assembly relating to the preparation of an international development strategy during the Third United Nations Development Decade, i.e. in the 1980s (Resolution 33/193);

noting

that at the recent United Nations Conference on Science and Technology for Development (Vienna, August 1979), the governments adopted a Declaration relating to a Programme of Action aimed at accelerating the application of science and technology for development;

aware of

the importance of the application of science and technology in telecommunications for the purposes of developing the services and attaining social, economic and cultural objectives;

also aware

of the important role of ITU as the United Nations specialized agency responsible for undertaking activities leading to the attainment of the objectives set forth in the International Telecommunication Convention;

urges

1. the governments of the Member countries, particularly those of the developing countries, and their Administrations, to take steps to strengthen their technical cooperation activities in order to achieve the efficient transfer of telecommunication technology, with a view to improving telecommunication services of all types;

2. Administrations to participate to the maximum extent practicable in the Study Groups of the International Consultative Committees of the Union, which are important forums for the transfer of technology;

instructs the Secretary-General

1. to strengthen further those technical cooperation activities geared to the planning, setting up, maintenance and operation of telecommunication systems and to the training of staff for such purposes, with a view to accelerating the transfer and satisfactory application of technology in favour of development, having regard to the specific requirements of each country;

2. to seek, at the international level, the resources required to accelerate these technical cooperation programmes, particularly funds which could be allocated under the Vienna Programme of Action;

3. to bring the present Resolution to the notice of all the Member countries of the Union and the competent bodies of the United Nations;

invites

the Administrative Council to keep abreast of the progress made in the attainment of the objectives set forth in the present Resolution and to report on such progress, as appropriate, to the next Plenipotentiary Conference.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 556-E
8 November 1979
Original : English

COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

Committee 4 considered and approved the annexed draft Recommendation, subject to the further consideration by Committee 6 with regard to the appropriateness of including the "service area" and related phrases indicated in square brackets.

Committee 6 is requested to take necessary action on this matter. The attention of the Committee 6 is drawn to the paragraph 2.2.6.1.2 of the SPM Report in this connection.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

ANNEX

DRAFT RECOMMENDATION

Concerning the Definitions of /"Service Area" and/ "Coverage Area"

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that in the official texts of the ITU reference is made very often to the terms /"service area"/ and "coverage area";

b) that these two terms are used with the same meaning or with different meaning according to the different services;

c) that there exists no definition of the terms /"service area"/ and "coverage area" in Article N1 of the Radio Regulations;

noting

a) that the term "service area" is already used in the texts of the Appendices 1, 1A, 1B, 1C and 25 of the Radio Regulations;

b) that a definition of "service area" for broadcasting exists in Recommendation 499-1 of CCIR which is based on the usable field strength;

c) that a definition very similar to that of Recommendation 499-1 is to be found in Annex 2 of the Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975;

d) that a definition of "service area" for satellite broadcasting is to be found in Annex 8 of the Final Acts of the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977. This definition contains above all administrative provisions. The technical definition is given in a note, in which reference is made to an appropriate power flux density and a protection against interference based on the agreed protection ratio;

e) that technical and administrative aspects are sometimes involved in the definition of "service area" which might not be separated easily;

f) that a definition of "coverage area" for the satellite broadcasting service is to be found in the same Annex 8 of the Final Acts of the WARC BC-SAT, Geneva, 1977, based on the value of a certain power flux-density which permits the wanted quality of reception in the absence of interference;

recognizes

that the existing definitions of /"service area"/ and "coverage area" are related to the definitions of usable field strength or usable power flux-density either in the presence or in the absence of interference;

invites the CCIR

1. to specify a general definition for "coverage area";

2. to specify the technical basis for a general definition of "service area" which takes into account the present usage of this term throughout all official ITU texts so that the administrative aspects of this definition could be established by future Administrative Conferences.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 557-E
8 November 1979
Original : English

COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

The consideration of the proposals Nos. F/82/816 to F/82/821 inclusive for the addition of an Article N27A to the Radio Regulations has been completed in Committee 4. The proposals concerned the up-links to broadcasting-satellites in the band 11.7 - 12.5 GHz (which would concern Regions 1 and 3 only).

The subject was considered in Working Group 4B who set up a Sub-Working Group 4B7 to study the matter in depth. The report of Sub-Working Group 4B7 is reproduced in the Annex.

The report has been agreed unanimously in Working Group 4B and in Committee 4 and in particular the conclusion that a new Article N27A containing a constant frequency translation and a procedure for coordination for the same orbital position is feasible if certain coordination measures are agreed. However, it has not been demonstrated that the constant frequency translation approach provides the optimum solution and therefore Committee 4 was unable to adopt the introduction of a new Article 27A in the Radio Regulations.

Committee 4 is nevertheless of the opinion that the conclusions listed in Section 4 of the Annex regarding the frequency translation method might form the basis for a procedural solution to allow implementation of up-links to broadcasting-satellites in the band 11.7 - 12.5 GHz in Regions 1 and 3 in advance of a possible overall plan, in a similar way to that in which the provisions of Resolution No. Spa2 - 3 allowed for broadcasting-satellite down-links.

Your Committee is invited to consider this matter and to take any further action that may be deemed desirable.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

A N N E X

REPORT OF SUB-WORKING GROUP 4B7 TO WORKING GROUP 4B

1. Introduction

Sub-Working Group 4B7 was asked by Working Group 4B to consider the technical basis for the proposed new Article N27A under the assumption that a total band of 800 MHz and 500 MHz respectively be available for the up-link of the broadcasting satellites provided for in the plan for Regions 1 and 3. The Sub-Working Group discussed the interference situation for 12.75, 14.5 and 17.3 GHz at the same orbital position and between satellites at adjacent orbital positions for the condition that the down-link operates as indicated in the Final Acts of the WARC-77 and the up-link frequencies are derived by a fixed frequency translation of the frequencies for the down-link.

The results of the interference calculation were compared with the requirements of the Administrations listed in paragraph 3.

2. Discussion of the interference situation

2.1 Interference between satellites located at adjacent orbital positions

For the calculations, the following assumptions were adopted :

- $\frac{C}{I}$ equal to 45 dB for one entry (see Recommendation SAT 5)
- Receive reference diagram identical to transmit one, as given in Annex 8 of the Final Acts (WARC-BS 77).

The $\frac{C}{I}$ ratio is given by :

$$\frac{C}{I} = P_w - P_i + G\left(\phi/\phi_0\right) + G'$$

where :

P_w = e.i.r.p. of the wanted earth station

P_i = e.i.r.p. of the interfering earth station

$G(\phi/\phi_0)$ = relative gain of the satellite receiving antenna given by Annex 8 of the Final Acts

G' = relative gain of the interfering earth station given by CCIR Recommendation No. 465.

$$G' = G_{max} - 32 + 25 \log \theta$$

where

$\theta = 5.8^0$ (adjacent orbital position with satellite station keeping tolerances)

$$G' = G_{max} - 12.9 \text{ dB}$$

According to the principle of crossed beams (Final Acts, Annex 7, paragraph 3, page 89), adjacent orbital station will not serve adjacent service area. We then have to adopt a value of ϕ/ϕ_0, which to satisfy nearly all cases would have to be based on a distribution curve. This is not available.

It may be assumed that in most cases $\phi/\phi_0 \geq 1$ and for $\phi/\phi_0 = 1$ a value of $G(\phi/\phi_0) = 12.5$ dB is appropriate.

With the value of 12.5 dB for $G(\phi/\phi_0)$ we get $45 = (P_w - P_i) + 12.5 + G_{max} - 12.9$

If we assume that the e.i.r.p. values of the wanted and interfering signals are equal

$G_{max} = 45.4$ dB

However, in the worst cases we can have a difference of e.i.r.p. of 12 dB if the earth stations are located in the beam centres. If not, 3 dB more has to be added in the case of satellite receiving antenna beamwidth being equal to the satellite transmit antenna beamwidth. If the beamwidth of the satellite receiving antenna is smalller than that of the satellite transmit antenna and the earth station is located at the edge of the coverage area of the satellite transmit antenna the value to be added would become greater than 3 dB.

With this we arrive at the following dimensions of the earth station antenna for a reference frequency of 12.75, 14.5 and 17.3 GHz (assumed m = 55 %, $G(\phi/\phi_0) = 12.5$ dB) :

f (GHz)	Difference in e.i.r.p. (dB)	G_{max} (dB)	D (m)
12.75	12	57.4	7.5
	15	60.4	10.6
14.5	12	57.4	6.6
	15	60.4	9.3
17.3	12	57.4	5.5
	15	60.4	7.8

Arriving at these values it was assumed that differences in up-link e.i.r.p. due to precipitation attenuation would be compensated by power control or other means.

2.2 Interference between satellites located at the same orbital position

2.2.1 Co-channel interference

Critical interference may exist in the same channel between distant areas, above all from a large area towards a small one but in this case interference may be reduced by adjusting e.i.r.ps. However, in the case of areas of similar size e.i.r.p. adjustment will not alleviate the interference problem.

2.2.2 Adjacent channels interference

The most critical case occurs between two adjacent countries using opposite polarizations according to the Plan.

$\frac{C}{I}$ = 29 dB for a single entry is required.

In the case where there is no difference in e.i.r.p's and earth stations are located at the beam centres then a value of 30 dB may be obtained. If there is no e.i.r.p. difference and the earth stations are not located at the beam centres a C/I of 27 dB results. These values reduce further with differences in e.i.r.p's. These values are based on a depolarization in the atmosphere of about 27 dB. More severe depolarization effects may further aggravate the interference situation.

Results of the studies on sandstorms have also to be considered.

3. Requirements of Administrations

3.1 Position of the transmitting earth station

Some Administrations find it desirable to have some flexibility in the choice of the siting of up-link earth stations at some point in the service area of the down-link or within a region which is covered by multiple beams. In some cases, it will even be necessary to use up-links from points outside the service area.

Some other Administrations in Region 1 expressed that they do not intend to make use of this flexiblity and that the requirements can be satisfied by them by other means.

3.2 Earth transmitting antenna

Transportable and small fixed up-link earth stations providing direct connection to a broadcasting satellite are required in certain countries and their numbers can be expected to increase as the broadcasting-satellite service develops. An example of this application will arise in remote areas where terrestrial radio-relay systems are not available for connection to the main earth station.

Transportable and some fixed earth stations will use relatively small antennae.

Some Administrations in Region 1 do not intend to use small transportable earth stations to feed into a broadcasting satellite in their countries.

4. Conclusions

The proposal for a new N27A containing a constant frequency translation and a procedure for coordination for the same orbital position is feasible if the following coordination measures are agreed to by all [1] Administrations.

1) The earth station transmit antenna diameter size cannot be smaller than indicated in paragraph 2.1.

2) To avoid an increase of the earth station antenna diameter to higher values than indicated in the Table in paragraph 2.1 for 12 dB of e.i.r.p. differences and to avoid the deterioration according to paragraph 2.2.2, the earth station should be located near the centre of the beam.

3) Up-link power control or other measures have to be effected to compensate for aggravation of up-link e.i.r.p. differences (between wanted and interfering carriers) because of precipitation attenuation.

4) The beamwidth of the satellite receiving antenna has to be equal to or smaller than that of the satellite transmit antenna. The transmit antenna reference pattern of the WARC-77 Final Acts has to be met by the satellite receiving antenna.

5) E.i.r.p. adjustments would have to be carried out on a coordinated basis to optimize up-link C/I ratios. Adjustments of earth station e.i.r.p. between adjacent satellite positions may not be necessary if the increase in e.i.r.p. is reached by the use of higher performance antennae.

---

1) All measures might not necessarily apply to all countries but it is not possible due to lack of information at the moment to identify these countries.

Even with these measures there would be negative up-link margins in some cases[2] which would require consideration of other solutions. Depolarization higher than 27 dB may further aggravate the interference situation for adjacent channels in the case of colocated satellites.

With the constraints of equal up-link and down-link bandwidth and on the basis of available information at this Conference it has not been demonstrated that the constant frequency translation approach provides the optimum solution. However, the Sub-Working Group 4B7 is not in the position to comment on whether or not other methods would provide significantly better solutions taking into account the requirements of all Administrations.

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2) It is not possible at the moment to identify these cases.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 558-E
28 November 1979
Original : English

COMMITTEE 4

SUMMARY RECORD OF THE SIXTH MEETING OF COMMITTEE 4

Paragraph 2.2

Amend the second part of the sentence to read :

"...since it fell within the necessary bandwidth and SSB transmissions would probably be used extensively in his region within the next ten or fifteen years."

Paragraph 2.3

Replace "less than" by "greater than" in the second sentence.

Paragraph 2.4

Amend the second sentence to read :

"Where the lowest modulation frequency was 350 Hz and the highest 2 700 Hz, and the notified bandwidth was 2,8A3J, it was not clear whether the guard band had been taken into account."

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 558-E
8 November 1979
Original : English

COMMITTEE 4

SUMMARY RECORD

OF THE

SIXTH MEETING OF COMMITTEE 4

(TECHNICAL REGULATIONS)

Friday, 2 November 1979, at 0900 hrs

Chairman : Mr. N. MORISHIMA (Japan)

Subjects discussed		Document No.
1.	Notes to the Chairman of Committee 6	432, 461
2.	Tenth Report of Working Group 4C	462
3.	Fourth Report of Working Group 4A	452
4.	Note from the Chairman of Committee 5	423
5.	Recommendations and Resolutions allocated to Committee 4	-

1. Notes to the Chairman of Committee 6
(Documents Nos. 432, 461)

1.1 Document No. 432

1.1.1 The Chairman of Working Group 4A, introducing the proposed note, said that the issue related mainly to the use of the term "accepted interference." It was therefore suggested that Committee 6 might wish to amend Provision No. 4170, sub-paragraph c).

1.1.2 The Chairman observed that the term "catastrophic" had been changed to "serious" used in English with the term "harmful interference", in accordance with the text approved by the Committee, but that that change had not been incorporated in the French and Spanish versions of Document No. 432.

1.1.3 In reply to a question by the delegate of India, the Chairman of Working Group 4A confirmed that the word "regional" in the context of permissible interference should not have an initial capital.

1.1.4 The Chairman pointed out that the term used in the definition approved by the Committee was "or in special agreements as provided for in these Regulations".

It was agreed that the Chairman and the Chairman of Working Group 4A should work out an appropriate text.

1.1.5 The delegate of Iraq said he objected to the replacement of the word "catastrophic" by "serious" in the context of "harmful interference".

1.1.6 The Chairman, supported by the delegate of the USSR, pointed out that the Committee had already approved the definition in which that change had been made. The note to the Chairman of Committee 6 was a purely internal document, and the main issue was the explanation of the term "accepted interference".

1.1.7 The delegate of France observed that in French the term "sérieuse" was too weak, while the word "catastrophique" might be too strong. Perhaps the term "détérioration extrêmement importante" could be used. The matter might be referred to the Editorial Group of Committee 4 or to Committee 9.

1.1.8 The delegate of Iraq said that in his opinion a substantive question was involved. The word "catastrophic" should be retained.

1.1.9 After some discussion, the Chairman suggested that the English text should remain as it stood, but that the list of levels of interference in paragraph 1 of the note should be accompanied by references to the documents in which the relevant definitions appeared, as follows :

"- harmful interference (Document No. 429)

- accepted interference (Document No. 460)

- permissible interference (Document No. 429)."

1.1.10 The delegate of Iraq said he maintained his objection to the definition of harmful interference.

Document No. 432 was approved, subject to the above comments.

1.2 Document No. 461

The Chairman of Working Group 4A introduced the document, which was approved.

2. Tenth Report of Working Group 4C
(Document No. 462)

2.1 The Chairman of Working Group 4C introduced the report, pointing out that the words "No modulating signal" should be deleted from the first column of the first example on page 5 of the English text.

Pages 2 to 6

Approved.

Page 7

2.2 The delegate of Argentina, referring to the first example on the page, said that mention should perhaps also be made of the pilot carrier, since it fell within the necessary bandwidth and would probably be used extensively for data transmission in his region within the next 10 or 15 years.

2.3 The Chairman of Working Group 4C said that the example in question was very common in the maritime and aeronautical mobile services. Normally, reference was made to a suppressed carrier when carrier reduction was equal to or less than 40 dB. There were indeed cases when pilot carriers were needed, and then a reduced carrier had to be used; Sub-Group 4C4 had not considered it necessary to introduce another example of SSB reduced carrier use, in view of the inclusion of the second example relating to Lincompex.

2.4 The delegate of Argentina accepted that explanation, but said he still wished to have a clarification from the IFRB concerning notifications under Appendix 17A. Where the lowest modulation frequency was 350 Hz and the notified bandwidth was 2 832 Hz, it was not clear whether the guardband had been taken into account.

2.5 The Member of the IFRB said that he could not answer the specific question of the Argentine delegate, but that the definition of the term "suppressed carrier" given by the Chairman of Working Group 4C was correct and corresponded to that of the CCIR. Although there might be a very small residual carrier of 40 dB or less, it would never be used for receiving purposes and simply did not exist from the point of view of the necessary bandwidth.

Page 7 was approved, subject to further consultations between the Argentine delegate and the IFRB.

Page 8

2.6 The delegate of New Zealand proposed that the square brackets be deleted from that page.

2.7 The delegate of the USSR proposed that the examples in the square brackets be deleted altogether. The problem of SSB broadcasting had been discussed extensively at the Special Preparatory Meeting and no consensus had been reached. Since there was as yet no CCIR Recommendation on the systems that should be used and since it was not clear which Committee of WARC-79 should decide on the matter, it would only create confusion to retain the examples.

2.8 The Technical Secretary pointed out that Sub-Group 5 ad hoc 4 had drafted a Recommendation for submission to Committee 5 on the convening of a World Administrative Radio Conference on HF broadcasting and that operative paragraph 2 of that Recommendation read "that the planning be based on DSB emissions. Consideration should also be given to the manner in which an SSB system could be introduced progressively without impairing the DSB emissions" (see Document No. 422).

2.9 The delegates of the United States, the United Kingdom, the Federal Republic of Germany and Sweden supported the New Zealand proposal in the light of the Technical Secretary's remarks and of the fact that SSB broadcasting emissions were already taking place in a number of countries.

2.10 The delegates of Algeria, India and Roumania supported the USSR proposal.

2.11 The Chairman observed that a large majority was against the USSR proposal and a smaller majority was in favour of removing the square brackets in accordance with the New Zealand proposal. The issue would be finally resolved in the Plenary Meeting.

2.12 The delegate of India said that, without prejudice to the decision on the retention of the second and third examples, he had two comments on the contents of the table. In the first place, the range of modulation frequencies was given in the second column of the first two examples but not of the third. Secondly, the sample calculations in column 3 elsewhere in the table were based on typical operational conditions; accordingly, the base in the examples on page 8 should be M = 10 000, not M = 4 000 or 4 500.

2.13 The Chairman of Working Group 4C said that, although the omission of a range of modulation frequencies in the third example might have been an oversight, it would perhaps be preferable to leave it as it stood and not to insert the same ranges as for the first two examples, since in practice the modulation never went beyond 4 500 Hz. In reply to the Indian delegate's second comment, the modulation for speech and music was normally 4 000 to 4 500 Hz, because in the case of DSB the highest modulation frequency of 10 000 Hz would yield a necessary bandwidth of 20 kHz for which no spectrum space was available with a channel spacing of 10 kHz.

2.14 The delegate of India said that the reply to his first comment merely confirmed his doubts concerning the advisability of retaining the two examples in question. In the case of the third example, there seemed to be a tendency to prejudge the issue by stating that in practice modulation frequencies did not exceed 4 500 Hz, although no system had yet been standardized and the CCIR had a long way to go before it reached any final conclusions.

With regard to the reply to his second comment, the common value for DSB emissions throughout the world was 20 kHz, with 10 kHz for the audio bandwidth; it was only exceptionally that the audio bandwidth was less than 10 kHz.

2.15 The delegate of the Federal Republic of Germany pointed out that the majority of the bandwidths in the LF/MF Broadcasting Plan were 2 times 4.5 kHz.

2.16 The Chairman observed that the document was concerned only with sample calculations, so that it was hardly worthwhile going into excessive detail.

Page 8 was approved, with the removal of the square brackets, on which a majority decision was taken.

Pages 9 to 16

Approved.

Page 17

2.17 The delegate of France said that on that page and some others the term "excursion de fréquence" had been used in the French text where "déviation de fréquence" had clearly been meant. That matter could be cleared up in the Editorial Group of Committee 4 or in Committee 9.

2.18 The delegate of Cuba said that those remarks also applied to the Spanish text.

2.19 The delegate of France asked why the word "telephone" had been omitted from the heading "Number of channels, N_c" at the beginning of the Table on page 17, when the formulae in the right-hand column were the classical ones used by the CCITT to denote telephone channels.

2.20 The Chairman of Working Group 4C drew attention to the list of terms on page 4, where the reference to telephony had been deliberately excluded from the definition of "N_c" because radio systems could have a number of telegraph channels in one telephone channel. The word "telephone" had been deleted from the heading on page 17 for the same reason.

2.21 The delegate of France, supported by the delegates of the Philippines and the Federal Republic of Germany, pointed out that the formulae on page 17 related solely to telephone channels. He proposed that the word "telephone" ("téléphonique") be reintroduced into the heading.

It was so agreed.

Page 17, as amended, was approved.

Page 18

Approved.

Document No. 462, as amended, was approved.

3. Fourth Report of Working Group 4A
(Document No. 452)

3.1 The Chairman of Working Group 4A, introducing that Working Group's Fourth Report to Committee 4, said that, following examination of proposals submitted by Administrations for several terms in Section VI of Article N1, a number of terms had been drafted as shown in the Annex to Document No. 452. Page 1 of the document also included a list of additional terms which had not received sufficient support for inclusion in Article N1.

3.2 The Chairman invited the Committee to consider the proposed definitions shown in the Annex to Document No. 452.

3.3 The text relating to Protection Ratio was approved.

3.4 Provisions 3137/88, 3135/86, 3135.1, 3136/87, 3147/98 and 3147A were approved.

3.5 Provision 3148 was approved, subject to editorial review to take account of the definition proposed in Working Group 4A's draft Report (Document No. DT/121).

3.6 The delegate of France, referring to Provision 3153C, said that the definition should refer to a polarized wave rather than to polarization. He also thought that, in the French text, the word "dextrogyre" was sufficiently clear and that the word "direct" was ambiguous and should be omitted.

3.6.1 The delegate of the United Kingdom said that he failed to see how the word "direct" could add anything but confusion to the definition; the expression "Right-hand or Clockwise Polarization" was sufficient.

3.6.2 The Chairman of Working Group 4A agreed with the delegates of France and the United Kingdom.

3.6.3 The delegate of Papua New Guinea supported the delegate of the United Kingdom.

3.6.4 The delegate of Iraq advocated the use of the word "Clockwise" only, without "Right-hand".

3.6.5 The Director of the CCIR agreed that it would be better to remove the word "direct". He proposed that the term should be entitled "Right-hand or Clockwise Polarization of a Wave".

3.6.6 The delegate of the USSR pointed out that it was a polarized wave, not polarization, which was being defined. He also felt that the accompanying Note was confusing and should be deleted.

3.6.7 The delegate of France said that the Note had been included because of existing confusion about finding the direction of polarization, but his delegation would have no formal objection to the deletion of the Note.

3.6.8 The delegate of Guatemala thought that the Committee should refer the Note to the Editorial Group for re-wording rather than delete it.

3.6.9 The delegate of Algeria thought that the Note should be deleted.

It was so decided.

3.6.10 The delegate of the United States, supported by the Director of the CCIR, thought that the word "intensity" should be deleted from the third line of the English text; the word was unnecessary and in any case did not appear in the French and Spanish texts.

3.6.11 The delegate of Switzerland, supported by the delegate of the Ivory Coast, felt that the term "Clockwise" was superfluous and that the English text should read simply "Right-hand" and the French text "dextrogyre".

3.6.12 The delegate of the United Kingdom said that both terms were widely used in English texts and should therefore be retained.

3.6.13 The Chairman proposed the following text in English : "Right-hand (or Clockwise) Polarized Wave" and in French : "Onde à polarisation dextrogyre (sens des aiguilles d'une montre)".

It was so agreed.

Provision 3153C, as amended, was approved.

3.7 The Chairman noted that Provision 3153D would have to be amended so as to correspond to the revised Provision 3153C. Accordingly, he proposed that the English version should now read "Left-hand (or Anti-clockwise) Polarized Wave", and that the word "intensity" should be removed from the third line of the present text. The French text should now read "Onde à polarisation lévogyre (sens inverse des aiguilles d'une montre)". Likewise, the accompanying Note should be deleted from the text.

It was so agreed.

Provision 3153D, as amended, was approved.

3.8 The delegate of New Zealand, referring to Provision 3153/103, said he had not seen the term "Antenna Directivity Diagram" used anywhere and thought it should be added to those not to be included in Article N1.

3.8.1 The representative of the IFRB said that a similar term appeared in Appendix 1A of the Radio Regulations : "antenna radiation pattern."

3.8.2 The delegate of the United States thought that the term could perhaps be renamed "antenna radiation diagram" or "antenna radiation pattern".

3.8.3 The Director of the CCIR said that the text required some amendment if the definition was to be retained, since not all antenna radiation diagrams were plotted in polar or cartesian coordinates.

Provision 3153/103 was deleted.

3.9 The delegate of France thought that in Provision 3154/103A the square brackets and the contents could be deleted and replaced (in the French text) by the words "définie en un point situé à la sortie de l'antenne".

3.9.1 The Chairman of Working Group 4A said that the square brackets had been left in the text pending the outcome of discussions in Working Group 4B relating to equivalent satellite link noise temperature.

3.9.2 The Chairman proposed that, in the English text, the words "at the" in the third line should be replaced by "referred to", and to delete the square brackets. On an editorial point, the word "from" should be added after the word "and" in the last line of the English text.

3.9.3 The delegate of France and the Chairman of Working Group 4B endorsed the proposal, which was adopted.

Provision 3154/103A, as amended, was approved.

3.10 The list, on page 1 of Document No. 452, of terms not supported for inclusion in Article N1 was approved.

Document No. 452, as amended, was approved.

4. Note from the Chairman of Committee 5
(Document No. 423)

The Committee noted the contents of the document and decided that Working Group 4C should deal with the matter.

5. Recommendations and Resolutions allocated to Committee 4

After a short discussion, it was decided that Resolutions and Recommendations would be considered by the full Committee, possibly on the basis of a document prepared by the Chairman, Vice-Chairman and Working Group Chairmen.

The meeting rose at 1225 hours.

The Secretary : The Chairman :

C. GLINZ N. MORISHIMA

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 559-E
8 November 1979
Original : French

COMMITTEE 6

SUMMARY RECORD

OF THE

EIGHTH MEETING OF COMMITTEE 6

(REGULATORY PROCEDURES)

Tuesday, 6 November 1979, at 0900 hrs

Chairman : Dr. M. JOACHIM (Czechoslovakia)

Subjects discussed		Document No.
1.	Summary record of the sixth meeting of Committee 6	481
2.	Report of Group 6 ad hoc 1	446
3.	Report of Group 6 ad hoc 2	482
4.	Third report of Working Group 6A	486
5.	Notes from the Chairman of Committee 4	477, 478
6.	Note from the Chairman of Committee 5	459
7.	Draft note to the Chairman of Committee 5	467
8.	Proposals for the work of the Conference (Canada)	60A(Add.3, Rev.1)
9.	Other business	-

1. Summary record of the sixth meeting of Committee 6
(Document No. 481)

1.1 The summary record of the sixth meeting of Committee 6 was approved.

2. Report of Group 6 ad hoc 1
(Document No. 446)

2.1 The report was approved.

3. Report of Group 6 ad hoc 2
(Document No. 482)

3.1 In presenting the document, the Chairman of Working Group 6 ad hoc 2 said that the Group would probably require a total of five meetings in order to complete its work.

The Committee took note of the report.

4. Third report of Working Group 6A
(Document No. 486)

4.1 The Chairman of Working Group 6A presented the report, drawing the Committee's attention to the footnotes on page 2 addressed to the Editorial Committee. Since no final decision had been reached on certain Resolutions, Committee 7 would have to take a decision on the matter or a subsequent specialized conference would have to solve the outstanding problems.

The report, together with Annex 1 and Annex 2 containing Resolution /6A-1/, were approved.

5. Notes from the Chairman of Committee 4
(Documents Nos. 477, 478)

5.1 It was agreed that Document No. 477 would be studied by Working Group 6A which would immediately prepare the guidelines requested by the Chairman of Committee 4.

5.2 The note given in Document No. 478 gave rise to a discussion, during which the delegate of the United Kingdom said that a definition of "accepted interference" in Article N1 would be entirely superfluous. The delegate of Algeria felt that it would be inappropriate to give such cavalier treatment to a note on a subject which had been examined at considerable length by another Committee, which did moreover specifically answer the questions raised by Committee 6.

5.3 It was finally agreed to take note of the reservation made by the delegate of the United Kingdom, who preferred to have the definition of "accepted interference" deleted in Article N1 and to instruct Group 6A to examine Document No. 478 and the proposals therein.

6. Note from the Chairman of Committee 5
(Document No. 459)

It was agreed to instruct Working Group 6A to examine Document No. 459.

7. Draft note to the Chairman of Committee 5
(Document No. 467)

7.1 The Chairman of Group 6A said that, in Document No. 312, Committee 5 had submitted to Committee 6 a note on the procedures required to ensure that services in bands which had been re-allocated could be transferred to other bands without affecting the operational utility of the services concerned.

7.2 Following a discussion in which the delegates of Jordan, Brazil, the United States of America, Algeria, India and Nigeria, together with the Chairman of Working Group 6A, took part, the draft note to the Chairman of Committee 5 was approved, after deletion of the second part of the last sentence of the last paragraph : "... but will not put forward its conclusions until Committee 5 confirms the need for such a procedure".

7.3 The Chairman enquired whether the Editorial Committee should not examine, at the end of the first paragraph of the French version of the document, the use of the fairly recondite expression "en pâtissent".

8. Proposals for the work of the Conference (Canada)
(Document No. 60A(Add.3, Rev.1))

8.1 On a proposal by the delegate of Australia, it was decided that the document would be examined by ad hoc Group 2 of Working Group 6A.

9. Other business

9.1 The Vice-Chairman of the IFRB said that with a view to the adoption by Committee 6 of Document No. 459 (paragraph 6 above) and since Committee 4 was expected to complete its work by the end of the week, Committee 4 should be urgently requested to supply Committee 6 with the technical criteria required for the application of a suitable procedure for coordination between the Mobile Satellite Service and the Aeronautical Mobile Service.

9.2 The Chairman said that he would personally make the necessary representations to the Chairman of Committee 4.

At the request of the delegate of Jordan, the Chairman requested the Secretariat to publish as soon as possible a working document showing the existing structure of Committee 6 and the allocation of work among the groups and sub-groups.

Since Committee 6 had given an undertaking to the Steering Committee that it would complete its work by the end of the week, Group 6A was invited to speed up its work and to produce the greatest possible number of documents for the meeting of Committee 6 to be held late on Friday, 9 November.

The meeting rose at 0945 hours.

The Secretary : The Chairman :

R. PLUSS M. JOACHIM

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 560-E
8 November 1979
Original : English

WORKING GROUP 6A

REPORT FROM WORKING GROUP 6A3
TO WORKING GROUP 6A

DRAFT RESOLUTION RELATING TO ACTION TO FACILITATE
INCREASED USE OF THE ITU COMPUTER INSTALLATION
BY THE IFRB FOR FREQUENCY MANAGEMENT

Working Group 6A3 agreed to submit the attached text to Working Group 6A for adoption by Committee 6.

The delegation of the USSR reserved the right to revert to this text in Working Group 6A if it still so desired.

A.M. CORRADO
Chairman of Working Group 6A3

Annex : 1

ANNEX

DRAFT

RESOLUTION No.

Relating to Action to Facilitate Increased Use of the ITU Computer Installation by the International Frequency Registration Board for Frequency Management

The World Administrative Radio Conference, Geneva, 1979,

considering

a) the initiatives that have been taken to increase the utilization of the ITU computer installation by the IFRB;

b) the necessity for the World Administrative Radio Conference, Geneva, 1979, to further these initiatives but without prejudicing the comprehensive systems analysis and design study now being undertaken;

c) that if changes to any of the Appendices relating to notices of frequency assignments are recommended in the report made after this design study, they should if possible be incorporated without the need for reference to a further Administrative Radio Conference if the Members of the Union agree to such changes;

d) that the key factor in adopting such recommendations should be acceptance by the Administrative Council of the report;

e) that certain other improvements are necessary and could be made by the IFRB progressively and without the need for prior adoption by an Administrative Radio Conference;

f) that the improvements obtained from the extended use of the computer for activities of the IFRB will benefit all Administrations;

resolves

that, to gain the maximum benefit from the report of the consultants on measures to increase utilization of the ITU computer installation by the IFRB, the Board shall :

1. without affecting the characteristics required by the Radio Regulations to be given in any notice relating to a frequency assignment, develop any necessary suggestions for the standardization, re-formatting and additional editorial information required to facilitate its computer processing of such notices;

2. without in any way affecting its statutory contents as prescribed by the Radio Regulations, develop any necessary suggestions for the refinement, improvement and extension of the International Frequency List from the point of view of presentation;

3. submit suggestions under 1. and 2. above :

- for comment by Administrations within /six months/ from the date of promulgation of the suggestions; and
- for subsequent endorsement by the Administrative Council at the session following the comment period and prior to the incorporation of the suggestions in Appendices 1, 1A, 1B, 1C, 2 and 9;

4. within the scope of the Radio Regulations as revised by the World Administrative Radio Conference, Geneva, 1979, prepare and introduce into the preface to the International Frequency List :

- a standard list of characteristics for use in appropriate notices;
- a set of working instructions for the completion of notices;

resolves further

that in the event of any unforeseen difficulty concerning completion of the above actions, or in the event of disagreement by Administrations, the Board shall present to the Administrative Council and to the next World Administrative Radio Conference, a comprehensive report on the subject, the problems encountered and their suggestions as to means to resolve the problems; and

requests the Administrative Council

in that event to place an appropriate item on the agenda of the said Conference to permit consideration of the report of the IFRB.

BLUE PAGES

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 561
9 November 1979

E

B.9

PLENARY MEETING

9th SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

Source	Document No.		Title
C.4	473 + 474		Appendix 3
			Appendix 5
		SUP	New Appendix B
		SUP	Appendix A

P. BASSOLE
Chairman of the
Editorial Committee

Annex: 23 pages

BLUE PAGES

MOD

APPENDIX 3

Mar Mar2
Aer2

MOD

Table of Transmitter Frequency Tolerances

(see Article N4)

MOD § 1. Frequency tolerance is defined in Article N1 and is expressed in parts in 10^6, unless otherwise indicated.

MOD § 2. The power shown for the various categories of stations is the peak envelope power for single-sideband transmitters and the mean power for all other transmitters, unless otherwise indicated. The term "power of a radio transmitter" is defined in Article N1.

ADD § 3. For technical and operational reasons, certain categories of stations may need more stringent tolerances than those shown in the table.

MOD

Frequency Bands (lower limit exclusive, upper limit inclusive) and Categories of Stations	Tolerances applicable until 1st January, 1990 to transmitters in use and to those to be installed before 2nd January, 1985	Tolerances applicable to new transmitters installed after 1st January, 1985 and to all transmitters after 1st January, 1990
Band : 9 to 535 kHz		
1. Fixed Stations :		
- 9 to 50 kHz	1 000	100
- 50 to 535 kHz	200	50
2. Land Stations :		
a) Coast Stations :		100 a)
- power 200 W or less	500 A)	
- power above 200 W	200 A)	
b) Aeronautical Stations	100	100
3. Mobile Stations :		
a) Ship Stations	1 000 B)	200 b)
b) Ship's Emergency Transmitters	5 000	500 c)
c) Survival Craft Stations	5 000	500
d) Aircraft Stations	500	100

4. Radiodetermination Stations	100	100	
5. Broadcasting Stations	10 Hz	10 Hz	
Band : 535 to 1 605 kHz			/¯ ¯/
Broadcasting Stations	10 Hz d)	10 Hz d)	
Band : 1 605 to 4 000 kHz			/¯ ¯/
1. Fixed Stations :			
- power 200 W or less	100	100 e) f)	
- power above 200 W	50	50 e) f)	
2. Land Stations :			
- power 200 W or less	100 A) C) g)	100 a) e) g)	
- power above 200 W	50 A) C) g)	50 a) e) g)	
3. Mobile Stations			
a) Ship Stations	200 B) D)	40 Hz h)	
b) Survival Craft Stations	300	100	
c) Emergency Position-Indicating Radiobeacons	300	100	
d) Aircraft Stations	100 g)	100 g)	
e) Land Mobile Stations	200	50 i)	
4. Radiodetermination Stations :			
- power 200 W or less	100	20 j)	
- power above 200 W	50	10 j)	
5. Broadcasting Stations	20	10 Hz k)	
Band : 4 to 29.7 MHz			
1. Fixed stations :			
- power 500 W or less	50		
- power above 500 W	15		

a) Single-sideband and independent sideband emissions		
- power 500 W or less		50 Hz
- power above 500 W		20 Hz
b) Class F1B emissions		10 Hz
c) Other classes of emission		
- power 500 W or less		20
- power above 500 W		10
2. Land stations :		
a) Coast Stations :		20 Hz a) 1)
- power 500 W or less	50 A) C)	
- power above 500 W and less than or equal to 5 kW	30 A) C)	
- power above 5 kW	15 A) C)	
b) Aeronautical Stations :		
- power 500 W or less	100 g)	100 g)
- power above 500 W	50 g)	50 g)
c) Base Stations :		20 e)
- power 500 W or less	100	
- power above 500 W	50	
3. Mobile stations :		
a) Ship Stations :		
1) Class A1A emissions	50 E) F)	10
2) Emissions other than Class A1A	50 B) D)	50 Hz b) m)
b) Survival Craft Stations	200	50
c) Aircraft Stations	100 g)	100 g)
d) Land Mobile Stations	200	40 n)

4. Broadcasting Stations	15	10 Hz k) o)
5. Space Stations		20
6. Earth Stations		20
Band : 29.7 to 100 MHz		
1. Fixed Stations :		
- power 200 W or less	50	
- power above 200 W	30	
- power 50 W or less		30
- power above 50 W		20
2. Land Stations :		20
- power 15 W or less	50	
- power above 15 W	20	
3. Mobile Stations :		20 p)
- power 5 W or less	100	
- power above 5 W	50	
4. Radiodetermination Stations	200	50
5. Broadcasting Stations (other than television) :		2 000 Hz q)
- power 50 W or less	50	
- power above 50 W	20	
6. Broadcasting Stations (television sound and vision) :		500 Hz r) s)
- power 50 W or less	100	
- power above 50 W	1 000 Hz	
7. Space Stations		20
8. Earth Stations		20

Band : 100 to 470 MHz		
1. Fixed Stations :		
- power 50 W or less	50	20 t)
- power above 50 W	20	10
2. Land Stations :		
a) Coast Stations	20 G)	10
b) Aeronautical Stations	50	20 u)
c) Base Stations :		
- power 5 W or less	50	
- power above 5 W	20	
- in the band /1) /		15 v)
- in the band / 2) /		7 v)
- in the band / 3) /		5 v)
3. Mobile Stations :		
a) Ship Stations and Survival Craft Stations :		
- in the band /156 - 174/MHz	20 G)	10 / /
- outside the band /156 - 174/MHz	50 H) w)	50 w) / /
b) Aircraft Stations	50	30 u)
c) Land Mobile Stations :		
- power 5 W or less	50	
- power above 5W	20	
- in the band /1) /		15 v)
- in the band / 2) /		7 v) x)
- in the band / 3) /		5 v) x)
4. Radiodetermination Stations	50 H) y)	50 y)
5. Broadcasting Stations (other than television)	20	2 000 Hz q)
6. Broadcasting Stations (television sound and vision)		500 Hz r) s)
- power 100 W or less	100	
- power above 100 W	1 000 Hz	

Editorial notes : 1) specific band around /160 MHz / } to be inserted later
2) specific band around / 300 MHz / } to be inserted later
3) specific band around / 450 MHz / } to be inserted later

7. Space Stations		20
8. Earth Stations		20
Band : 470 to 2 450 MHz		
1. Fixed Stations :		
- power 100 W or less	300 I)	100
- power above 100 W	100 J)	50
2. Land Stations	300	20 z)
3. Mobile Stations	300	20 z)
4. Radiodetermination Stations	500 y)	500 y)
5. Broadcasting Stations (other than television)	100	100
6. Broadcasting Stations (television sound and vision) in the band 470 to /960/MHz :		500 Hz r) s)
- power 100 W or less	100	
- power above 100 W	1 000 Hz	
7. Space Stations		20
8. Earth Stations		20
Band : 2 450 to 10 500 MHz		
1. Fixed Stations :		
- power 100 W or less	300 I)	200
- power above 100 W	100 J)	50
2. Land Stations	300	100
3. Mobile Stations	300	100
4. Radiodetermination Stations	2 000 y)	1 250 y)
5. Space Stations		50
6. Earth Stations		50

Band : 10.5 to 40 GHz		
1. Fixed Stations	500	300
2. Radiodetermination Stations	7 500 y)	5 000 y)
3. Broadcasting Stations		100
4. Space Stations		100
5. Earth Stations		100

MOD

Notes in the Table of Transmitter Frequency Tolerances

SUP

Existing notes a) to r)

ADD A) For coast station transmitters used for direct-printing telegraphy and for data transmission the tolerance is 15 Hz. This tolerance is applicable to equipment installed after 1 January 1976 and to all equipment after 1 January 1985. For equipment installed before 2 January 1976 the tolerance is 40 Hz.

ADD B) For ship station transmitters used for direct-printing telegraphy or for data transmissions, the tolerance is 40 Hz. This tolerance is applicable to equipment installed after 1 January 1976 and to all equipment after 1 January 1985. For equipment installed before 2 January 1976 the tolerance is 100 Hz (with a maximum deviation of 40 Hz for short periods of the order of 15 minutes).

ADD C) For coast station single-sideband radiotelephone transmitters the tolerance is 20 Hz.

ADD D) For ship station single-sideband radiotelephone transmitters the tolerance is :

1) in the band 1 605 - 4 000 kHz : /_ _/
   - 100 Hz for transmitters in use or to be installed before 2 January 1982;
   - 50 Hz for transmitters installed after 1 January 1982, but before 1 January 1985;

2) in the band 4 000 - 23 000 kHz : /_ _/
   - 100 Hz for transmitters in use until 1 January 1990 or those installed before 2 January 1978.
   (See also Appendix 17A.)

ADD E) In the A1A Morse working frequency bands, a frequency tolerance of 200 parts in 10^6 may be applicable to existing transmitters, provided that the emissions are contained within the band in question.

ADD F) In the A1A Morse calling frequency bands frequency tolerances of 40 parts in 10^6 in the bands between 4 and 23 MHz and of 30 parts in 10^6 in the 25 MHz band are recommended as far as possible.

ADD G) For coast and ship station transmitters in the band /156 - 174/ MHz put into service after 1 January 1973 a tolerance of 10 parts in 10^6 shall apply. This tolerance is applicable to all transmitters, including survival craft stations, after 1 January 1983. / /

ADD H) This tolerance is not applicable to survival craft stations operating on the frequency 243 MHz.

ADD I) For transmitters using time-division multiplex the tolerance of 300 may be increased to 500.

ADD J) This tolerance applies only to such emissions for which the necessary bandwidth does not exceed 3 000 kHz; for larger bandwidth emissions a tolerance of 300 applies.

ADD a) For coast station transmitters used for direct-printing telegraphy or for data transmission, the tolerance is 15 Hz.

ADD b) For ship station transmitters used for direct-printing telegraphy or for data transmission, the tolerance is 40 Hz.

ADD c) If the emergency transmitter is used as the reserve transmitter for the main transmitter, the tolerance for ship station transmitters applies.

ADD d) In countries covered by the North American Regional Broadcasting Agreement (NARBA) the tolerance of 20 Hz may continue to be applied.

ADD e) For single-sideband radiotelephone transmitters the tolerance

- in the bands /1 605/ - 4 000 kHz and 4 - 29.7 MHz for peak envelope powers of 200 W or less and 500 W or less, respectively, is 50 Hz; / /
- in the bands /1 605/ - 4 000 kHz and 4 - 29.7 MHz for peak envelope powers above 200 W and 500 W, respectively, is 20 Hz. / /

ADD f) For radiotelegraphy transmitters with frequency shift keying the tolerance is 10 Hz.

ADD g) For single-sideband transmitters operating in the frequency bands /1 605/ - 4 000 kHz and 4 - 29.7 MHz which are allocated exclusively to the aeronautical mobile (R) service, the tolerance on the carrier (reference) frequency is : / /

1.	for all aeronautical stations	10 Hz
2.	for all aircraft stations operating on international services	20 Hz
3.	for aircraft stations operating exclusively on national services	50 Hz*

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* Note. - In order to achieve maximum intelligibility, it is suggested that administrations encourage the reduction of this tolerance to 20 Hz.

ADD h) For A1A emissions the tolerance is 50 parts in 10^6.

ADD i) For transmitters used for single-sideband radiotelephony or for frequency shift keying radiotelegraphy the tolerance is 40 Hz.

ADD j) For radiobeacon transmitters in the band /1 605/ - 1 800 kHz the tolerance is 50 parts in 10^6. / /

ADD k) For A3E transmitters with carrier power of 10 kW or less the tolerance is 20 parts in 10^6 and 15 parts in 10^6 in the bands /1 605/ - 4 000 kHz and 4 - 29.7 MHz respectively. / /

ADD l) For A1A emissions the tolerance is 10 parts in 10^6.

ADD m) For ship station transmitters in the band /* / kHz, / / / /
on board small craft, with a carrier power not exceeding 5 W operating /in/near/ coastal waters and utilizing A3E or F3E emissions the frequency tolerance is 40 parts in 10^6.

ADD n) The tolerance is 50 Hz for single-sideband radiotelephone transmitters, except for those transmitters operating in the band /* / kHz, and not exceeding a peak envelope power of 15 W, for which the basic tolerance of 40 parts in 10^6 applies. / /

ADD o) It is suggested that administrations avoid carrier frequency differences of a few hertz, which cause degradations similar to periodic fading. This could be avoided if the frequency tolerance were 0.1 Hz, a tolerance which would also be suitable for single sideband emissions.

ADD p) For non-vehicular mounted portable equipment with a transmitter mean power not exceeding 5 W the tolerance is 40 parts in 10^6.

ADD q) For transmitters of a mean power of 50 W or less operating at frequencies below 108 MHz a tolerance of 3 000 Hz applies.

ADD r) In the case of television stations of :

- 50 W (vision peak envelope power) or less in the band 29.7 - 100 MHz;
- 100 W (vision peak envelope power) or less in the band 100 - /960/ MHz / /

and which receive their input from other television stations or which serve small isolated communities, it may not, for operational reasons, be possible to maintain this tolerance. For such stations, the tolerance is 2 000 Hz.

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* Editorial note : specific band around 27 120 kHz to be inserted later.

For stations of 1 W (vision peak envelope power) or less this tolerance may be relaxed further to :

- 5 kHz in the band 100 - 470 MHz;

- 10 kHz in the band 470 - /960/ MHz. / /

ADD s) For transmitters for system M(NTSC) the tolerance is 1 000 Hz. However, for low power transmitters using this system note r) applies.

ADD t) For multi-hop radio-relay systems employing direct frequency conversion the tolerance is 30 parts in 10^6.

ADD u) For a channel spacing of 50 kHz the tolerance is 50 parts in 10^6.

ADD v) These tolerances apply to channel spacings equal to or greater than 20 kHz.

ADD w) For transmitters used by on-board communication stations a tolerance of 5 parts in 10^6 shall apply.

ADD x) For non-vehicular mounted portable equipment with a transmitter mean power not exceeding 5 W the tolerance is 15 parts in 10^6.

ADD y) Where specific frequencies are not assigned to radar stations, the bandwidth occupied by the emissions of such stations shall be maintained wholly within the band allocated to the service and the indicated tolerance does not apply.

ADD z) In applying this tolerance administrations should be guided by the latest relevant CCIR Recommendations.

SUP

APPENDIX A

Studies and Prediction of Radio Propagation and Radio Noise

SUP

NEW APPENDIX B

Table of Classification of Typical Emissions

MOD

APPENDIX 5

Additional Characteristics for the Classification of Emissions; Determination of Necessary Bandwidths including Examples for their Calculation and Associated Examples for the Designation of Emissions

(see Article N3)

PART A

Additional Characteristics for the Classification of Emissions

Article N3 of these Regulations describes the basic characteristics, with three symbols, for the classification of emissions. For a more complete description of an emission, two optional additional characteristics should be added.

The optional additional characteristics (see also Recommendation No. /87/) are :

Fourth symbol - Details of signal(s);

Fifth symbol - Nature of multiplexing.

Where the fourth or the fifth symbol is not used this should be indicated by a dash where each symbol would otherwise appear.

1. Fourth symbol - Details of signal(s)

1.1	Two-condition code with elements of differing numbers and/or durations	A
1.2	Two-condition code with elements of the same number and duration without error-correction	B
1.3	Two-condition code with elements of the same number and duration with error-correction	C
1.4	Four-condition code in which each condition represents a signal element (of one or more bits)	D
1.5	Multi-condition code in which each condition represents a signal element (of one or more bits)	E
1.6	Multi-condition code in which each condition or combination of conditions represents a character	F

1.7	Sound of broadcasting quality (monophonic)	G
1.8	Sound of broadcasting quality (stereophonic or quadraphonic)	H
1.9	Sound of commercial quality (excluding categories given in sub-paragraphs 1.10 and 1.11)	J
1.10	Sound of commercial quality with the use of frequency inversion or band-splitting	K
1.11	Sound of commercial quality with separate frequency-modulated signals to control the level of demodulated signal	L
1.12	Monochrome	M
1.13	Colour	N
1.14	Combination of the above	W
1.15	Cases not otherwise covered	X

2. Fifth symbol - Nature of multiplexing

2.1	None	N
2.2	Code-division multiplex*)	C
2.3	Frequency-division multiplex	F
2.4	Time-division multiplex	T
2.5	Combination of frequency-division multiplex and time-division multiplex	W
2.6	Other types of multiplexing	X

*) This includes bandwidth expansion techniques.

PART B

Determination of Necessary Bandwidths including Examples for their Calculation and Associated Examples for the Designation of Emissions

For the full designation of an emission, the necessary bandwidth, indicated in four characters, shall be added just before the classification symbols. When used, the necessary bandwidth shall be determined by one of the following methods :

1) use of the formulae included in the following table which also gives examples of necessary bandwidths and designation of corresponding emissions;

2) computation in accordance with CCIR Recommendations;[1] /_ _/

3) measurement, in cases not covered by 1) or 2) above.

However, the necessary bandwidth so determined is not the only characteristic of an emission to be considered in evaluating the interference that may be caused by that emission.

In the formulation of the table, the following terms have been employed :

B_n = Necessary bandwidth in hertz

B = Modulation rate in bauds

N = Maximum possible number of black plus white elements to be transmitted per second, in facsimile

M = Maximum modulation frequency in hertz

C = Sub-carrier frequency in hertz

D = Peak deviation, i.e., half the difference between the maximum and minimum values of the instantaneous frequency. The instantaneous frequency in hertz is the time rate of change in phase in radians divided by 2π

t = Pulse duration in seconds at half-amplitude

t_r = Pulse rise time in seconds between 10 % and 90 % amplitude

K = An overall numerical factor which varies according to the emission and which depends upon the allowable signal distortion

N_c = Number of baseband channels in radio systems employing multichannel multiplexing

f_p = Continuity pilot subcarrier frequency (Hz) (continuous signal utilized to verify performance of frequency division multiplex systems).

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[1] See also Recommendation No. /_ _/ "Examples of Necessary Bandwidths". /_ _/

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
I. NO MODULATING SIGNAL			
Continuous wave emission	-	-	NON
II. AMPLITUDE MODULATION			
1. Signal with Quantized or Digital Information			
Continuous wave Telegraphy, Morse Code	$B_n = BK$ K = 5 for fading circuits K = 3 for non-fading circuits	25 words per minute; B = 20, K = 5 Bandwidth : 100 Hz	100HA1AAN
Telegraphy by on-off keying of a tone modulated carrier, Morse Code	$B_n = BK + 2M$ K = 5 for fading circuits K = 3 for non-fading circuits	25 words per minute; B = 20, M = 1 000 K = 5 Bandwidth : 2 100 Hz = 2.1 kHz	2K10A2AAN
Selective calling signal using sequential single frequency code, single sideband, full carrier	$B_n = M$	Maximum code frequency is : 2 110 Hz M = 2 110 Bandwidth : 2 110 Hz = 2.11 kHz	2K11H2BFN
Direct printing telegraphy using a frequency shifted modulating sub-carrier, with error-correction, single sideband, suppressed carrier (single channel)	$B_n = 2M + 2DK$ $M = \frac{B}{2}$	B = 50 D = 35 Hz (70 Hz shift) K = 1.2 Bandwidth : 134 Hz	134HJ2BCN

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
Telegraphy, multi-channel with voice frequency, error-correction, some channels are time-division multiplexed, single sideband, reduced carrier	B_n = highest central frequency + M + DK $M = \frac{B}{2}$	15 channels; highest central frequency is : 2 805 Hz B = 100 D = 42.5 Hz (85 Hz shift) K = 0.7 Bandwidth : 2 885 Hz = 2.885 kHz	2K89R7BCW
2. Telephony (Commercial Quality)			
Telephony, double sideband (single channel)	$B_n = 2M$	M = 3 000 Bandwidth : 6 000 Hz = 6 kHz	6K00A3EJN
Telephony, single sideband, full carrier (single channel)	$B_n = M$	M = 3 000 Bandwidth : 3 000 Hz = 3 kHz	3K00H3EJN
Telephony, single sideband, suppressed carrier (single channel)	$B_n = M$ lowest modulation frequency	M = 3 000; lowest modulation frequency is 300 Hz Bandwidth : 2 700 Hz = 2.7 kHz	2K70J3EJN
Telephony with separate frequency modulated signal to control the level of de-modulated speech signal, single sideband, reduced carrier, (Lincompex) (single channel)	$B_n = M$	Maximum control frequency is 2 990 Hz M = 2 990 Bandwidth : 2 990 Hz = 2.99 kHz	2K99R3ELN
Telephony with privacy, single sideband, suppressed carrier (two or more channels)	$B_n = N_c M$ lowest modulation frequency in the lowest channel	N_c = 2 M = 3 000 lowest modulation frequency is 250 Hz Bandwidth : 5 750 Hz = 5.75 kHz	5K75J8EKF
Telephony, independent sideband (two or more channels)	B_n = sum of M for each sideband	two channels M = 3 000 Bandwidth : 6 000 Hz = 6 kHz	6K00B8EJN

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
3. Sound Broadcasting			
Sound broadcasting double sideband	$B_n = 2M$ M may vary between 4 000 and 10 000 depending on the quality desired	Speech and music, M = 4 000 Bandwidth : 8 000 Hz = 8 kHz	8K00A3EGN
Sound broadcasting, single sideband, reduced carrier (single channel)	$B_n = M$ M may vary between 4 000 and 10 000 depending on the quality desired	Speech and music, M = 4 000 Bandwidth : 4 000 Hz = 4 kHz	4K00R3EGN
Sound broadcasting, single sideband, suppressed carrier	$B_n = M$ lowest modulation frequency	Speech and music, M = 4 500; lowest modulation frequency = 50 Hz; Bandwidth : 4 450 Hz = 4.45 kHz	4K45J3EGN
4. Television			
Televison, vision and sound	Refer to relevant CCIR documents for the bandwidths of the commonly used television systems	Number of lines = 625; Nominal video bandwidth : 5 MHz Sound carrier relative to video carrier = 5.5 MHz; Total vision bandwidth : 6.25 MHz; FM sound bandwidth including guardbands : 750 kHz RF channel bandwidth : 7 MHz	6M25C3F-- 750KF3EGN
5. Facsimile			
Analogue facsimile by sub-carrier frequency modulation of a single sideband emission with reduced carrier, monochrome	$B_n = C + \frac{N}{2} + DK$ K = 1.1 (typically)	N = 1 100 corresponding to an index of cooperation of 352 and a cylinder rotation speed of 60 rpm. Index of cooperation is the product of the drum diameter and number of lines per unit length. C = 1 900 D = 400 Hz Bandwidth : 2 890 Hz = 2.89 kHz	2K89R3CMN

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
Analogue facsimile; frequency modulation of an audio frequency sub-carrier which modulates the main carrier, single sideband suppressed carrier	$B_n = 2M + 2DK$ $M = \frac{N}{2}$ $K = 1.1$ (typically)	N = 1 100 D = 400 Hz Bandwidth : 1 980 Hz = 1.98 kHz	1K98J3C--
6. Composite Emissions			
Double sideband, television relay	$B_n = 2C + 2M + 2D$	Video limited to 5 MHz, audio on 6.5 MHz frequency modulated sub-carrier, sub-carrier deviation = 50 kHz $C = 6.5\ 10^6$ $D = 50\ 10^3$ Hz M = 15 000 Bandwidth : 13.13×10^6 Hz = 13.13 MHz	13M1A8W--
Double sideband radio-relay system, frequency division multiplex	$B_n = 2M$	10 voice channels occupying base-band between 1 and 164 kHz; M = 164 000 Bandwidth : 328 000 Hz = 328 kHz	328KA8E--
Double sideband emission of VOR with voice (VOR = VHF omnidirectional radio range)	$B_n = 2C_{max}+2M+2DK$ K = 1 (typically)	The main carrier is modulated by : - a 30 Hz sub-carrier - a carrier resulting from a 9 960 Hz tone frequency modulated by a 30 Hz tone - a telephone channel - a 1 020 Hz keyed tone for continual Morse identification C_{max} = 9 960 M = 30 D = 480 Hz Bandwidth : 20 940 Hz = 20.94 kHz	20K9A9WWF

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
Independent sidebands; several telegraph channels with error correction together with several telephone channels with privacy; frequency division multiplex	B_n = sum of M for each sideband	Normally composite systems are operated in accordance with standardized channel arrangements (e.g. CCIR-Rec. 348-2). 3 telephone channels and 15 telegraphy channels require the bandwidth 12 000 Hz = 12 kHz	12K0B9WWF
III-A. FREQUENCY MODULATION			
1. Signal with Quantized or Digital Information			
Telegraphy without error-correction (single channel)	$B_n = 2M + 2DK$ $M = \frac{B}{2}$ $K = 1.2$ (typically)	B = 100 D = 85 Hz (170 Hz shift) Bandwidth : 304 Hz	304HF1BBN
Telegraphy, narrow-band direct printing with error-correction (single channel)	$B_n = 2M + 2DK$ $M = \frac{B}{2}$ $K = 1.2$ (typically)	B = 100 D = 85 Hz (170 Hz shift) Bandwidth : 304 Hz	304HF1BCN
Selective calling signal	$B_n = 2M + 2DK$ $M = \frac{B}{2}$ $K = 1.2$ (typically)	B = 100 D = 85 Hz (170 Hz shift) Bandwidth : 304 Hz	304HF1BCN
Four-frequency Diplex telegraphy	$B_n = 2M + 2DK$ B = Modulation rate in bauds of the faster channel. If the channels are synchronized : $M = \frac{B}{2}$ (otherwise M = 2B) K = 1.1 (typically)	Spacing between adjacent frequencies = 400 Hz; Synchronized channels B = 100 M = 50 D = 600 Hz Bandwidth : 1 420 Hz = 1.42 kHz	1K42F7BDX

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
2. Telephony (Commercial Quality)			
Commercial telephony	$B_n = 2M + 2DK$ K = 1 (typically, but under certain conditions a higher value may be necessary)	For an average case of commercial telephony, D = 5 000 Hz M = 3 000; Bandwidth : 16 000 Hz = 16 kHz	16K0F3EJN
3. Sound Broadcasting			
Sound broadcasting	$B_n = 2M + 2DK$ K = 1 (typically)	Monaural D = 75 000 Hz, M = 15 000 Bandwidth : 180 000 Hz = 180 kHz	180KF3EGN
4. Facsimile			
Facsimile by direct frequency modulation of the carrier; black and white	$B_n = 2M + 2DK$ $M = \frac{N}{2}$ K = 1.1 (typically)	N = 1 100 elements/sec; D = 400 Hz Bandwidth : 1 980 Hz = 1.98 kHz	1K98F1C--
Analogue facsimile	$B_n = 2M + 2DK$ $M = \frac{N}{2}$ K = 1.1 (typically)	N = 1 100 elements/sec; D = 400 Hz Bandwidth : 1 980 Hz = 1.98 kHz	1K98F3C--
5. Composite Emissions (see Table III-B)			
Radio-relay system, frequency division multiplex	$B_n = 2f_p + 2DK$ K = 1 (typically)	60 telephone channels occupying baseband between 60 and 300 kHz; rms per-channel deviation : 200 kHz; continuity pilot at 331 kHz produces 100 kHz rms deviation of main carrier. $D = 200 \times 10^3 \times 3.76 \times 2.02 = 1.52 \times 10^6$ Hz; $f_p = 0.331 \times 10^6$ Hz; Bandwidth : 3.702×10^6 Hz = 3.702 MHz	3M70F8EJF

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
Radio-relay system; frequency division multiplex	$B_n = 2M + 2DK$ $K = 1$ (typically)	960 telephone channels occupying baseband between 60 and 4 028 kHz; rms per-channel deviation 200 kHz; continuity pilot at 4 715 kHz produces 140 kHz rms deviation of main carrier $D = 200 \times 10^3 \times 3.76 \times 5.5$ $= 4.13 \times 10^6$ Hz; $M = 4.028 \times 10^6$; $f_p = 4.715 \times 10^6$; $(2M + 2DK) > 2f_p$ Bandwidth : 16.32×10^6 Hz = 16.32 MHz	16M3F8EJF
Radio-relay system; frequency division multiplex	$B_n = 2f_p$	600 telephone channels occupying baseband between 60 and 2 540 kHz; rms per-channel deviation 200 kHz; continuity pilot at 8 500 kHz produces 140 kHz rms deviation of main carrier $D = 200 \times 10^3 \times 3.76 \times 4.36$ $= 3.28 \times 10^6$ Hz; $M = 2.54 \times 10^6$; $K = 1$; $f_p = 8.5 \times 10^6$; $(2M + 2DK) < 2f_p$ Bandwidth : 17×10^6 Hz = 17 MHz	17M0F8EJF
Stereophonic sound broadcasting with multiplexed subsidiary telephony sub-carrier	$B_n = 2M + 2DK$ $K = 1$ (typically)	Pilot tone system; $M = 75\ 000$; $D = 75\ 000$ Hz; Bandwidth : 300 000 Hz = 300 kHz	300KF8EHF

III-B. MULTIPLYING FACTORS FOR USE IN COMPUTING D, PEAK FREQUENCY DEVIATION, IN FM FREQUENCY DIVISION MULTIPLEX (FM/FDM) MULTI-CHANNEL EMISSIONS

For FM/FDM systems the necessary bandwidth is :

$B_n = 2M + 2DK.$

The value of D, or peak frequency deviation, in this formula for B_n is calculated by multiplying the rms value of per-channel deviation by the appropriate "Multiplying factor" shown below.

In the case where a continuity pilot of frequency f_p exists above the maximum modulation frequency, M, the general formula becomes :

$B_n = 2f_p + 2DK.$

In the case where the modulation index of the main carrier produced by the pilot is less than 0.25, and the rms frequency deviation of the main carrier produced by the pilot is less than or equal to 70 % of the rms value of per-channel deviation, the general formula becomes either

$B_n = 2f_p$ or $B_n = 2M + 2DK$

whichever is greater.

Number of telephone channels, N_c	Multiplying factor [1]	
	(peak factor) x antilog	$\left[\frac{\text{value in dB above modulation reference level}}{20}\right]$
$3 < N_c < 12$	4.47 x antilog	$\left[\frac{\text{a value in dB specified by the equipment manufacturer or station licensee, subject to administration approval}}{20}\right]$
$12 \leqslant N_c < 60$	3.76 x antilog	$\left[\frac{2.6 + 2 \log N_c}{20}\right]$
$60 \leqslant N_c < 240$	3.76 x antilog	$\left[\frac{-1 + 4 \log N_c}{20}\right]$
$N_c \geqslant 240$	3.76 x antilog	$\left[\frac{-15 + 10 \log N_c}{20}\right]$

[1] In the above chart, the multipliers 3.76 and 4.47 correspond to peak factors of 11.5 dB and 13.0 dB, respectively.

Description of Emission	Necessary Bandwidth		Designation of Emission
	Formula	Sample Calculation	
IV. PULSE MODULATION			
1. Radar			
Unmodulated pulse emission	$B_n = \frac{2K}{t}$ K depends upon the ratio of pulse duration to pulse rise time. Its value usually falls between 1 and 10 and in many cases it does not need to exceed 6	Primary Radar Range resolution : 150 m. K = 1.5 (triangular pulse where $t \simeq t_r$, only components down to 27 dB from the strongest are considered) Then $t = \frac{2 \text{ (range resolution)}}{\text{velocity of light}}$ $= \frac{2 \times 150}{3 \times 10^8}$ $= 1 \times 10^{-6}$ seconds Bandwidth : 3×10^6 Hz = 3 MHz	3M00PONAN
2. Composite Emissions			
Radio-relay system	$B_n = \frac{2K}{t}$ K = 1.6	Pulse position modulated by 36 voice channel baseband; pulse width at half amplitude = 0.4 μs; Bandwidth : 8×10^6 Hz = 8 MHz (Bandwidth independent of the number of voice channels)	8M00M7EJT

INTERNATIONAL TELECOMMUNICATION UNION

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WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 562
9 November 1979

E

B.10

PLENARY MEETING

10TH SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

Source	Document No.	Title
C.5	496 + 497	Resolution AG — Protection of Radiocommunication Services against Interference caused by Radiation from Industrial, Scientific, and Medical Equipment
		Recommendation G — Convening of a WARC for the Planning of the HF Bands Allocated to the Broadcasting Service
		Recommendation H — Preparation of the Technical Information Necessary for the WARC on HF Broadcasting
		Recommendation I — Studies for the Introduction of a Single Sideband Technique in the HF Bands allocated to the Broadcasting Service in preparation for the WARC on HF Broadcasting
C.4	473 + 474	Recommendation E — Studies and Prediction of Radio Propagation and Radio Noise
		Recommendation F — Improvement of protection of distress and safety frequencies, and those related to distress and safety against harmful interference

P. BASSOLE
Chairman of the
Editorial Committee

Annex: 10 pages

BLUE PAGES

RESOLUTION AG

Relating to the Protection of Radiocommunication Services against Interference caused by Radiation from Industrial, Scientific and Medical (ISM) Equipment

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that ISM equipment generates and uses locally radio frequency energy, whereby outward radiation cannot always be avoided;

b) that there is an increasing amount of ISM equipment working on various frequencies throughout the spectrum;

c) that in some cases a considerable part of the energy may be radiated by ISM equipment outside its working frequency;

d) that some radio services, especially those using low field strengths, may suffer interference caused by radiation from ISM equipment, a risk which is unacceptable particularly in the case of radionavigation or {other} safety services; {}

e) that, in order to avoid the uncontrolled risk of interference to radiocommunication services:

i) the preceding Radio Conferences of Atlantic City, 1947, and Geneva, 1959, have designated some frequency bands within which the radiocommunication services must accept harmful interference produced by ISM equipment;

ii) this Conference has accepted an increase in the number of bands to be designated for ISM equipment, but only on the condition that limits of radiation from such equipment be specified within the bands newly designated for worldwide use and outside all the bands designated for ISM equipment;

resolves

that, to ensure that radiocommunication services are adequately protected, studies are urgently required on the limits to be imposed on the radiation from ISM equipment in the entire radio spectrum, particularly in the newly designated bands;

invites the CCIR

1. to continue, in collaboration with the CISPR and the IEC, its studies relating to radiation from ISM equipment in the entire radio spectrum in order to ensure adequate protection of radiocommunication services;

2. to specify as soon as possible, in the form of Recommendations, the limits to be imposed on radiation from ISM equipment inside and outside the bands designated for their use in the Radio Regulations.

Priority should be given to the studies which would permit the formulation of a Recommendation relating to the frequency bands, newly designated for use by ISM equipment by this Conference, which are listed below:

[ ]
[ ]
[ ];

invites the next competent World Administrative Radio Conference

to resolve the problem of interference from ISM equipment to radiocommunication services taking into account these CCIR Recommendations.

RECOMMENDATION G

Relating to the Convening of a World Administrative Radio Conference for the Planning of the HF Bands Allocated to the Broadcasting Service

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the existing situation in the HF bands allocated exclusively to the broadcasting service is not satisfactory;

b) that it is important to ensure that all countries are guaranteed free and equal rights to the use of these bands;

recommends

1. that the use of the exclusive [and shared] HF bands allocated to the broadcasting service (excluding those bands reserved for broadcasting in the Tropical Zone) should be the subject of planning by a World Administrative Radio Conference; [1]

2. that the planning be based on DSB (double sideband) emissions. Consideration should also be given to the manner in which an SSB (single sideband) system could be introduced progressively without impairing the DSB emissions;

3. that this Conference referred to in recommends 1. should be held in two sessions;

4. that the first session

4.1 is to establish the technical parameters to be used for planning and the principles governing the use of the HF bands allocated to the broadcasting service and in particular:

4.1.1 the power appropriate to HF broadcasting in conjunction with the other relevant technical factors,

4.1.2 the needs of each country for national broadcasting,

4.1.3 the maximum number of frequencies to be used for the broadcasting of the same programme to the same zone,

4.1.4 a specification of an SSB system suitable for future use for HF broadcasting;

4.2 should also decide the planning principles to be used and the method of planning to be adopted by the second session;

5. that, at its second session, to be held not sooner than 12 months nor later than 18 months after the first session, the conference:

5.1 should carry out the planning according to the principles and the method established at the first session;

5.2 should review and, where necessary, revise the relevant provisions of the Radio Regulations relating to broadcasting in the HF bands;

urges Administrations,

until the Conference is held, to use no greater transmitter power than that required for satisfactory reception and to ensure that the number of frequencies used is the minimum necessary;

draws the attention of the Administrative Council

to the urgency of this Conference; and

invites the Administrative Council

to take all necessary steps for the convening of the Conference, the first session of which shall be held as soon as possible after the next CCIR Plenary Assembly and with the least possible delay as defined in Article 58 (No. 303) of the Convention;

requests the IFRB

to carry out the necessary engineering studies and preparations, including those envisaged in No. 4894/657 of the Radio Regulations;

requests the CCIR

to accelerate the studies described in Recommendations H and I.

RECOMMENDATION H

Relating to the Preparation of the Technical Information Necessary for the World Administrative Radio Conference on HF Broadcasting

The World Administrative Radio Conference, Geneva, 1979,

considering

that a considerable amount of technical information relating to HF broadcasting is already available in CCIR texts, nevertheless there are some subjects needing further studies and, in some cases, adaptation to make them suitable for use in planning;

noting in particular

a) that the CCIR has recommended a method of estimating field strength and transmission loss in band 7 (HF) based on the best information available, and is developing a new computerized method which incorporates the special elements considered necessary for improving the accuracy of these estimations at medium and long distances and in equatorial and high latitude regions;

b) that there is insufficient information relating to propagation predictions in many equatorial areas;

c) that the use of directional antennae is essential for efficient use of the spectrum in band 7 (HF) and that radiation in directions other than the desired direction may cause interference;

requests the CCIR

1. to complete its work in respect of the improved computerized prediction method (Recommendation No. 533) paying special attention to medium and long distance transequatorial paths and to high latitude regions;

2. to adapt the present method of propagation predictions in order to make it more suitable for broadcasting and to recommend suitable values of solar indices for use in planning;

3. to make Recommendations where these do not already exist concerning appropriate protection ratios to be adopted, including cases where the unwanted [transmissions] are of a different type, and the appropriate values of channel spacing; and the minimum signal-to-noise ratio required for satisfactory reception; [ ]

4. to ensure that the CCIR Book of Antenna Diagrams includes all principal types of antennae in common use;

5. to prepare and present data on the practical performance of directional antennae in a form suitable for planning purposes;

invites Administrations

to participate actively in these studies and to provide the CCIR with available data on the questions listed above and especially on field strength observations in band 7 (HF) for comparison with predicted values.

RECOMMENDATION I

Relating to Studies for the Introduction of Single Sideband (SSB) Technique in the HF Bands allocated to the Broadcasting Service, in Preparation for the World Administrative Radio Conference on HF Broadcasting

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the use of SSB leads to a more efficient utilization of the spectrum;

b) that the introduction of this technique for broadcasting in the HF bands creates both technical and economic problems;

requests the CCIR

to accelerate the appropriate studies regarding the introduction of the SSB technique for broadcasting in the HF bands and the specification of a suitable SSB system, paying particular attention to the economic problems associated with transmitters and receivers;

invites Administrations

to provide the CCIR with information on this subject.

RECOMMENDATION E [1]

**To Administrations and the CCIR
Relating to Studies and Prediction of Radio
Propagation and Radio Noise**

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the efficient utilization of radio frequencies depends upon the use of the most reliable technical data and standards, especially in those parts of the radio frequency spectrum which are most congested;

b) that the satisfaction of new frequency requirements and the development of radiocommunication services can be facilitated by improvements, where these are necessary, in the technical standards at present used by the IFRB;

c) that former Appendix A of the Radio Regulations, Geneva, 1968, entitled, "Studies and Prediction of Radio Propagation and Radio Noise" recognized the importance of radio propagation and radio noise data as vital for the maximum utilization of radio frequencies and efficient planning of radiocommunication services;

d) that a principal objective of that Appendix had been the establishment and operation of worldwide systems of observation stations to obtain data on radio noise and on ionospheric, tropospheric and other phenomena affecting radio propagation;

e) that administrations provide, by the best means possible, for the study, coordination and rapid dissemination of such data and of the predictions relating to these data; and endeavour as well to promote further studies on radio propagation and radio noise through the medium of the CCIR;

f) that the CCIR has adopted programmes of studies covering many of these problems;

requests the CCIR

1. to encourage and assist in initiating the study of radio propagation and radio noise in those areas where an adequate system of observation stations has not yet been established;

2. to continue the studies of radio propagation and radio noise and to take measures for the coordination of the results of these studies carried out in different countries;

3. to give particular attention to those studies which will assist in the further refinement of the technical standards used by the IFRB;

4. to report regularly on these matters, even if the studies have not been completed;

---

[1] Replaces Recommendation No. 4 of the Administrative Radio Conference, Geneva, 1959.

5. to continue regular consultation with other organizations undertaking studies of propagation such as the International Scientific Radio Union, in order to attain the maximum possible degree of coordination;

recommends that administrations

1. initiate the study of radio propagation and radio noise in those areas where an adequate system of observation stations has not yet been established, and communicate the results of their studies to the CCIR;

2. continue to establish and to operate a worldwide system of observation stations to obtain data on radio noise and on ionospheric, tropospheric and other phenomena affecting radio propagation;

3. continue to provide, by the best means possible, for the study, coordination and rapid dissemination of such data and of the predictions relating to them;

4. take note, in formulating and carrying out their propagation work, of the relevant CCIR Recommendations, Reports, Questions and Study Programmes, particularly regarding the conclusions so far reached, the planning of future studies and the recommended forms of presentation contained in these documents.

RECOMMENDATION F

Relating to the improvement of protection of distress and safety frequencies, and those related to distress and safety, against harmful interference

The World Administrative Radio Conference, Geneva, 1979,

considering

a) the importance of minimizing the danger of harmful interference to frequencies used for the safeguarding of human life;

b) the unanimous agreement by this Conference in its consideration of Article **N16** concerning interference, that improved protection against harmful interference should be given to distress and safety frequencies and those related to distress and safety;

c) that such improved protection could be achieved, inter alia, by including provisions in the Radio Regulations ensuring that all tests on these frequencies should be accomplished on artificial antennae or with reduced power, wherever practicable;

d) that these provisions pertain to Article **N35** concerning frequencies for distress and safety;

noting, however,

that this Conference is not competent to revise Article **N35**;

invites

administrations to study this matter and to submit proposals for consideration by the next competent World Administrative Radio Conference.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 563-E
8 November 1979
Original : English

COMMITTEE 5

International Amateur Radio Union (IARU)

USE OF THE BAND 435 - 438 MHz BY THE AMATEUR-SATELLITE SERVICE

In view of the number of proposals to introduce the fixed and mobile services in the band 430 - 440 MHz, the IARU would like to acquaint delegations with the activities now taking place, and planned for the immediate future, by the amateur-satellite service in the band 435 - 438 MHz under the provisions of FN 3644/320A. This footnote was introduced at the 1971 WARC/ST, and provided the only allocation between 146 MHz and 24 GHz which has been available to the amateur-satellite service since that time. Operation by amateur-satellites is on the basis that harmful interference shall not be caused to other services operating in accordance with the Table. Until now, radiolocation and amateur services have been the only other services listed in the Table. Experience has shown that this sharing arrangement is satisfactory, in the former case because of the different nature of emissions in the radiolocation and amateur-satellite services, and in the second case because of frequency planning undertaken by the amateurs themselves. However, because amateur satellites are designed to be used with earth stations having effective radiated powers of 100 watts or less, sharing with the fixed and mobile services would create new problems for the amateur-satellite service.

The first amateur satellite to use the 435 - 438 MHz band was OSCAR 6, launched on 15 October 1972, which contained a beacon transmitter operating in the band. The first to have a communications transponder operating in this band was OSCAR 8, which was launched on 5 March 1978 and is still in operation. A satellite package which is now in the final stages of construction, called Phase III-A, is scheduled for launch early next year by the European Space Agency (ESA) and will include a transponder with an up-link in the 435 MHz band and a down-link in the 144 MHz band. It is expected that future satellites will make extensive use of the band.

Radio amateurs have designed and built the ten amateur satellites launched to date, almost without exception as an international effort. Radio amateurs in the Federal Republic of Germany, Australia, Canada, the USA, Hungary, Japan, the United Kingdom, and the USSR have been especially active in this effort. Financing of the satellite construction is provided entirely by voluntary contributions from the amateur radio community. The effort is entirely non-profit, and has the same objectives as those of the amatuer service : self-training, intercommunication, and technical investigations.

Amateur satellites have been used in educational programmes in a number of countries, and are particularly well suited to be a low-cost means of transferring space communications technology to individuals in developing countries and elsewhere. An educational programme using the Phase III-A satellite is now under development in Africa in cooperation with UNESCO.

The technical contributions of the amateur-satellite service are chronicled in all of the recent reports by the ITU "On Telecommunication and the Peaceful Uses of Outer Space". Some of these contributions are listed in Document No. 42-E, page 20.

It is hoped that Administrations will reconsider their requirements for fixed and mobile services in the 430 - 440 MHz band, and especially in the narrow segment 435 - 438 MHz, in view of the amount of spectrum available to fixed and mobile both above and below this band. The benefits to be gained from recognition of the continuing requirements of the amateur-satellite service more than outweigh the modest amount of spectrum involved.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 564-E
9 November 1979
Original : English

PLENARY MEETING

EIGHTH REPORT OF COMMITTEE 4

In its seventh meeting, Committee 4 discussed Document No. 453 relative to Article N2: Nomenclature of the Frequency and Wavelength Bands Used in Radiocommunication. An amendment was proposed by Iraq to suppress three frequency ranges at the end of the table (band numbers 13 - 15 for frequencies from 3 to 3000 THz) and to add a general sentence about bands above 3000 GHz and the "unit-Terahertz (THz)".

This amendment was accepted with a majority 19 : 16 and with 16 abstentions.

The table was amended accordingly and has been transmitted to the Editorial Committee for subsequent submission to the Plenary Meeting (see Document No. 565).

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 565-E
9 November 1979
Original : English

COMMITTEE 9

EIGHTH SERIES OF TEXTS FROM COMMITTEE 4

TO THE EDITORIAL COMMITTEE

The text mentioned in Document No. 564 (Article N2) is hereby submitted to the Editorial Committee.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

A N N E X

ARTICLE N2

Nomenclature of the Frequency and Wavelength Bands Used in Radiocommunication

MOD 3183/112

The radio spectrum shall be subdivided into nine frequency bands, which shall be designated by progressive whole numbers in accordance with the following Table. As the unit of frequency is the hertz (Hz), frequencies shall be expressed :

- in kilohertz (kHz) up to and including 3 000 kHz
- in megahertz (MHz) thereafter up to and including 3 000 MHz
- in gigahertz (GHz) thereafter up to and including 3 000 GHz.

For bands above 3 000 GHz, i.e. centimillimetric waves, micrometic waves, decimicrometric waves, it would be appropriate to use "terahertz (THz)".

However, where adherence to these provisions would introduce serious difficulties, for example in connection with the notification and registration of frequencies, the lists of frequencies and related matters, reasonable departures may be made.

Band Number	Symbols	Frequency range (lower limit exclusive, upper limit inclusive)	Corresponding metric subdivision	Metric Abbreviations
4	VLF	3 to 30 kHz	myriametric waves	0.Mam
5	LF	30 to 300 kHz	kilometric waves	0.km
6	MF	300 to 3 000 kHz	hectometric waves	0.hm
7	HF	3 to 30 MHz	decametric waves	0.dam
8	VHF	30 to 300 MHz	metric waves	0.m
9	UHF	300 to 3 000 MHz	decimetric waves	0.dm
10	SHF	3 to 30 GHz	centimetric waves	0.cm
11	EHF	30 to 300 GHz	millimetric waves	0.mm
12		300 to 3 000 GHz	decimillimetric waves	

Note 1 : "Band number N" (N = band number) extends from 0.3×10^N Hz to 3×10^N Hz.

Note 2 : Prefix : k = kilo (10^3), M = mega (10^6), G = giga (10^9), T = tera (10^{12})

ADD 3183A

In communications between Administrations and the ITU no names, symbols or abbreviations should be used for the various frequency bands other than those specified in 3183/112.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 566-E
9 November 1979
Original : English

COMMITTEE 7

Thailand

REQUEST FOR ALLOCATION OF ADDITIONAL CALL SIGN SERIES

In view of the anticipated future growth of maritime communications in our country, we herewith request the allocation of at least two new call sign series to Thailand.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 567-E
9 November 1979
Original : English

PLENARY MEETING

NINTH REPORT OF COMMITTEE 4

Committee 4 has unanimously adopted one draft Resolution (Document No. 475, pages 2 and 3) and one draft Recommendation (Document No. 500, page 6).

The texts have been transmitted to the Editorial Committee for subsequent submission to the Plenary Meeting (see Document No. 568).

N. MORISHIMA
Chairman of Committee 4

UNION INTERNATIONALE DES TELECOMMUNICATIONS

CONFERENCE ADMINISTRATIVE MONDIALE DES RADIOCOMMUNICATIONS

(Genève, 1979)

Corrigendum No. 1 au
Document No. 568-F/E/S
14 November 1979

COMMISSION 9
COMMITTEE 9
COMISIÓN 9

NEUVIEME SERIE DE TEXTES TRANSMIS PAR LA COMMISSION 4 A LA COMMISSION DE REDACTION

page 3, demande 2., dernière ligne :
supprimer "et à l'IFRB".

NINTH SERIES OF TEXTS FROM COMMITTEE 4 TO THE EDITORIAL COMMITTEE

page 3, requests 2., last line :
cancel "and to the IFRB".

NOVENA SERIE DE TEXTOS SOMETIDOS POR LA COMISIÓN 4 A LA COMISIÓN DE REDACCIÓN

página 3, solicita 2., último renglón
suprímase " y a la IFRB".

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 568-E
9 November 1979
Original : English

COMMITTEE 9

NINTH SERIES OF TEXTS FROM COMMITTEE 4

TO THE EDITORIAL COMMITTEE

The text mentioned in Document No. 567, i.e. one draft Resolution (Document No. 475, pages 1 and 2) and one draft Recommendation (Document No. 500, page 6) is hereby submitted to the Editorial Committee.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

A N N E X

DRAFT RESOLUTION

Relating to the Propagation Information
Used in the Determination of Coordination Area

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that Appendix 28 of these Regulations provides a method for the determination of coordination area which incorporates certain material concerned with radiowave propagation;

b) that the propagation information contained in Appendix 28 is based directly or indirectly on propagation data given in the texts of the CCIR;

c) that CCIR studies of radiowave propagation are continuing, and therefore the conclusions of these studies are subject to change and may in future show the need to revise those sections of Appendix 28 which incorporate the propagation information;

recognizing

a) that a period of several years is generally required to accumulate sufficient data to form relaibale conclusions concerning radiowave propagation;

b) that for administrative reasons it is desirable that the propagation information used for the determination of coordination area should not be revised very frequently and, in any case, should be revised only if the effect of such revision on the size of the coordination area is significant;

c) that in Appendix 28 the coordination area is determined without the need for detailed knowledge of the propagation characteristics of individual paths, and it is desirable that this approach be maintained;

invites

the CCIR to continue to study propagation data concerned with the determination of coordination area, and to maintain the relevant CCIR texts in a format which would permit direct insertion into Appendix 28 in place of the existing sections 3, 4, 6 or Annex II;

resolves

1. that each Plenary Assembly of the CCIR should come to a conclusion as to whether, according to the propagation information given in the most recent CCIR Recommendations, any revision of sections 3, 4, 6 or Annex II of Appendix 28 of these Regulations is warranted;

2. that when a Plenary Assembly of the CCIR has come to a conclusion that a revision of sections 3, 4, 6 or Annex II of Appendix 28 is warranted, the Director of the CCIR shall so inform the Secretary-General of the ITU and transmit to him the proposed amendments to Appendix 28;

requests

1. that the Administrative Council then place, as an extraordinary item, on the agenda of the next world administrative radio conference, the consideration of the conclusion of the CCIR;

2. that if the said world administrative radio conference decides that Appendix 28 is to be revised, the Secretary-General, in consultation with the IFRB, incorporate the amendments agreed at said conference in a document which contains the new text of sections 3, 4, 6 or Annex II of Appendix 28 in a form suitable for direct substitution in the version of Appendix 28 then in force, and send this document to all Administrations and to the IFRB; and

decides

that from a date extablished by said radio conference, the revised text shall form the basis of all subsequent determinations of coordination area using Appendix 28.

DRAFT RECOMMENDATION No.

Relating to the Use of the Term "Channel" in the Radio Regulations

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the term "channel" has been used extensively in the Radio Regulations in the frequency allotment plans of Appendices 15, 17, 18, 25, 26 and 27;

b) that the term "channel" has a different meaning in other provisions of the Radio Regulations and for the various radiocommunication services;

c) that there should not be any ambiguity in the meaning of the term "channel" in its usage throughout the Radio Regulations;

invites

the CCIR to define the term "channel" so that it may be used consistently and without confusion in the Radio Regulations in all working languages of the ITU.

BLUE PAGES

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 569
9 November 1979

E

B.11

PLENARY MEETING

11th SERIES OF TEXTS SUBMITTED BY THE EDITORIAL COMMITTEE TO THE PLENARY MEETING

The following texts are submitted to the Plenary Meeting for first reading:

Source	Document No.	Title
C.6	531 + 532	Resolution AH – Circulation of Current Information
		Resolution AI – The use of Frecuency Assignments to Terrestrial and Space Radiocommunications
		Resolutions Nos. 15; Mar 5; Mar 19; Spa2 – 1; Mar2 – 7; Mar2 – 8; Mar2 – 14; Sat – 5; Sat – 6; Sat – 9; Aer2 – 2; Aer2 – 3; Aer2 – 4; Aer2 – 5 Recommendations Nos. 21; Spa2 – 1; Aer2 – 3; Aer2 – 4
SUP		Resolutions Nos. Sat – 1; Sat – 2

P. BASSOLE
Chairman of the
Editorial Committee

Annex: 7 pages

RESOLUTION AH

Relating to the Circulation of Current Information on CCIR Recommendations Referred to in the Radio Regulations

The World Administrative Radio Conference, Geneva, 1979,

noting

a) that reference is made in the Radio Regulations to specific CCIR Recommendations as well as to "relevant CCIR Recommendations";

b) that Resolution No. **Spa2** – 6 provides for consultation on the applicability of those CCIR Recommendations relating to the technical criteria for sharing frequency bands between space radiocommunication and terrestrial radiocommunication services or between space radiocommunication services;

c) that the CCIR Recommendations may be revised by CCIR Plenary Assemblies, with consequent changes of reference numbers;

considering

a) that a correct application of the Radio Regulations requires the identification by administrations of the relevant CCIR Recommendations to be taken into account;

b) that information on the up-dating of these Recommendations is of the utmost importance;

invites the CCIR

1. to identify and list those provisions of the Radio Regulations containing a reference to a specific CCIR Recommendation or to a "relevant CCIR Recommendation" together with the reference numbers and titles of those Recommendations;

2. to instruct the Director of the CCIR to provide the Secretary-General with the information required to up-date the list;

requests the Secretary-General

to communicate to all administrations the list of those Recommendations as well as any subsequent up-dating thereof.

BLUE PAGES

RESOLUTION AI [1]

Relating to the Use of Frequency Assignments to Terrestrial and Space Radiocommunication Stations in the Band 11.7 - 12.2 GHz in Region 3 and in the Band 11.7 - 12.5 GHz in Region 1

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977, adopted Resolution No. **Sat – 2**;

b) that No. 405BA of the Radio Regulations provides that in the band 11.7 - 12.2 GHz in Region 3 and in the band 11.7 - 12.5 GHz in Region 1, existing and future fixed, mobile and broadcasting services shall not cause harmful interference to broadcasting-satellite stations operating in accordance with the decisions of that Conference;

c) that the decisions of that Conference included a Plan for stations in the broadcasting-satellite service;

d) that the coordination procedures described in Resolution No. **Spa2 – 3** are to be applied only until the entry into force of plans pursuant to Resolution No. **Spa2 – 2**;

resolves

1. that all administrations using or intending to use frequency assignments to terrestrial stations in the bands covered by the Plan shall decide as soon as possible, whether or not these assignments will affect frequency assignments in accordance with the Plan (if necessary, with the assistance of the IFRB);

2. that administrations may continue to use frequency assignments which are not in accordance with the Plan, provided that agreement is reached with the administration whose broadcasting-satellite stations are affected;

3. that the administrations seeking agreement shall inform the IFRB of the terms of the agreement reached;

---

1 Replaces Resolution No. **Sat – 2** of the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977.

4. that, upon receipt of such information, the IFRB shall insert a symbol in the Remarks column of the Master Register indicating the duration specified in the agreement. The duration specified shall also be published in a special section of its weekly circular;

5. that Resolution No. **Sat – 2** is abrogated and superseded by this Resolution;

invites the IFRB

to assist administrations in implementing the provisions of this Resolution.

Explanatory Note

This Resolution contains the sections of Resolution No. **Sat – 2** that remain relevant. In particular, "considerings" b) and d) of this Resolution are identical with "considerings" b) and c) of Resolution No. **Sat – 2**, respectively; "resolves" 1, 2, 3 and 4 are identical with "resolves" 1, 3, 4 and 5 of Resolution No. **Sat – 2**, respectively.

NOC

RESOLUTION No. 15

Relating to Inter-ship Frequencies in the Bands between 1 605 and 3 600 kHz in Region 1

NOC

RESOLUTION No. Mar 5

Relating to the Use of Single Sideband Technique in the Radiotelephone Maritime Mobile Service Bands between 1 605 and 4 000 kHz

NOC

RESOLUTION No. Mar 19

Relating to the Manner in which the IFRB shall treat Notifications dealing with Frequency Assignments to Oceanographic Stations

NOC

RESOLUTION No. Spa2 – 1

Relating to the Use by all Countries, with equal Rights, of Frequency Bands for Space Radiocommunication Services

NOC

RESOLUTION No. Mar2 – 7

Relating to the Use and Notification of Paired Frequencies Reserved for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems in the HF Bands allocated to the Maritime Mobile Service

NOC

RESOLUTION No. Mar2 – 8

Relating to the Notification of Non-Paired Ship Station Frequencies used for Narrow-Band Direct-Printing Telegraph and Data Transmission Systems

NOC

RESOLUTION No. Mar2 — 14

Relating to the Channel Spacing of Frequencies allocated to the Maritime Mobile Service in the Band 156 - 174 MHz

NOC

RESOLUTION No. Sat — 5

Relating to the coordination, notification and recording in the Master International Frequency Register of frequency assignments to stations in the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Sat — 6

Relating to the coordination, notification and recording in the Master International Frequency Register of assignments to stations in the fixed-satellite service with respect to stations in the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Sat — 9

Relating to the submission of requirements for the broadcasting-satellite service in Region 2

NOC

RESOLUTION No. Aer2 — 2

Relating to the Unauthorized Use of Frequencies in the Bands Allocated to the Aeronautical Mobile (R) Service

NOC

RESOLUTION No. Aer2 — 3

Relating to the Implementation of the New Arrangement Applicable to Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

NOC

RESOLUTION No. Aer2 – 4

Relating to the Treatment of Notices Concerning Frequency Assignments to Aeronautical Stations in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

NOC

RESOLUTION No. Aer2 – 5

Relating to the Implementation of the Frequency Allotment Plan in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service Between 2 850 and 17 970 kHz

NOC

RECOMMENDATION No. 21

Relating to Technical Provisions for Maritime Radiobeacons in the African Area

NOC

RECOMMENDATION No. Spa2 – 1

Relating to the Examination by World Administrative Radio Conferences of the Situation with Regard to Occupation of the Frequency Spectrum in Space Radiocommunications

NOC

RECOMMENDATION No. Aer2 – 3

Relating to Cooperation in the Efficient Use of World-Wide Frequencies in the Aeronautical Mobile (R) Service

NOC

RECOMMENDATION No. Aer2 – 4

Relating to the Transition from the Present to the New Frequency Allotment Plan in the Bands Allocated Exclusively to the Aeronautical Mobile (R) Service between 2 850 and 17 970 kHz

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SUP

RESOLUTION No. Sat – 1

Relating to the preparation and publication of information not contained in the broadcasting-satellite Plan for Regions 1 and 3

SUP

RESOLUTION No. Sat – 2
(replaced by Resolution AI)

Relating to the updating of the Master International Frequency Register for Regions 1 and 3 on the date of entry into force of the Final Acts

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 570-E
9 November 1979
Original : English

PLENARY MEETING

TENTH REPORT OF COMMITTEE 4

Committee 4 has unanimously adopted the texts for Article N17 (Document No. 521), for Article N33, Section IV B (Document No. 535), for Appendix 4 (Document No. 534) and for Recommendation No. 8 (Document No. 533).

The texts have been transmitted to the Editorial Committee for subsequent submission to the Plenary Meeting (see Document No. 571).

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 571-E
9 November 1979
Original : English

COMMITTEE 9

TENTH SERIES OF TEXTS FROM COMMITTEE 4

TO THE EDITORIAL COMMITTEE

The texts mentioned in Document No. 570, i.e. texts for Article N17, (Document No. 521), Article N33, Section IV B (Document No. 535), Appendix 4 (Document No. 534) and for Recommendation No. 8 (Document No. 533) are hereby submitted to the Editorial Committee.

The attention of Committee 9 is drawn to :

a) difficulties with the French translation of the term "spurious emission"; the present expression "émission / non essentielle /" is not satisfactory;

b) in revising Article N3 (see Document Nos. 406 and 474) and Appendix 5 (see Documents Nos. 462 and 474) the following equivalent terms were adopted :

"additional characteristics" (English)

"caractéristiques supplémentaires" (French)

"características suplementarias" (Spanish)

In MOD Recommendation No. 8 the English term "supplementary additional characteristics" is used. If here the equivalent terms given above still were used this would pose great difficulties for translation into French and Spanish. To overcome this difficulty MOD Recommendation No. 8 uses the following equivalent terms :

"additional characteristics" (English)

"caractéristiques additionnelles" (French)

"características adicionales" (Spanish)

Therefore, it is proposed, that the French and Spanish texts of Article N3 and Appendix 5 be amended accordingly.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

A N N E X

MOD

ARTICLE N17

NOC

Tests

NOC 5029/700

§ 1. (1) Before authorizing tests and experiments in any station, each administration, in order to avoid harmful interference, shall prescribe the taking of all possible precautions such as the choice of frequency and of time and the reduction or, in all cases where this is possible, the suppression of radiation. Any harmful interference resulting from tests and experiments shall be eliminated with the least possible delay.

MOD 5030/701

(2) ~~A station making emissions for tests, adjustments, or experiments, shall transmit, at slow speed and at frequent intervals its identification in accordance with the provisions of Article N23/19~~. For the identification of transmissions made during tests, adjustments or experiments see Article N23/19.

ADD 5030A

(2A) In the aeronautical radionavigation service, it is undesirable, for safety reasons, to transmit the normal identification during emissions conducted to check or adjust equipment already in service. Unidentified emissions should however be restricted to a minimum.

(NOC) 5031/702

(3) Signals for testing and adjustment shall be chosen in such a manner that no confusion will arise with a signal, abbreviation, etc., having a special meaning defined by these Regulations or by the International Code of Signals.

(NOC) 5032/703

(4) For testing stations in the mobile service see Nos. **7523**/1061, **7524**/1062 and **8814**/1293 to **8816**/1295.

MOD

ARTICLE N33

NOC

Radiodetermination Service and Radiodetermination-Satellite Service

NOC

Section IV. Radiobeacon Stations

NOC **6475**

B. Aeronautical Radiobeacons

MOD **6476 433** § 15. (1) The assignment of frequencies to aeronautical radiobeacons operating in the bands between / 160 and 415 / kHz shall be based on a protection ratio against interference of at least 15 dB for each beacon throughout its service area.

MOD **6477 434** **(2)** The radiated power should be kept to the minimum value necessary to give the desired field strength at the service range.

NOC **6478 435** **(3) The daylight service range of radiobeacons referred to in No. 6476/433 shall be based on the following field strengths:**

NOC **6479 436** **(4) *Regions 1 and 2***

- **70 microvolts per metre for radiobeacons north of 30° N.**
- **120 microvolts per metre for radiobeacons between 30° N and 30° S.**
- **70 microvolts per metre for radiobeacons south of 30° S.**

NOC **6480 437** **(5) *Region 3***

- **70 microvolts per metre for radiobeacons north of 40° N.**
- **120 microvolts per metre for radiobeacons between 40° N and 50° S.**
- **70 microvolts per metre for radiobeacons south of 50° S.**

MOD

APPENDIX 4

MOD

Table of Maximum Permitted Spurious Emission Power Levels

(See Article N4)

MOD

1. The following table indicates 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.

MOD

2. Spurious emission from any part of the installation other than the antenna and its transmission line, shall not have an effect greater than would occur if this antenna system were supplied with the maximum permitted power at that spurious emission frequency.

MOD
(PNG/111/377
as modified)

3. These levels shall not, however, apply to emergency position indicating radio beacon stations, emergency locator transmitters, ship's emergency transmitters, lifeboat transmitters, survival craft stations or maritime transmitters when used in emergency situations.

MOD
(PNG/111/377
as modified)

4. For technical or operational reasons, specific services may demand more stringent levels than those specified in the Table. The levels applied to these services shall be those agreed upon by the appropriate World Administrative Radio Conference. More stringent levels also can be fixed by specific agreement between Administrations concerned.

MOD
(≈ SPM 8,
SPM Report p.8.8)

5. For radiodetermination stations, until acceptable methods of measurement exist, the lowest practicable power of spurious emission should be achieved.

SUP

6. (transferred to Column A of the Table)

MOD

Frequency Band containing the assignment (lower limit exclusive, upper limit inclusive)	For any spurious component the attenuation (mean power within the necessary bandwidth relative to the mean power of the spurious component concerned) shall be at least that specified in Columns A and B below and the absolute mean power levels given shall not be exceeded (Note 1).	
	A	B
	Levels applicable until 1 January 1994 to transmitters now in use and to those installed before 2 January 1985	Levels applicable to transmitters installed after 1 January 1985 and to all transmitters after 1 January 1994
9 kHz to 30 MHz	40 decibels 50 milliwatts (Notes 2,3,4)	40 decibels 50 milliwatts (Notes 4, 7, 8)
30 to /¯235_7 MHz		
- mean power above 25 watts	60 decibels 1 milliwatt (Note 5)	60 decibels 1 milliwatt (Note 9)
- mean power 25 watts or less	40 decibels 25 microwatts (Notes 5,6)	40 decibels 25 microwatts

/235/ to /960/ MHz - mean power above 25 watts - mean power 25 watts or less	No level is specified for transmitters operating on assigned frequencies above 235 MHz. For these transmitters the power of spurious emissions shall be as low as practicable.	60 decibels 20 milliwatts (Notes 10,11) 40 decibels 25 microwatts (Notes 10,11)
/960/ MHz to /17.7/ GHz - mean power above 10 watts - mean power 10 watts or less		50 decibels 100 milliwatts (Notes 10,11,12,13) 100 microwatts (Notes 10,11,12,13)
Above /17.7/ GHz		Due to the diverse nature of technologies employed by services operating above /17.7/ GHz further study by the CCIR is required prior to specification of levels. To the extent possible, the values to be observed should be those shown in appropriate CCIR Recommendations. Until suitable Recommendations have been adopted, the lowest possible values achievable shall be employed (see Recommendation No. / /)

ADD

Notes referring to the Table of Maximum Permitted Spurious Emission Power Levels

MOD
(= SPM 11)

1. When checking compliance with the provisions of the Table, it shall be verified that the bandwidth of the measuring equipment is sufficiently wide to accept all significant components of the spurious emission concerned.

MOD
(= (MOD) ex.1)

2. For transmitters of mean power exceeding 50 kilowatts and which operate below 30 MHz over a frequency range approaching an octave or more, a reduction below 50 milliwatts is not mandatory, but a minimum attenuation of 60 decibels shall be provided and every effort should be made to comply with the level of 50 milliwatts.

MOD
(= (MOD) ex.2)

3. For hand-portable equipment of mean power less than 5 watts which operates in the frequency band below 30 MHz, the attenuation shall be at least 30 decibels, but every effort should be made to attain 40 decibels attenuation.

MOD
(= (MOD) ex.3)

4. For mobile transmitters which operate below 30 MHz any spurious component shall have an attenuation of at least 40 decibels without exceeding the value of 200 milliwatts, but every effort should be made to comply with the level of 50 milliwatts wherever practicable.

ADD
(= (MOD) ex.4)

5. For frequency modulated maritime mobile radio-telephone equipment which operates above 30 MHz, the mean power of any spurious emission falling in any other international maritime mobile channel, due to products of modulation, shall not exceed a level of 10 microwatts and the mean power of any other spurious emission on any discrete frequency within the international maritime mobile band shall not exceed a level of 2.5 microwatts. Where, exceptionally, transmitters of mean power above 20 watts are employed, these levels may be increased in proportion to the mean power of the transmitter.

ADD

6. For transmitters having a mean power of less than 100 milliwatts it is not mandatory to comply with an attenuation of 40 decibels provided that the mean power level does not exceed 10 microwatts.

ADD

7. For transmitters of a mean power exceeding 50 kilowatts which can operate on two or more frequencies covering a frequency range approaching an octave or more, whilst a reduction below 50 milliwatts is not mandatory, a minimum attenuation of 60 decibels shall be provided.

ADD

8. For hand-portable equipment of mean power less than 5 watts, the attenuation shall be 30 decibels, but every practicable effort should be made to attain 40 decibels attenuation.

ADD

9. Administrations may adopt a level of 10 milliwatts provided that harmful interference is not caused.

ADD

10. Where several transmitters feed a common antenna or closely spaced antennae on adjacent frequencies, every practicable effort should be made to comply with the levels specified.

ADD

11. Since these levels may not provide adequate protection for receiving stations in the radio astronomy and space services, more stringent levels might be considered in each individual case in the light of the geographical position of the stations concerned.

ADD

12. These levels are not applicable to systems using digital modulation techniques, but may be used as a guide. Values for these systems may be provided by the relevant CCIR Recommendations (see Recommendation No. / _/).

ADD

13. These levels are not applicable to stations in the space services, but the levels of their spurious emissions should be reduced to the lowest possible values compatible with the technical and economic constraints to which the equipment is subject. Values for these systems may be provided by the relevant CCIR Recommendation when available (see Recommendation No. / _/).

RECOMMENDATION No. 8

Supplementing the Additional Characteristics for
Classifying Emissions and Providing Additional Examples
for the Full Designation of Emissions,
Both as Given in Appendix 5

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that this Conference has adopted in Article N3 a new method for designating emissions based on CCIR Recommendation 507, Kyoto, 1978;

b) that an essential part of this new method is the classification of emissions;

c) that the new method of classifying emissions distinguishes between basic characteristics (first, second and third symbol) the use of which is mandatory, and additional characteristics (fourth and fifth symbol) the use of which is optional;

d) that the full classification of emissions consists of all of these five symbols;

e) that the list of the additional characteristics given in Appendix 5, Part A, may not be sufficiently complete to take account of future new technologies and may require relatively frequent supplementing;

f) that a CCIR Recommendation would provide a suitable means for such supplementing;

considering further

a) that a list of examples for the full designation of emissions is given in Appendix 5, Part B;

b) that this list, however, is not exhaustive and that for this reason No. 3209 of these Regulations stipulates that further examples may appear in the latest Recommendations of the CCIR and that these examples may also be published in the Preface to the International Frequency List;

invites the CCIR

1. to continue its studies on the classification of emissions with a view to supplementing the list of additional characteristics in order to cater for new technologies without, however, changing those additional characteristics which have already been agreed upon and which are contained in Appendix 5, Part A;

2. to provide examples for the full designation of emissions which are not contained in Appendix 5, Part B, taking also account of the supplementing mentioned in 1. above;

requests the International Frequency Registration Board to publish the supplementary additional characteristics and the additional examples mentioned in 1. and 2. above in the Preface to the International Frequency List as soon as they are available in relevant CCIR Recommendations;

and recommends that Administrations use the additional characteristics referred to in 1. above where appropriate.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 572-E
9 November 1979
Original : English

COMMITTEE 7

Socialist People's Libyan Arab Jamaheriya

REQUEST FOR THE ALLOCATION OF ADDITIONAL CALL SIGN SERIES

As a result of the development of telecommunications in the Socialist People's Libyan Arab Jamaheriya, the call sign series allocated to our Administration have been used up.

Therefore, the Libyan Administration requests accordingly the allocation of additional call sign series to fulfil its needs.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 573-E
11 November 1979
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COMMITTEE 6A

DRAFT

NOTE FROM THE CHAIRMAN OF COMMITTEE 6

TO THE CHAIRMAN OF COMMITTEE 7

During the examination of Article N13, Committee 6 has considered proposals relating to the inclusion of the principles of Resolution No. 5 in the body of Articles N11, N12 and N13, together with the text of a footnote relating to the notification by an administration of frequency assignments to stations situated in the territory of the country of another administration.

These draft texts, which are still under consideration, together with the text of the footnote are shown in the Annex for your information.

During the discussion, the question of territories over which there is dispute of sovereignty and of occupied territories was raised. It was agreed that, for radiocommunication stations situated in a territory over which there is a dispute of sovereignty, the application of the above-mentioned Articles of the Radio Regulations would not signify recognition by the Union of the sovereignty over the territory in question for the country concerned. Proposals were made to include, at the beginning of the Radio Regulations, a Preamble which would cover this subject.

Committee 7 is requested to consider the possibility of including a Preamble to that effect in the Radio Regulations, in a suitable position so that it would be applicable to all the relevant provisions of the Radio Regulations.

After Committee 7 has taken a decision on this matter, Committee 6 will examine the possible implications in Articles N11, N12 and N13.

J.K. BJORNSJO
Chairman of Working Group 6A

Annex

DRAFT TEXTS TO BE ENTERED IN ARTICLE N13 (AS WELL AS IN ARTICLES N11 AND N12)

ADD 4577A (3A) Frequency assignments to an Earth station shall be notified by the Administration of the country on whose territory [1] the Earth station is located, unless specifically stipulated otherwise by special arrangements in accordance with Article 31 of the Convention communicated to the Union by the Administrations. Frequency assignments to a space station shall be notified by the Administration (or one acting on behalf of a group of named Administrations) for which the space station is to be brought into use.

/ ADD 4577A.1 [1] If a notice is received from an Administration for a frequency assignment to an Earth station situated on a territory over which there is a dispute of sovereignty, an entry in the Master Register, after examination by the Board, does not signify recognition of the sovereignty of a country over the territory in question. /

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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10 November 1979
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PLENARY MEETING

SECOND REPORT OF COMMITTEE 7

(GENERAL ADMINISTRATION)

Committee 7 has had nine meetings to date. In the course of discussions on the proposals and documents allocated to Committee 7 in accordance with its terms of reference, the following decisions were taken :

1. Article N30

1.1 With respect to provision 6362 which had been left pending in the First Series of Texts from Committee 7 to the Editorial Committee (Document No. 439), a decision was taken in Committee 7 to retain the original text, i.e. NOC 6362.

2. Article N32

2.1 With respect to provision 6427 which had been left pending in the First Series of Texts from Committee 7 to the Editorial Committee (Document No. 439), a decision was taken in Committee 7 to retain the original text, i.e. NOC 6427.

3. Article N37

3.1 A Working Group (7A) was set up under the chairmanship of Mr. J.J. Foggon (Australia) to deal with all proposals concerning agenda item 2.6, which affected Articles N7, N12, N23, N34, N35, N36, N37, N39, N39A, N48 and N58.

3.2 Working Group 7A submitted a series of texts for new Section II of Article N37 in its report to Committee 7 (see Document No. 268). Committee 7 adopted unanimously the new Section II relating to medical transports and the necessary editorial changes in Article N37. The title of Article N37 was left pending.

4. Article N39

4.1 The revision of the texts of Article N39 was approved; the terms "transmission" and "emission" were left in square brackets pending a decision by Committee 5 (see Document No. 227).

4.2 The terms "arrangement" and "agreement" were left in square brackets for the purposes of the work of Committee 7 (see Document No. 236).

5. The revised texts as adopted by Committee 7 have been submitted to the Editorial Committee for subsequent submission to the Plenary Meeting (see Document No. 575).

H.L. VENHAUS
Vice-Chairman of Committee 7

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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10 November 1979
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COMMITTEE 9

SECOND SERIES OF TEXTS FROM COMMITTEE 7

TO THE EDITORIAL COMMITTEE

The texts mentioned in Document No. 574 are hereby submitted to the Editorial Committee.

H.L. VENHAUS
Vice-Chairman of Committee 7

Annex :

ANNEX

NOC 6472 1593
to
6474 1595

ARTICLE N37

Title PENDING

NOC **Section I. Urgency Signal and Messages**

NOC **6873** 1477
to
6885 1487

MOD Section II. Medical Transports

ADD 6885A § 7. The term "medical transports" as defined in the 1949 Geneva Conventions and Additional Protocols refers to any means of transportation by land, water or air, whether military or civilian, permanent or temporary, assigned exclusively to medical transportation and under the control of a competent authority of a Party to a conflict.

ADD 6885B § 8. For the purpose of announcing and identifying medical transports which are protected under the above mentioned Conventions, a complete transmission of the urgency signals described in Nos. 6873 and 6874 shall be followed by the addition of the single group "YYY" in radiotelegraphy and by the addition of the single word "Medical", pronounced as in French, "MAY-DEE-CAL", in radiotelephony.

ADD 6885C § 9. The frequencies specified in No. 6878 may be used by medical transports for the purpose of self-identification and to establish communications. As soon as practicable, communications shall be transferred to an appropriate working frequency.

ADD 6885D § 10. The use of the signal described in 6885B indicates that the message which follows concerns a protected medical transport. The message shall convey the following data :

a) the call sign or other recognized means of identification of the medical transport;

b) position of the medical transport;

c) number and type of medical transports;

d) intended route;

e) estimated time en route and of departure and arrival, as appropriate;

f) any other information, such as flight altitude, radio frequencies guarded, languages and secondary surveillance radar modes and codes.

ADD 6885E § 11. The provisions of Section I of this Article shall apply as appropriate to the use of the urgency signal by medical transports.

ADD 6885F § 12. The use of radiocommunications for announcing and identifying medical transports is optional; however, if they are used, the provisions of the Radio Regulations and this Section and of Articles N34 and N35 particularly apply. shall

III

(MOD) **Section ~~II~~. Safety Signal and Messages**

(MOD) **6886** 1488 13 §~~7~~.- (1) In radiotelegraphy, the safety signal consists of three repetitions of the group TTT, the individual letters of each group and the successive groups being clearly separated from each other. It shall be sent before the call.

NOC **6887** 1489 (2) In radiotelephony, the safety signal consists of the word SÉCURITÉ pronounced clearly as in French, spoken three times and transmitted before the call.

(MOD) **6888** 1490 Mar2 14 §~~8~~.- (1) The safety signal indicates that the station is about to transmit a message containing an important navigational or important meteorological warning.

NOC **6889** 1491 Mar2 (2) The safety signal and call shall be sent on one or more of the international distress frequencies (500 kHz, 2 182 kHz, 156·8 MHz) or on any other frequency which may be used in case of distress.

NOC **6890** 1492 Mar2 (3) The safety message which follows the call should be sent on a working frequency. A suitable announcement to this effect shall be made at the end of the call.

NOC **6891** 1492A Mar (4) In the maritime mobile service, safety messages shall generally be addressed to all stations. In some cases, however, they may be addressed to a particular station.

(MOD) **6892** 1493 15 Mar* ~~§ 9.~~ (1) With the exception of messages transmitted at fixed times, the safety signal, when used in the maritime mobile service, shall be transmitted towards the end of the first available period of silence (see No. **6696**/1130 for radiotelegraphy and No. **6708**/1335A for radiotelephony); the message shall be transmitted immediately after the period of silence.

NOC **6893** 1494 (2) In the cases prescribed in Nos. **6997**/1612, **7000**/1615 and **7004**/1619, the safety signal and the message which follows it shall be transmitted as soon as possible, and shall be repeated at the end of the first period of silence which follows.

(MOD) **6894** 1495 16 § ~~10.~~ All stations hearing the safety signal shall listen to the safety message until they are satisfied that the message is of no concern to them. They shall not make any transmission likely to interfere with the message.

6895 to **6919** NOT allocated.

ARTICLE N39

Special Services relating to Safety

NOC

Section I. Meteorological Messages

NOC 6981 1596 to 6991 1606

/(MOD)/ **6992** 1607 § 2. (1) The various national meteorological services mutually agree to prepare common [transmission] programmes so as to use the transmitters best situated to serve the regions concerned.

MOD **6993** 1608 (2) The meteorological (should be) observations contained in the classes mentioned in Nos. **6982**/1597 to **6985**/1600 ~~are, in principle,~~ drawn up in an international meteorological code, whether they are transmitted by or intended for mobile stations.

MOD **6994** 1609 § 3. For observation messages intended for an official meteorological service, use shall be made of the ~~facilities resulting from the allocation of exclusive frequencies to synoptic meteorology and the aeronautical meteorological service~~, in conformity with regional [agreements] made by the services concerned for the use of these frequencies.
[frequencies made available for meteorological purposes,]

NOC **6995** 1610 § 4. (1) Meteorological messages specially intended for all ship stations shall in principle be sent in accordance with a definite timetable, and, as far as possible, at times when they can be received by ship stations with only one operator. In radiotelegraphy the transmission speed shall not exceed sixteen words a minute.

/(MOD)/ **6996** 1611 (2) During the [transmission] "to all stations" of meteorological messages intended for stations of the maritime mobile service, all stations of this service whose [transmission] might interfere with the reception of these messages, shall keep silent in order to permit all stations which desire to do so to receive these messages.

during the next appropriate broadcast as indicated in the List of Radiodetermination and Special Service Stations.

MOD 6997 1612 Mar2* (3) Meteorological warning messages for the maritime mobile service shall be transmitted without delay. They shall be repeated at the end of the first silence period which follows their receipt (see Nos. **6696**/1130 and **6708**/1335A) as well as ~~at the end of the first silence period which occurs in the working hours of a ship station having a single operator.~~ They shall be preceded by the safety signal and sent on the appropriate frequencies (see No. **6889**/1491).

NOC 6998 1613 (4) In addition to the regular information services contemplated in the preceding sub-paragraphs, administrations shall take the necessary steps to ensure that certain stations shall, upon request, communicate meteorological messages to stations in the maritime mobile service.

MOD 6999 1614 (5) The provisions of Nos. **6995**/1610 to **6998**/1613 are applicable to the aeronautical mobile service, in so far as they are not contrary to more detailed special [arrangements] which ensure at least equal protection to air navigation.

NOC 7000 1615 to 7002 1617

NOC **Section II. Notices to Mariners**

NOC 7003 1618 to 7005 1620

NOC **Section III. Medical Advice**

NOC **7006** 1621 § 9. Mobile stations requiring medical advice may obtain it through any of the land stations shown as providing this service in the List of Radiodetermination and Special Service Stations.

NOC **7007** 1622 § 10. Radiotelegrams and radiotelephone calls concerning medical advice may be preceded by the appropriate urgency signal (see Nos. **6875**/1479 to **6885**/1487).

7008 to **7107** NOT allocated.

ARTICLE N30

NOC 6362

ARTICLE N32

NOC 6427

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEES 4 AND 6

Syrian Arab Republic

SYR/576/1 ADD

DRAFT RESOLUTION

Concerning HF Broadcasting

The World Administrative Radio Conference, Geneva, 1979,

considering

a) the congestion of the HF broadcast bands;

b) the amount of adjacent channel interference;

c) that a HF broadcasting conference is being planned;

resolves

a) that Administrations shall conform with Recommendation No. 205-1 of the CCIR concerning synchronized transmitter operation and that the IFRB shall take this Recommendation as one of the basic principles of its work;

b) that Administrations shall conform with Recommendation No. 328-3 of the CCIR concerning the bandwidth requirements for sound broadcasting;

c) that manufacturers of broadcast receivers shall strictly conform with Recommendation No. 332-4 of the CCIR concerning the selectivity of receivers and that these shall be control of that by the competent authorities of countries where such receivers are produced.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 5

Greece

MF BAND REQUIREMENTS FOR THE MARITIME MOBILE SERVICE

1. In their documents submitted to the WARC-79 a lot of countries indicated the difficulties of the ship-to-shore communication due to the lack of adequate number of channels in the MF and HF bands. These difficulties, together with the exact requirements and probable solutions, are summarized in the most recent documents, Nos. 208 (IMCO), 463 (Australia) and 480 (Greece).

In Document No. DT/195 the initial decisions on the MF bands are indicated.

2. Before finalizing those decisions it would be advisable to see how they could be improved so that they offer the possibility of viable implementation and of rendering a good service to the maritime people.

Having in mind that :

a) Amongst others in Recommendation No. Mar2 - 3 of the WMARC-74 recommends "that the next competent World Administrative Radio Conference study : the establishment of a channel plan which should include some common international shore-to-ship, ship-to-shore and intership allocations, to be used by the maritime mobile service in the bands between 1 605 and 4 000 kHz."

b) As a result of a suggestion by Norway, some discussion took place in Working Group 5BA during its twelfth session, on the implications of this Recommendation. It was generally considered, since a reference was made to a "channel plan", that the implementation of the Recommendation must await a competent World Maritime/Mobile Administrative Radio Conference.

c) However, in the view of Greece, no channel plan can be prepared until the necessary world-wide allocations have been made to the maritime mobile service and this is clearly within the competence of this Conference. Equally clearly, in the opinion of Greece, this is what was intended by those responsible for the preparation of the Recommendation, in its reference to the need for "common international shore-to-ship, ship-to-shore and intership allocations."

3. The ITU sister organization, IMCO, in its Conference Document No. 208 drew attention to maritime needs. An extract relevant to the MF needs of the maritime mobile service reads as follows :

"The essential additional maritime radio frequency spectrum requirements which should be provided at the 1979 World Administrative Radio Conference as items of high priority can be summarized in general terms as follows :

a) Maritime mobile service

i) Medium frequency channels for common international use in the bands between 1 605 and 4 000 kHz (see ITU Recommendations Mar2 - 2 and Mar2 - 3)."

4. Recognizing the need for two channel duplex operation for very nearby all types of traffic, Greece proposes that urgent consideration be given to the following minimum requirements at MF :

a) The band 2 065 - 2 107 kHz should be world-wide allocated exclusively to the maritime mobile service.

b) A similar band of 42 kHz bandwidth should be made available to provide the complementary component of a), by the world-wide exclusive allocation of the band 3 155 - 3 197 kHz (presently allocated to fixed and mobile services) to the maritime mobile service.

c) A small band 2 625 - 2 650 kHz presently allocated to the maritime mobile service and maritime radionavigation service in Region 1, and to fixed and mobile services in Regions 2 and 3 should be world-wide exclusively allocated to the maritime mobile service for intership working.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 578-E
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Original : French
English
Spanish

COMMITTEE 5

NINTH REPORT OF WORKING GROUP 5A TO COMMITTEE 5

Working Group 5A presents its ninth report to Committee 5.

1. The texts adopted by the Working Group for the approval of Committee 5 are shown in the Annex to this document.

2. Article N5/3 (General rules for the assignment and use of frequencies)

2.1 The consideration of proposals relating to No. 3281/116A is kept in abeyance until the report of Sub-Working Group 5A1 (Radio Astronomy) is available.

2.2 Proposal G/53A/67, relating to the protection to be afforded to the space research (passive) and Earth exploration-satellite (passive) services, is still under the consideration of the Working Group.

3. Article N6/4 (Special /¯Agreements¯/)

3.1 The examination of a proposal to amend reference to Article 31 of the Convention in No. 3310/120 led to a general discussion of the interpretation to be given to these provisions. As a result of this discussion, the Working Group arrived at the following conclusions :

3.1.1 - the reference to Article 31 in No. 3310/120 is appropriate and correct;

3.1.2 - the objective of No. 3310/120 is to enable the conclusion of special agreement among Members of the Union through means other than Administrative Conferences; and

3.1.3 - the phrases ".....on a world-wide basis" and "as a result of a Conference...." should be understood within the overall meaning of Article N6/4. No. 3310/120 authorizes the conclusion of the special agreements subsequent to, and as a result of the decisions of, a Conference to which all Members of the Union had been invited. The Final Acts of the WARC (Aeronautical Mobile), 1978, and subsequent action under ICAO, were mentioned in the Working Group as an example of the application of the provisions of No. 3310/120.

3.2 The Working Group decided that the Editorial Committee should be requested to amend the French and Spanish versions of No. 3310/120 so as to bring them in concordance with the English version.

4. Article N28 - Section I (Broadcasting Service)

4.1 In the discussion relating to Article N28 - (Section I), the Working Group did not consider the following proposals :

CAN/60A/157	S/15/350
CAN/60A/158	S/15/351
CAN/60A/159	S/15/352
GRC/86A/455	THA/18/3
GRC/86A/456	USA/47/437(Corr.2)
PHL/92A/52	USA/47/438
PHL/92A/53	USA/47/439
PHL/92A/54	USA/47/440
PHL/92A/55	USA/47/441(Corr.2)
S/15/349	USA/47/442(Corr.2)

This action is justified on the basis of the decision taken by Committee 5 on Document No. 422.

4.2 The Working Group decided that the Editorial Committee be invited to align in the three languages the text of No. 6214/422.

4.3 The text of No. 6215/423 given in the Annex was adopted by a significant majority. The main difficulty concerns the retention or deletion of the words "In principle" at the beginning of the text.

4.4 By a small majority, the Working Group decided not to adopt the proposal PNG/39A/357(Add.1). USSR and some other delegations, however, felt that the subject matter did not concern Working Group 5A and, as such, the proposal in question should be referred to Working Groups 5BA/5BB for proper consideration. In the case of a favourable response to the essence of the proposal by the Working Groups, Committee 4 could subsequently be requested to examine the technical aspect of the proposal.

4.5 The Working Group decided to refer the proposal IND/93/164 to Committee 5 with the request that the advice of Committee 4 may be sought concerning the power limit mentioned therein.

5. Radio astronomy

The Sub-Working Group 5A1 is examining the proposals relating to the writing of an article on radio astronomy for inclusion in the Radio Regulations.

6. Article N29 (Fixed Service)

The Working Group has before it proposals CAN/60A/161 and CAN/60A/162 which require to change the title of Article N29 to "Fixed Service and Land Mobile Service" and to introduce a provision relating to the land mobile service in this Article. The majority view in the Working Group is that it would not be appropriate to introduce, in Article N29, provisions relating to the land mobile service. The proposal relating to

the prohibition of the use of DSB-AM by the land mobile service below 25 MHz (CAN/60A/162) was received sympathetically but the Working Group is uncertain on the manner in which to treat it. Guidance is sought from Committee 5 in this respect.

7. Earth exploration service

After a lengthy discussion of the proposals CAN/60A/6 and F/57A/509, the Working Group unanimously decided that no such definition was required in the Radio Regulations.

V. QUINTAS
Chairman of the Working Group 5A

Annex : 1

A N N E X

ARTICLE N5/3

General Rules for the Assignment and Use of Frequencies

ADD 3276 Members shall endeavour to limit the number of frequencies and the spectrum space used to the minimum essential to provide in a satisfactory manner the necessary services. To that end they shall endeavour to apply the latest technical advances as soon as possible (CONV).

(MOD) **3277/113** The Members ~~and Associate Members~~ of the Union ~~agree~~ undertake that in assigning frequencies to stations which are capable of causing harmful interference to the services rendered by the stations of another country, such assignments are to be made in accordance with the Table of Frequency Allocations and other provisions of these Regulations.

NOC **3278/114** Any new assignment or any change of frequency or other basic characteristic of an existing assignment (see Appendix 1 or Appendix 1A) shall be made in such a way as to avoid causing harmful interference to services rendered by stations using frequencies assigned in accordance with the Table of Frequency Allocations in this Chapter and the other provisions of these Regulations, the characteristics of which assignments are recorded in the Master International Frequency Register.

(MOD) **3279/115** Administrations of the Members of the Union shall not assign to a station any frequency in derogation of either the Table of Frequency Allocations given in this Chapter or the other provisions of these Regulations, except on the express condition that harmful interference shall not be caused to services carried on by stations operating in accordance with the provisions of the Convention and of these Regulations.

NOC **3280/116** The frequency assigned to a station of a given service shall be separated from the limits of the band allocated to this service in such a way that, taking account of the frequency band assigned to a station, no harmful interference is caused to services to which frequency bands immediately adjoining are allocated.

NOC **3282/117** Where, in adjacent Regions or sub-Regions, a band of frequencies is allocated to different services of the same category (see Sections I and II of Article N7/5), the basic principle is the equality of right to operate. Accordingly, the stations of each service in one Region or sub-Region must operate so as not to cause harmful interference to services in the other Regions or sub-Regions.

ADD 3283 No provision of these Regulations prevents the use by a station in distress of any means of radiocommunications at its disposal to attract attention, make known its condition and location, and obtain assistance.

ADD 3284 No provision of these Regulations prevents the use by a station, in the exceptional circumstances described in No. 3283, of any means of radiocommunications at its disposal to assist a station in distress.

ARTICLE N6/4

Special Agreements

(MOD) **3308**/118 Two or more Members ~~or Associate Members~~ of the Union may, in accordance with Article 31 of the Convention, conclude special agreements regarding the sub-allocation of bands of frequencies to the appropriate services of the participating countries.

(MOD) **3309**/119 Two or more Members ~~or Associate Members~~ of the Union concerned may, in accordance with Article 31 of the Convention, conclude special agreements, as a result of a Conference to which all those Members ~~and Associate Members~~ of the Union ~~affected~~ have been invited, regarding the assignment of frequencies to those of their stations which participate in one or more specific services within the frequency bands allocated to these services by Article **N7**/5, either below 5 060 kHz or above 27 500 kHz, but not between those limits.

(MOD) **3310**/120 The Members ~~and Associate Members~~ of the Union may, in accordance with Article 31 of the Convention, conclude, on a world-wide basis, and as a result of a Conference to which all Members ~~and Associate Members~~ of the Union have been invited, special agreements concerning the assignment of frequencies to those of their stations participating in a specific service, on condition that such assignments are within the frequency bands allocated exclusively to that service in Article **N7**/5.

NOC **3311**/121 Special agreements concluded in accordance with the provisions of Nos. **3308**/118 to **3310**/120 shall not be in conflict with any of the provisions of these Regulations.

NOC **3312**/122 The Secretary General shall be informed, in advance, of any Conference to be convened to conclude such an agreement: he shall also be informed of the terms of the agreement when concluded: and he shall inform the Members and Associate Members of the Union of the existence of such agreements.

NOC **3313**/123 In accordance with the provisions of Article **N9**/8 the International Frequency Registration Board may be invited to send representatives to participate in an advisory capacity in the preparation of these agreements and in the proceedings of the Conferences, it being recognized that in the majority of cases such participation is desirable.

(MOD) **3314**/124 If, besides the action they may take in accordance with No. **3309**/119, two or more Members ~~or Associate Members~~ of the Union co-ordinate the use of individual frequencies in any of the frequency bands covered by Article **N7**/5 before notifying the frequency assignments concerned, they shall in all appropriate cases inform the Board of such co-ordination.

ARTICLE N8/6

Special Rules for the Assignment and Use of Frequencies

ADD 3916 Members of the Union recognize that the safety aspects of radionavigation and other safety services require special measures to ensure their freedom from harmful interference; it is necessary therefore to take this factor into account in the assignment and use of frequencies.

(MOD) **3917 /413** **Members ~~and Associate Members~~ of the Union recognize that among frequencies which have long-distance propagation characteristics, those in the bands between 5 000 and 30 000 kHz are particularly useful for long-distance communications: they agree to make every possible effort to reserve these bands for such communications. Whenever frequencies in these bands are used for short or medium-distance communications, the minimum power necessary shall be employed.**

NOC **3918 /414** **To reduce requirements for frequencies in the bands between 5 000 and 30 000 kHz and thus to prevent harmful interference to long-distance radiocommunications, administrations are encouraged to use, whenever practicable, any other possible means of communication.**

MOD **3919 /415** **When special circumstances make it indispensable to do so, an administration may, as an exception to the normal methods of working authorized by these Regulations, have recourse to the special methods of working enumerated below, on the sole condition that the characteristics of the stations still conform to those inserted in the Master International Frequency Register:**

a) a fixed station in the fixed service or an Earth station in the fixed-satellite service may, under the conditions defined in No. 3430/139, transmit to mobile stations on its normal frequencies;

b) a land station may communicate, ~~on a secondary basis~~ under the conditions defined in No. 3430/139, with fixed stations in the fixed service or Earth stations in the fixed-satellite service or other land stations of the same category.

NOC 3920/416 (See Document No. 382)

NOC **3921 /417** **Any administration may assign a frequency in a band allocated to the fixed service or allocated to the fixed-satellite service to a station authorized to transmit, unilaterally, from one specified fixed point to one or more specified fixed points provided that such transmissions are not intended to be received directly by the general public.**

NOC 3922/418
NOC 3923/419 } (See Document No. 382)
MOD 3924/419A

MOD 3925/421 Any emission capable of causing harmful interference to distress, alarm, urgency or safety communications on the international distress and emergency frequencies established for this purpose by these Regulations is prohibited. Supplementary distress frequencies available on less than the world-wide basis should be afforded suitable protection.

ARTICLE N28/7

Broadcasting Service and
Broadcasting-Satellite Service

NOC **6214/422** The establishment and use of broadcasting stations (sound broadcasting and television broadcasting stations) on board ships, aircraft or any other floating or airborne objects outside national territories is prohibited.

/ NOC / **6215/423** In principle, except in the frequency band [3 900-4 000] kHz broadcasting stations using frequencies below [5 060 kHz] or above [41 MHz] shall not employ power exceeding that necessary to maintain economically an effective national service of good quality within the frontiers of the country concerned.

NOC **6217/424** In these Regulations, the expression "broadcasting in the Tropical Zone" indicates a type of broadcasting for internal national use in countries in the zone defined in Nos. 3425/135 and 3426/136, where it may be shown that because of the difficulty of high atmospheric noise level and propagation it is not possible to provide economically a more satisfactory service by using low, medium, or very high frequencies.

NOC **6218 425** The use by the broadcasting service of the bands listed below is restricted to the Tropical Zone:

[
2 300 - 2 498 kHz (Region 1)
2 300 - 2 495 kHz (Regions 2 and 3)
3 200 - 3 400 kHz (All Regions)
4 750 - 4 995 kHz (All Regions)
5 005 - 5 060 kHz (All Regions)
]

NOC **6219/426** Within the Tropical Zone, the broadcasting service has priority over the other services with which it shares the bands listed in No. 6218/425.

NOC **6220/427** However, in that part of Libya north of parallel 30° North the broadcasting service in the bands listed in No. 6218/425 has equal rights to operate with other services in the Tropical Zone with which it shares these bands.

NOC **6221/428** The broadcasting service operating inside the Tropical Zone, and other services operating outside the Zone, are subject to the provisions of No. 3282/117.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 579-E
9 November 1979
Original: English

COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 6

TO THE CHAIRMAN OF COMMITTEE 4

After having considered Document No. 478 relating to the definitions to be given to the terms

- harmful interference
- accepted interference
- permissible interference

Committee 6 has decided that, while the definition of "harmful interference" is to be retained in Article N1, no definition was needed for the term "accepted interference" and that a definition of "permissible interference" should appear only in Appendices 28 and 29, since this term only appears in those Appendices.

The attention of Committee 4 is invited to the reference to C.C.I.R. Recommendations in the definition adopted for the term "permissible interference" (see No. ADD 3142A) and the possible consequences of modifications which the C.C.I.R. could bring to such Recommendations.

.. ..

J.K. BJORNSJO
Chairman of Working Group 6A

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 580-E
9 November 1979
Original : English

COMMITTEE 4

NOTE FROM THE CHAIRMAN OF WORKING GROUP 4B

TO THE CHAIRMAN OF COMMITTEE 4

In response to the Chairman of Committee 6 request to Committee 4 concerning Document No. 459, the attached draft note is submitted for approval.

E.R. CRAIG
Chairman of Working Group 4B

Annex : 1

A N N E X

COMMITTEES 5 AND 6

DRAFT

NOTE FROM THE CHAIRMAN OF COMMITTEE 4 TO THE CHAIRMAN OF COMMITTEE 5 AND THE CHAIRMAN OF COMMITTEE 6

In response to the verbal request delivered at the ..... meeting of Committee 4 on ..... concerning coordination between the mobile-satellite service and the aeronautical mobile service Committee 4 offers the following advice. Document No. 459 refers.

The SPM report addressed the subject of sharing between the mobile-satellite service and terrestrial service in Section 5.3.2.8. This is supplemented in Annex 5.3.2.8.1 which gives examples calculating coordination distances for Earth stations in the mobile-satellite service.

The general conclusion of the SPM was that the calculation of coordination contours around the service area of a mobile Earth station could be extremely complex and further study in CCIR is required.

In Section 7 of the proposed revision of Appendix 28 (Document No. 476) some general guidance concerning this subject is also given. It must be emphasized, however, that the procedures therein contained are specifically concerned with coordination between Earth stations in the mobile-satellite service and stations in the fixed and mobile services located on the surface of the Earth. Extension of these methods to include coordination with airborne stations in the aeronautical mobile service would therefore need further study.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva 1979)

Corrigendum No. 1 to
Document No. 581-E
23 November 1979
Original : English

COMMITTEE 3

SUMMARY RECORD

OF THE

FOURTH MEETING OF COMMITTEE 3

Paragraph 3.7 should be replaced by the following :

"3.7 The Executive Secretary of the Conference suggested that a subscription list should be opened enabling each delegation to indicate the number of copies of the Final Acts required. It should however be stipulated that each delegation would receive a minimum of 3 and a maximum of 15 copies, according to the number of delegates composing it."

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 581-E
9 November 1979
Original : French

COMMITTEE 3

SUMMARY RECORD

OF THE

FOURTH MEETING OF COMMITTEE 3

(BUDGET CONTROL)

Tuesday, 6 November 1979, at 1630 hrs

Chairman : Mr. Z. KUPCZYK (People's Republic of Poland)

Subjects discussed	Document No.
1. Approval of the summary records of the first, second and third meetings of Committee 3	181, 251, 464
2. Position of WARC accounts on 31 October 1979	465
3. Questions relating to the publication of the Final Acts of the Conference	-

1. Approval of the summary records of the first, second and third meetings of Committee 3 (Documents Nos. 181, 251 and 464)

These three summary records were approved without comment.

2. Position of WARC accounts on 31 October 1979 (Document No. 465)

This document was approved without comment.

3. Questions relating to the publication of the Final Acts of the Conference

3.1 The Executive Secretary of the Conference drew the Committe's attention to the problem of the publication of the Final Acts, which would represent a volume of some 1,000 pages to be printed in a very short space of time. He had discussed the subject with the Secretary-General, on whose behalf he proposed that the Committee should adopt a method which would allow substantial savings to be made both in money and in printers' time : each delegate should be handed a copy of the Final Acts, the total number of copies distributed to each delegation not to exceed 15.

3.2 In view of the experience acquired at previous conferences, the Chairman thought that the following solution might be adopted : a minimum of 3 copies and a maximum of 15 copies for each delegation.

3.3 In reply to a question by the delegate of New Zealand, who asked on what basis the budget for the Final Acts had been prepared, the Secretary of the Committee referred to Document No. 125, in which the following gross estimate was made :

- printing of the Final Acts : 550 copies in French, 750 copies in English and 250 copies in Spanish,

or a total of 1,550 copies at an estimated printing cost of 200,000 Swiss francs.

For the present, since the conditions in which the printers would have to work could not be accurately predicted, it was impossible to estimate the approximate size of the savings that would result from printing a smaller number of copies.

3.4 The delegate of Papua-New Guinea thought that in the case of particularly large delegations, 15 copies might be insufficient.

3.5 The delegate of the USSR emphasized that due account should be taken of the difference in the size of delegations.

3.6 The Secretary of the Committee pointed out that the problem of the Final Acts was one of the time available to the printers rather than a financial issue. The Secretary-General had proposed a reduction in the number of copies run off in order to ease the task of the printers, who would have to work at night in order to produce the documents in time.

3.7 The Executive Secretary of the Conference suggested that a subscription should be opened enabling each delegation to indicate the number of copies of the Final Acts required. It should however be stipulated that each delegate would receive a copy of the Acts but with a minimum number of three copies and a maximum number of 15 copies for each delegation.

The Committee approved the opening of a subscription.

The meeting rose at 1650 hours.

The Secretary : R. PRELAZ

The Chairman : Z. KUPCZYK

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Corrigendum No. 1 to
Document No. 582-E
30 November 1979
Original : English

COMMITTEE 5

SUMMARY RECORD OF THE NINTH MEETING OF COMMITTEE 5

Paragraph 2.4.2

Replace the word "higher" by "power" in the third sentence.

Replace "950 MHz" by "915 MHz" in the last sentence.

Paragraph 2.4.3

Replace the word "their" by the words "associated radiation" in the second sentence.

Paragraph 2.4.15

Amend the first sentence to read :

"The delegate of Uruguay reserved his delegation's position on the new text."

Paragraph 3.9

Delete "China" from the first line and add the following new sub-paragraph :

"The delegate of China supported the proposal by the delegates of Cameroon, Pakistan and the United States."

Paragraph 3.20

Replace the word "compromise" by "change" in the second sentence.

Paragraph 3.39.1

Amend the paragraph to read :

"3.39.1 The delegate of Brazil drew attention to the need for extremely careful timing of the two sessions of the Conference, bearing in mind particularly the preparatory work of administrations and the IFRB. He drew attention to the fact that, in Region 2 alone, two important conferences were to be held between now and 1983."

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 582-E
9 November 1979
Original : English

COMMITTEE 5

SUMMARY RECORD

OF THE

NINTH MEETING OF COMMITTEE 5

(FREQUENCY ALLOCATIONS)

Monday, 5 November 1979, at 0900 hrs

Chairman : Mr. M. HARBI (Algeria)

Subjects discussed		Document No.
1.	Approval of the summary record of the sixth meeting of Committee 5	455
2.	Report of Working Group 5/ad hoc 3	374(Rev.1) + Corr.1
3.	Report of Working Group 5/ad hoc 4	422

1. Approval of the summary record of the sixth meeting of Committee 5 (Document No. 455)

1.1 The delegate of India, referring to paragraphs 11.5 and 11.6, said that 11.5 correctly reflected his delegation's views, but the second part of 11.6 appeared to suggest that his delegation believed the status quo should be maintained, which was not correct.

1.2 The Chairman said that a suitable wording would be prepared in consultation with the USSR delegate.

Document No. 455 was approved, subject to the correction to paragraph 11.6 (see Corrigendum No. 1 to Document No. 455).

2. Report of Working Group 5/ad hoc 3 (Document No. 374(Rev.1) and Corr.1)

2.1 The Chairman of Working Group 5/ad hoc 3 presented his Group's report, pointing out a further correction, the deletion of the line beginning "or 2 425 MHz" in Annex 1.

2.2 Annex 1

2.2.1 The Chairman reminded the Committee that the frequencies proposed in Annex 1 were still subject to examination by the various competent Working Groups.

2.2.2 The Chairman of Working Group 5/ad hoc 3 said that the frequencies in question had been submitted to the relevant Working Groups in Document No. DT/105(Rev.2). Subject to the agreement of the Chairmen of the Working Groups concerned, he took it that the ad hoc Working Group had completed its work and would meet again only if it received a specific request for re-consideration of any of the frequencies listed in the Annex from the Chairman of one of the Working Groups dealing with frequency allocations.

2.2.3 The Chairman confirmed that that was the case.

2.2.4 In reply to a question by the delegate of Sweden, the Chairman of Working Group 5/ad hoc 3 said that the square brackets round "915 MHz" had been retained to indicate that the delegations of Japan and France had expressed reservations in the Working Group concerning the 915 MHz band. However, since the relevant Working Groups were going to consider all the frequencies listed, those square brackets might be deleted.

It was so agreed.

Subject to consideration by the relevant Working Groups, Annex 1, as amended, was approved.

2.3 Annex 2

2.3.1 The delegate of Greece suggested, in connection with invites b), that to avoid delay, a date should be fixed for the completion of the studies to be undertaken by the CCIR.

2.3.2 The Director of the CCIR said that it would not be practical to fix a definitive deadline at that stage. The completion of the CCIR studies would depend on the speed with which input information was made available by Administrations. He urged that the relevant information should be provided as soon as possible so that the studies might be ready for submission to the next appropriate WARC.

2.3.3 The delegate of Switzerland suggested that the words "invites the CCIR" should be amended to read "requests the CCIR" and that a reference be introduced to the effect that action should be taken as rapidly as possible.

2.3.4 The Chairman said that in view of the comments just made by the Director of the CCIR it did not appear appropriate to amend the text.

2.3.5 The delegate of the United Kingdom proposed that the words "with a view to including it in the Radio Regulations" should be deleted from the last paragraph of the draft Resolution so as to avoid prejudging the action to be taken by the next competent World Administrative Radio Conference. If those words were deleted, his delegation would not press its reservations as indicated on page 1 of the Report.

2.3.6 The delegate of Greece said that in his view the phrase in question was a matter of substance. He proposed that the paragraph should read : "invites the Administrative Council to place on the agenda of the first World Administrative Radio Conference to be held after the Plenary Assembly of the CCIR which has approved the Recommendations mentioned in sub-paragraph b) above, the adoption and incorporation of these Recommendations in the Radio Regulations."

2.3.7 The delegate of Japan said that his delegation shared the United Kingdom delegate's view and he supported the deletion of the last phrase in the draft Resolution.

2.3.8 The delegate of Italy said that his delegation also considered that the CCIR Recommendations were not necessarily to be incorporated in the Radio Regulations. He proposed that the phrase should be amended to read : "invites the next competent World Administrative Radio Conference to resolve the problem of interference from ISM equipment to radiocommunication services taking into account the CCIR Recommendations".

2.3.9 The delegate of India said that he agreed with the changes proposed, including the reference to the Administrative Council suggested by the delegate of Greece. He suggested that the word "it" in the last line of the draft Resolution might be replaced by the words "appropriate provisions".

2.3.10 The Chairman, summing up the various proposals, invited the Committee to adopt the Italian proposal which complemented the United Kingdom proposal and which appeared the most appropriate and likely to receive the support of the Committee.

In the absence of any opposition, the Italian proposal was approved.

The draft Resolution in Annex 2 was adopted, as amended.

2.4 Annex 3

2.4.1 The Chairman reminded the Committee that the text of footnote 1 had already been adopted by the Committee.

2.4.2 The delegate of Japan said that his Administration had a strong preference for the original text of footnote 2 as given in Document No. 374. His delegation believed that ISM equipment to be operated in the newly designated frequency bands should not cause harmful interference to radiocommunications operating inside or outside those bands in accordance with the provisions of the Radio Regulations. Also, it was essential to leave the higher limit of radiation from ISM equipment to each Administration with the CCIR Recommendation as a reference. It was for that reason that his delegation had supported the deletion of the last phrase in the draft Resolution in Annex 2.

If the text as proposed were adopted, he wished to exclude the allocation in Japan from the footnote corresponding to 3 390 kHz, 6 780 kHz, 433.92 MHz and 950 MHz because those frequency bands were already extensively used for radiocommunications in Japan.

2.4.3 The delegate of Canada said that his delegation also preferred the original footnote. In the ad hoc Working Group, his Administration had made the point that it was difficult to accept certain allocations subject to their limits being determined at some point in the future.

2.4.4 The delegate of Spain said that his delegation also had reservations regarding the new text. He considered that there was a dangerous tendency to leave in the hands of the CCIR matters which should be determined by a WARC. In his view, only a WARC was competent to establish the values in question.

2.4.5 The delegate of the United States also expressed a preference for the original text of footnote 2.

2.4.6 The Chairman enquired why, since all the delegations who had opposed the revised text, with the exception of the delegation of Spain, had been represented in the Working Group, the matter had not been settled at that level.

2.4.7 The Chairman of Working Group 5/ad hoc 3 explained that there had been considerable divergence of opinion in the Working Group and many difficulties had been encountered. The original text had been more in accordance with the views of the delegations of Canada, Japan and the United States. Since opposition had been expressed to that text at the previous meeting of Committee 5, an attempt had been made to remodel it, but the task had proved extremely difficult. In his view, it would serve no useful purpose for the Working Group to meet again.

2.4.8 The delegate of Brazil endorsed the comments made by previous speakers on the difference in substance between the original and the revised texts for standard footnote 2. In his view, CCIR Recommendations should remain as Recommendations and Administrations should not be obliged to follow them, particularly since many countries did not take part in the work of the CCIR. His delegation preferred the original text as given in Document No. 374.

2.4.9 The delegate of Switzerland proposed that footnote 2 should be amended as follows : the first sentence should remain unchanged. The following words should be deleted down to the words "the use of this frequency band for ISM applications" and the remainder of that sentence should be retained.

2.4.10 The delegates of the Federal Republic of Germany, Yugoslavia and the United Kingdom supported the Swiss proposal.

2.4.11 The delegate of Uruguay endorsed the Japanese view; he said that he could accept the Swiss proposal if the latter meant that in each case Administrations must authorize the use of new frequencies for ISM applications.

2.4.12 The delegate of France also endorsed the Swiss proposal while suggesting that the last sentence of the original proposal in Document No. 374 might be added to it.

2.4.13 In view of the general support expressed for the Swiss proposal, the Chairman invited a small drafting group consisting of the delegates of Canada, Spain, Switzerland and France to perfect the text.

2.4.14 The delegate of Switzerland read out the following proposed text for footnote 2 : "The band / _7 - / _7 is designated for industrial, scientific and medical (ISM) applications (centre frequency / _7). The use of this frequency band for ISM applications shall be subject to special authorization by the Administration concerned in agreement with other Administrations whose radio services might be affected. In applying this provision, Administrations shall have due regard to the latest CCIR Recommendations."

That text was approved.

2.4.15 The delegates of Brazil and Uruguay reserved their delegations' positions on the new text.

Annex 3 as thus amended was approved.

3. Report of Working Group 5/ad hoc 4 (Document No. 422)

3.1 The Chairman of Working Group 5/ad hoc 4 introduced the Working Group's Report, drawing attention to the following drafting amendments : 1) On page 6, the English text of the paragraph beginning "requests the IFRB" should be aligned on the French text; 2) On page 7, in the French text of recommends 2 the words "de propagation" should be deleted and the French text should be aligned on the English text; 3) On the same page, in sub-paragraph c) the word "harmful" should be deleted.

Referring to Annex 1 of the Report, which contained a list of proposals to be considered by the proposed conference on HF broadcasting, she said that at the Working Group's last meeting one delegate had still had some doubts on the subject. She hoped that he had now changed his mind.

The Chairman asked delegates to bear in mind that the Working Group's Report represented a compromise and an effort to reconcile views which initially had been very widely divergent. Several informal meetings had been held for the purpose and continuous efforts been deployed within Working Group 5/ad hoc 4.

3.2 The delegate of Pakistan, referring to paragraph 2.1, asked whether the representative of the IFRB was able to answer the question he had raised at the Committee's last meeting.

3.3 The representative of the IFRB said that the question had been whether the HF Broadcasting Conference would be able to adopt a compatible plan in so far as it pertained to the 6 MHz band. There were many factors to be taken into account before that question could be answered, such as what type of planning was envisaged and whether it was an assignment type plan which would assign a free channel or a shared channel to each country. In the particular band in question, there were approximately 250 kHz of spectrum which, on the basis of 5 kHz channelling, would yield about 50 channels and on the basis of 4 kHz channelling would give some 60 to 62 channels. The IFRB would be in a better position to give a detailed answer to the question when the outcome of that day's discussion in Committee 5 was known.

3.4 The delegate of Pakistan said that his question concerned not only the 6 MHz band but the entire requirements as submitted to the IFRB with particular reference to the 6 and 7 MHz bands, and he had mentioned the lowest phase of the sun-spot cycle in December and the fact that no extensions in the 6 and 7 MHz bands had so far been approved by Working Groups. His question related to HF broadcasting schedule requirements submitted to the IFRB for coordination purposes. He pointed out that those requirements were in-band requirements but it was widely known that a great deal of out-of-band broadcasting went on; in the two bands in question it was approximately double the amount of in-band broadcasting. It would be interesting to know precisely how much out-of-band broadcasting was taking place in each band and he wondered whether the IFRB could produce a document giving that information. His own Administration carried out some out-of-band broadcasting as a result of sheer necessity and it was for that reason that in Document No. 55 his Administration had proposed some quite reasonable extensions in the various bands. He did not believe it was possible to prepare a reasonable plan which would meet the minimum requirements of all countries within the present allocations of the broadcasting bands and, that being the case, the whole substance of Document No. 422 was dependent on the answer to his question.

3.5 The Chairman agreed that the question was extremely complex and could only be answered by the IFRB when a decision had been taken on the type of plan to be adopted.

3.6 The delegate of Singapore suggested that, to facilitate the task of the HF Broadcasting Conference, the Committee should instruct Working Group 5BB to consider the allocation of some exclusive bands, in addition to those allocated exclusively to the broadcasting service, to pave the way towards the introduction of SSB emissions.

3.7 The delegate of the United States made the following statement :

"The United States has no objections and supports Document No. 422 and the Resolutions attached. However, I would draw your attention to paragraph 2.1.

Mr. Chairman, the United States believes that if this future Conference is to be successful, it is imperative that adequate frequency allocations be provided. We are convinced that adequate allocations do not exist today. We believe that the failures of past broadcasting conferences have in fact proven this point.

If Working Group 5BB and Committee 5 do not address this serious problem in a positive way by providing additional allocations for broadcasting, then we believe that this future Conference is doomed to failure.

Mr. Chairman, we ask all Administrations here today to consider seriously the problems associated with attempts to implement insufficient allocations for both their domestic and international broadcasting needs."

3.8 The delegate of Cameroon pointed out that his Administration's proposals contained a request for as long a transition period as possible for the introduction of SSB emissions. Although Cameroon was concerned by the effect of extensions of broadcasting bands on the fixed service bands, it agreed that some moderate extensions were indeed essential for the success of the Broadcasting Conference.

3.9 The delegates of Italy, the Netherlands, China and Sweden supported the views of the preceding three speakers.

3.10 The delegate of Afghanistan observed that if bands were allocated now for SSB emissions, many countries would not be able to use them for some years to come. He therefore preferred the existing text of paragraph 2.3.

3.11 The delegate of Japan said he could support the Singapore delegate's suggestion as a long-term solution. Nevertheless, in view of the difficulty of registering frequencies for which all countries would require coordination, it would perhaps be wiser to allocate the frequencies concerned on a shared basis for the time being.

3.12 The Chairman said that the Committee seemed to share the concern of previous speakers regarding the necessity of having adequate bands to ensure the success of the future Conference and that would be mentioned in the summary record of the meeting so that Working Group 5BB would take the Recommendation into account.

3.13 Annex 2

The Chairman of Working-Group 5/ad hoc 4, introducing the draft Recommendation, said that the square brackets round the words "and shared" in "recommends" paragraph 1 did not indicate differences of opinion in the ad hoc Group, but had been inserted pending a decision by Committee 5 on whether or not shared bands would be allocated to HF Broadcasting. Furthermore, the words "and in particular" in paragraph 4.1 related only to principles corresponding to specific proposals by Administrations; there were, of course, many other principles governing the use of bands allocated to HF broadcasting that the future Conference would have to consider.

"considering" paragraph a)

3.14 The delegate of Iran said he thought that some explanation should be given of the reasons why the existing situation in the bands concerned was not satisfactory.

3.15 The Chairman observed that the question had been discussed in the ad hoc Group, but that it had been decided to use the existing wording as an acceptable compromise.

"considering" paragraph a) was approved.

3.16 "considering" paragraph b)

Approved.

3.17 The delegate of Jordan proposed the addition of a new "considering" paragraph c) reading "that the World Administrative Radio Conference, Geneva, 1979, has allocated new bands for HF broadcasting".

3.18 The delegate of Brazil, supported by the delegate of Cameroon, objected to that addition because it would prejudge the outcome of the work of Working Group 5BB.

3.19 The delegates of the Philippines and Greece supported the Jordanian proposal and suggested that the new paragraph be placed in square brackets.

3.20 The delegate of the USSR said he objected on principle to the new paragraph, even if it was placed in square brackets. The terms of reference of the ad hoc Group did not include examination of possible extensions of allocations, and the entire draft Recommendation was based on those terms of reference; accordingly, the addition would compromise all the Group's decisions. Working Group 5BB and Committee 5 could decide on an extension at any time and it would not be too late to add a reference to such an extension in the appropriate document.

3.21 The delegate of Argentina supported the views of the delegates of Brazil, Cameroon and the USSR. The existing situation was not satisfactory because the bands in question were not properly used and the provisions of Article 10 of the Radio Regulations were not being adequately applied.

3.22 The Chairman of Working Group 5/ad hoc 4 said the Group had agreed that there was no need for many "considering" paragraphs. However, she would not object to the inclusion of another paragraph in square brackets.

3.23 The delegate of Jordan said that the main purpose of his proposal was to ensure that any additional HF bands allocated by WARC-79 to the broadcasting service would not be used before the forthcoming Broadcasting Conference.

3.24 The Chairman assured the Jordanian delegate that any bands ceded by other services to the broadcasting service would not be used at once, since the procedure worked out by Committee 6 for that purpose would take some time to apply.

3.25 At the request of the Chairman, who appealed to his spirit of cooperation, the delegate of Jordan said he would not insist on his proposal.

"recommends" paragraph 1

3.26 The delegate of Pakistan said it was not clear whether even the existing bands could not be used without planning by the Conference or whether the use of the bands should be generally fixed by the Conference. In view of that uncertainty, he proposed that the words "if feasible" be added at the end of the paragraph.

3.27 The Chairman noted that there was no support for that proposal.

3.28 The delegate of Japan said that although exclusive allocation to the broadcasting service was theoretically advisable, Working Group 5BB would in fact find it difficult to make additional exclusive allocations, especially in the frequency band below 20 MHz. Allocation on a shared basis was therefore the best compromise, and he suggested that the words "exclusive and shared" be placed in square brackets.

3.29 The delegate of Kenya observed that sharing between the broadcasting and fixed services would be very difficult, since the broadcasting service used much higher power. The words "and shared" should be deleted, to avoid complicating the work of the future conference.

3.30 The Chairman pointed out that a decision would be taken when Working Group 5BB had come to a decision on the point.

"recommends" paragraph 1 was approved as it stood.

"recommends" paragraph 2

3.31 The delegate of the Netherlands, referring to the second sentence, observed that it was impossible progressively to introduce an SSB system "without impairing the DSB emissions" and proposed that that phrase be deleted.

3.32 The delegates of Switzerland and Sweden supported that proposal. The delegates of Nigeria, Sudan and Jordan opposed the proposal. The Chairman put the Netherlands proposal to the vote. The proposal was rejected by 50 votes to 20.

"recommends" paragraph 2 was approved.

3.33 "recommends" paragraph 3

Approved.

3.34 "recommends" paragraph 4

Sub-paragraph 4.1

The delegate of India said that the word "and" should be inserted before "the principles

Approved as amended.

3.35 Sub-paragraph 4.1.1

Approved.

3.36 The delegate of Mexico, supported by the delegates of Argentina, Brazil, Ecuador and Guatemala, proposed the insertion of a new sub-paragraph after sub-paragraph 4.1.1, reading "the requirements of each country in the field of national broadcasting".

That proposal was approved.

3.37 Sub-paragraphs 4.1.2 and 4.1.3

Approved.

3.38 Sub-paragraph 4.2

The delegate of Iran suggested that the word "should" be replaced by "shall" in the English text and the delegate of Turkey suggested that the words "to be adopted" should be replaced by "to be used".

After a brief discussion, it was decided to align the English text on the French.

Approved on that understanding.

3.39 "recommends" paragraph 5

3.39.1 The delegate of Brazil drew attention to the need for extremely careful timing of the two sessions of the Conference, bearing in mind particularly the work of Administrations and the IFRB in Region 2, where two important conferences were to be held in 1982.

3.39.2 The delegate of Pakistan said that, since WARC-79 seemed to be imposing provisions on the second session of the Conference despite the uncertainty with regard to planning, it would be advisable to insert a provision that the second session should be held only after the feasibility of planning had been established at the first session.

3.39.3 The Chairman, replying to the delegate of Brazil, said that the Administrative Council would undoubtedly take all the pertinent considerations into account when fixing the dates of the sessions. In reply to the delegate of Pakistan, he observed that the second session would of course be held only if that was warranted by the results of the first session.

Approved.

The remainder of the draft Recommendation was approved.

Annex 2, as amended, was approved.

The delegate of Pakistan reserved his position on paragraphs 1 and 5 of Annex 2.

3.40 Annex 3

The Director of the CCIR, referring to the title of the draft Recommendation, observed that nowhere in the text was there any specific provision that the CCIR should supply the information concerned. It would be useful for the timing of CCIR work if the Recommendation contained a provision along the lines of "The CCIR shall prepare a report containing the necessary technical information for the WARC".

3.41 The Chairman of Working Group 5/ad hoc 4 said that the question had been discussed in her Group, but that it had been thought that requesting a report from the CCIR might delay the fixing of the date of the first session.

3.42 The delegate of Cameroon, referring to "considering" paragraph b), observed that the information concerned was not merely insufficient, but did not exist. The delegate of Jordan endorsed that remark, adding that the Recommendation should contain a phrase to the effect that an SSB system could not be introduced before, say, 1985.

3.43 The Chairman said that information on propagation predictions did exist in certain equatorial areas. As for the point made by the delegate of Jordan, it would be for the first session of the Broadcasting Conference to fix the date for the introduction of SSB systems.

Annex 3 was approved.

3.44 Annex 4

Approved.

3.45 The Chairman reminded the Committee that it was proposed to refer all the proposals listed in Annex 1 to the first session of the future HF Broadcasting Conference.

That proposal was approved.

In reply to the Chairman of Working Group 5A, the Chairman confirmed that those proposals need not be considered in Working Group 5A.

Document No. 422 as a whole, as amended, was approved.

The meeting rose at 1210 hours.

The Secretary : The Chairman :

M. SANT M. HARBI

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 583-E
11 November 1979
Original : English

COMMITTEE 5

EIGHTH AND LAST REPORT FROM WORKING GROUP 5E TO COMMITTEE 5

1. The Working Group has considered the existing Recommendations referred to it (Nos. Spa2 - 3, Spa2 - 4, and Spa2 - 5).

2. The decisions taken by the Working Group on these Recommendations are shown in Annex 1.

Dr. A.W. ADEY
Chairman of Working Group 5E

Annexes : 3

ANNEX 1

1. Recommendation No. Spa2 - 3

Two new Recommendations for action on the subject covered by Recommendation No. Spa2 - 3 have been drafted (see Annexes 2 and 3).

2. Recommendation No. Spa2 - 4

Action has been taken through the recommendation of allocations to terrestrial services, as shown in Documents Nos. 394(Rev.1), 449(Rev.1) and 450(Rev.1).

The Recommendation should now be abrogated.

3. Recommendation No. Spa2 - 5

Action has been taken through the recommendation of allocations to terrestrial services, as shown in Document No. 390(Rev.2).

The Recommendation should now be abrogated.

ANNEX 2

DRAFT RECOMMENDATION

Relating to the Use of Airborne Radars in the Frequency Bands shared between the Inter-Satellite Service and the Radiolocation Service

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the bands 59 - 64 GHz and 126 - 134 GHz are allocated to the inter-satellite service and the radiolocation service;

b) that the foregoing bands are located in parts of the radio frequency spectrum close to peaks of atmospheric absorption;

c) that, nevertheless, the atmospheric absorption alone may not prevent harmful interference to stations of the inter-satellite service from radars operating on aircraft flying at high altitudes;

d) that for this reason the use of airborne radars in the radiolocation service is subject to not causing harmful interference to the inter-satellite service (see ADD 3815C, the text of which is reproduced below);

recommends

that, as a matter of urgency, studies should be made of the sharing criteria for these two services in the frequency bands listed above;

requests the CCIR

to carry out these studies;

recommends further

that a future competent World Administrative Radio Conference review the allocations of these bands, taking into account the results of the studies of the CCIR.

ADD 3815C In the bands 59 - 64 GHz and 126 - 134 GHz, the use of airborne radars in the radiolocation service is subject to not causing harmful interference to the inter-satellite service (see No. 3442/148).

ANNEX 3

DRAFT RECOMMENDATION

Relating to Sharing of Frequency Bands between the Aeronautical Mobile Service and the Inter-Satellite Service

The World Administrative Radio Conference, Geneva, 1979,

considering

a) that the bands 54.25 - 58.2 GHz, 59 - 64 GHz, 116 - 126 - 134 GHz, 168 - 182 GHz, and 185 - 190 GHz are allocated to the inter-satellite service and the mobile service;

b) that the foregoing bands are located in parts of the radio frequency spectrum close to peaks of atmospheric absorption;

c) that, nevertheless, the atmospheric absorption alone may not prevent harmful interference to the stations of the inter-satellite service from stations on aircraft flying at high altitudes;

d) that for this reason the use of aircraft stations in the aeronautical mobile service is subject to not causing harmful interference to the inter-satellite service (see ADD 3815BA, the text of which is reproduced below);

recommends

that, as a matter of urgency, studies should be made of the sharing possibility and criteria for these two services in the frequency bands listed above;

requests the CCIR

to carry out these studies;

recommends further

that a future competent World Administrative Radio Conference review the allocations of these bands, taking into account the results of the studies of the CCIR.

ADD 3815BA In the bands 54.25 - 58.2 GHz, 59 - 64 GHz, 116 - 134 GHz, 170 - 182 GHz and 185 - 190 GHz, the use of stations in the aeronautical mobile service is subject to not causing harmful interference to the inter-satellite service (see No. 3442/148).

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 584(Rev.1)-E
12 November 1979
Original : Spanish

WORKING GROUP 5D

REPORT OF REGION 2 AD HOC GROUP

1. The Region 2 group of countries has held three meetings to coordinate the various proposals submitted to the Conference relating to the allocations in the 11.7 - 12.7 GHz band to different services with a view to arriving at a proposal which will meet the requirements of the countries concerned.

2. Mr. C.J. Martinez (Venezuela) was elected Chairman of the Region 2 ad hoc Group meetings.

3. The Region 2 ad hoc Group decided to set up a drafting group to prepare the texts relating to the allocation of the 11.7 - 12.7 GHz band in Region 2 as well as the relevant Resolutions. This Group consisted of representatives of the following countries : Argentina, Costa Rica, Canada, Chile, Cuba, Brazil, Mexico, United States of America, Uruguay and Venezuela and its work was coordinated by Mr. L. Azuaje (Venezuela).

4. Allocations in the 11.7 - 12.7 GHz band

It was unanimously decided to recommend the adoption of the revised Table and the revised provisions contained in Annex 1.

5. Resolution Relating to the Convening of a Regional Administrative Radio Conference for the Detailed Planning of the Broadcasting-Satellite Service in the 12 GHz Band and Associated Up-links in Region 2

All countries, with the exception of Colombia and Ecuador, agreed to recommend the adoption of Resolution No. AA constituting Annex 2.

6. On this Resolution, the delegations of Colombia and Ecuador maintain the reservation expressed in the Final Protocol of the Final Acts of the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977.

Annexes : 2

A N N E X 1

GHz

Region 2
MOD 11.7 - 12.1 FIXED FIXED-SATELLITE (Space-to-Earth) Mobile except aeronautical mobile MOD 3787/405BC 3787A
MOD 12.1 - 12.3 FIXED-SATELLITE (Space-to-Earth) BROADCASTING-SATELLITE MOBILE except aeronautical mobile FIXED BROADCASTING MOD 3787/405BC 3787B 3787C 3787D 3787E
MOD 12.3 - 12.7 FIXED MOBILE except aeronautical mobile BROADCASTING-SATELLITE BROADCASTING MOD 3787/405BC 3787D 3787E 3787F

SUP 3786/405BB

MOD 3787/405BC The use of the band 11.7 - 12.7 GHz in Region 2 by the broadcasting-satellite and fixed-satellite services is limited to domestic and sub-regional systems and is subject to previous agreement between the Administrations concerned and those having services, operating or planned in accordance with the Table, which may be affected (see Articles N11, N13 and N13A /and Resolution No. Spa2 - 3/).

ADD 3787A In Region 2, in the band 11.7 - 12.1 GHz, transponders on space stations in the fixed-satellite service may be used additionally for transmissions in the broadcasting-satellite service, provided that such transmissions do not have a maximum e.i.r.p. greater than 53 dbW per television channel and do not cause greater interference or require more protection than the coordinated fixed-satellite service frequency assignments. With respect to the space services this band shall be used principally for the fixed-satellite service. The upper limit of this band shall be in accordance with the decisions of the 1983 RARC (see footnote 3787B).

ADD 3787B The 1983 RARC will divide the band 12.1 - 12.3 GHz in two sub-bands and will allocate the lower sub-band to the fixed-satellite service and the upper sub-band to the broadcasting-satellite, broadcasting, mobile (except aeronautical mobile) and fixed services, all services on a primary basis.

ADD 3787C Additional allocation : in Brazil, Peru and the USA, the band 12.1 - 12.3 GHz is also allocated to the fixed service, on a primary basis.

ADD 3787D In the band 12.1 - 12.7 GHz existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in accordance with the broadcasting-satellite Plan to be prepared at the 1983 RARC, and shall not impose restrictions on the elaboration of such a Plan. The lower limit of this band shall be in accordance with the decisions of the 1983 RARC (see footnote 3787B).

ADD 3787E In the band 12.1 - 12.7 GHz, the space services existing or planned before the 1983 RARC shall not impose restrictions on the elaboration of the Plan for the broadcasting-satellite service in Region 2 and shall be operated under the conditions set forth by such Conference.

ADD 3787F In Region 2, in the band 12.3 - 12.7 GHz, BSS channels made available in the 1983 Planning Conference may also be used for transmissions in the fixed-satellite service provided that such transmissions do not cause more interference or require more interference protection than the broadcasting-satellite service transmissions operating in accordance with the 1983 Plan. With respect to the space services, this band shall be used principally for the broadcasting-satellite service. The lower limit of this band shall be in accordance with the decisions of the 1983 RARC (see footnote 3787B).

ANNEX 2

RESOLUTION No. /AA/

Relating to the Convening of a Regional Administrative Radio Conference for the Detailed Planning of the Broadcasting-Satellite Service in the 12 GHz Band and Associated Up-links in Region 2

The World Administrative Radio Conference, Geneva, 1979,

noting

a) that the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977, adopted a Plan for the allocation of frequencies and orbits for the broadcasting-satellite service in the 12 GHz band for Regions 1 and 3;

b) that the 1977 Conference adopted interim provisions pending the establishment of a similar plan for Region 2;

c) that the Administrative Council /at its ... session, in Resolution .../ subsequently decided that the RARC-BS will be convened in 1983;

d) that the present Conference has adopted changes to the Table of Frequency Allocations that greatly affect the conditions on which the planning of the broadcasting-satellite service in the 12 GHz band by Region 2 will be based;

considering

a) that Annexes 8 and 9 of the Final Acts of the World Administrative Radio Conference, 1977 contain technical data and sharing criteria used in establishing the provisions and associated Plan;

b) that advantage should be taken of technological advances resulting from experiments carried out on broadcasting satellites since 1977;

c) that advantage should also be taken of recent studies by the CCIR;

d) that with respect to space services the World Administrative Radio Conference, Geneva, 1979 has allocated the band 12.3 - 12.7 GHz to the broadcasting-satellite service, and the band 12.1 - 12.3 GHz to the fixed-satellite service and broadcasting-satellite service in accordance with the terms of footnote 3787B of the Radio Regulations;

e) that the said Conference, has designated the band / / GHz for use as up-link frequencies to broadcasting satellites;

f) that there are significant advantages to planning the up-links together with the down-links of 12 GHz broadcasting-satellite systems;

recognizing

a) that arc segmentation is no longer required in the band 11.7 - 12.1 GHz and will not be required in the band 12.1 - 12.3 GHz following the 1983 Regional Administrative Radio Conference;

b) that systems of the fixed-satellite service in the band 11.7 - 12.2 GHz shall not impose restrictions on the preparation of a Region 2 broadcasting-satellite Plan, but that such systems developed by the time of the 1983 Regional Administrative Radio Conference, if in conformity with the provisions of the Final Acts of the 1971 Space Conference and the 1977 World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service, should be taken into account in the decisions of the 1983 Regional Administrative Radio Conference;

resolves

1. that a Regional Administrative Radio Conference (RARC) be held no later than 1983 :

1.1 to divide the band 12.1 - 12.3 GHz in two sub-bands and to allocate the lower sub-band to the fixed-satellite service and the upper sub-band to the broadcasting-satellite, broadcasting, mobile (except aeronautical mobile), and fixed services, all services on a primary basis (see footnote 3787B of the Radio Regulations);

1.2 to draw up a detailed orbit and frequency plan for the broadcasting-satellite service for Region 2 in the bands 12.3 - 12.7 GHz and that portion of 12.1 - 12.3 GHz allocated by the 1983 Regional Administrative Radio Conference to the broadcasting-satellite service;

1.3 to plan up-links in a part of the band [ ] GHz, of a bandwidth equal to the total bandwidth allocated to the broadcasting-satellite service for the down-link in the 12 GHz band. However, Administrations may use broadcasting-satellite up-links in frequency bands other than those planned provided that such use does not necessitate any changes in the Plan;

1.4 to establish procedures to govern the use of the bands specified in paragraph 1.2 of this Resolution by the broadcasting-satellite service, and, as necessary, procedures for the corresponding up-links;

2. that planning shall take into account the applicable parts of Annexes 6, 7 and 8 of the Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service, Geneva, 1977, considering the changes made by the present Conference, and the latest CCIR Recommendations and technological advances;

3. that the Plan shall provide for the detailed assignment of the orbital positions and frequency channels available, ensuring that the broadcasting-satellite service requirements submitted by the various Administrations are met in an equitable manner satisfactory to all the countries concerned. It should be laid down as a matter of principle that each Administration in the Region should be guaranteed a minimum number of channels (4) for the operation of the broadcasting-satellite service. Above this minimum, the special characteristics of the countries (size, time zones, language differences, etc.) shall be taken into account;

4. that all Administrations in Region 2 shall submit their broadcasting-satellite service requirements to the IFRB not later than one year before the start of the regional administrative radio conference responsible for planning this service in Region 2. Each Administration may update these requirements as it considers necessary. "Requirements" are understood to include the number and boundaries of service areas and the number of channels requested for each of them. Six months before the deadline for submitting requirements, the IFRB shall remind Administrations of the need to submit them by means of a circular letter and/or telegram;

5. that planning shall be based on individual reception, but each Administration may use the reception system which best meets its requirements (individual or community reception, or both);

6. that, in planning, it shall be borne in mind that systems should be designed with a view to reducing, to a minimum, technical differences and incompatibilities with the systems of other Regions;

7. that the Plan be consistent with the inter-regional considerations specified in the Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service, Geneva, 1977;

invites the Administrative Council

to make preparations for convening the said Regional Administrative Radio Conference using the provisions of this Resolution as a basis for the agenda of the Conference;

invites the CCIR

to carry out the necessary studies with a view to presenting, at the appropriate time, the technical information likely to be required as a basis for the work of the Regional Conference;

invites the IFRB

1. to request all Administrations in Region 2 to submit their broadcasting-satellite service requirements in accordance with "resolves" 4 above;

2. to assemble the information submitted by Administrations in a form permitting a comparative study thereof and to communicate it to the Secretary-General for publication and despatch to Administrations not later than nine months prior to the said Regional Administrative Radio Conference.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 584-E
10 November 1979
Original : Spanish

WORKING GROUP 5D

REPORT OF REGION 2 AD HOC GROUP

1. The Region 2 group of countries has held their meetings to coordinate the various proposals submitted to the Conference relating to the allocations in the 11.7 - 12.7 GHz band to different services with a view to arriving at a proposal which will meet the requirements of the countries concerned.

2. Mr. C.J. Martinez (Venezuela) was elected Chairman of the Region 2 ad hoc Group meetings.

3. The Region 2 ad hoc Group decided to set up a drafting group to prepare the texts relating to the allocation of the 11.7 - 12.7 GHz band in Region 2 as well as the relevant Resolutions. This Group consisted of representatives of the following countries : Argentina, Costa Rica, Canada, Chile, Cuba, Brazil, Mexico, United States of America, Uruguay and Venezuela and its work was coordinated by Mr. L. Azuaje (Venezuela).

4. Allocations in the 11.7 - 12.7 GHz band

It was unanimously decided to recommend the adoption of the revised Table and the revised provisions contained in Annex 1.

5. Resolution Relating to the Convening of a Regional Administrative Radio Conference for the Detailed Planning of the Broadcasting-Satellite Service in the 12 GHz Band and Associated Up-links in Region 2

All countries, with the exception of Colombia and Ecuador, agreed to recommend the adoption of Resolution No. AA constituting Annex 2.

6. On this Resolution, the delegations of Colombia and Ecuador maintain the reservation expressed in the Final Protocol of the Final Acts of the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977.

Annexes : 2

A N N E X 1

GHz

Region 2
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SUP 3786/405BB

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ADD 3787B The 1983 RARC will divide the band 12.1 - 12.3 GHz in two sub-bands and will allocate the lower sub-band to the fixed-satellite service and the upper sub-band to the broadcasting-satellite, broadcasting, mobile (except aeronautical mobile) and fixed services, all services on a primary basis.

ADD 3787C Additional allocation : in Brazil, Peru and the USA, the band 12.1 - 12.3 GHz is also allocated to the fixed service, on a primary basis.

ADD 3787D In the band 12.1 - 12.7 GHz existing and future terrestrial radiocommunication services shall not cause harmful interference to the space services operating in accordance with the broadcasting-satellite Plan to be drawn at the 1983 RARC, and shall not impose restrictions to the elaboration of such a Plan. The lower limit of this band shall be in accordance with the decisions of the 1983 RARC (see footnote 3787B).

ADD 3787E In the band 12.1 - 12.7 GHz, the space services existing or planned before the 1983 RARC shall not impose restrictions to the elaboration of the Plan to the broadcasting-satellite service in Region 2 and shall be operated under the conditions set forth by such Conference.

ADD 3787F In Region 2, in the band 12.3 - 12.7 GHz, BSS channels made available in the 1983 Planning Conference may also be used for transmissions in the fixed-satellite service provided that such transmissions do not cause more interference or require more interference protection than the broadcasting-satellite service transmissions operating in accordance with the 1983 Plan. With respect to the space services, this band shall be used principally for the broadcasting-satellite service. The lower limit of this band shall be in accordance with the decisions of the 1983 RARC (see footnote 3787B).

ANNEX 2

RESOLUTION No. [AA]

Relating to the Convening of a Regional Administrative Radio Conference for the Detailed Planning of the Broadcasting-Satellite Service in the 12 GHz Band and Associated Up-links in Region 2

The World Administrative Radio Conference, Geneva, 1979,

noting

a) that the World Broadcasting-Satellite Administrative Radio Conference, Geneva, 1977 adopted an orbit and frequency Plan for the broadcasting-satellite service in the 12 GHz band for Regions 1 and 3;

b) that the 1977 Conference adopted interim provisions until the establishment of a similar plan for Region 2;

c) that the Administrative Council [at its ... session, in Resolution ...] subsequently decided that the RARC-BS will be convened in 1983;

d) that the present Conference adopted changes to the Table of Frequency Allocations that greatly affect the conditions on which Region 2 will carry out planning of the broadcasting-satellite service in the 12 GHz band;

considering

a) that Annexes 8 and 9 of the Final Acts of the World Administrative Radio Conference, 1977 contain technical data and sharing criteria used in establishing the provisions and associated Plan;

b) that advantage should be taken of technological advances resulting from experiments carried out on broadcasting satellites since 1977;

c) that advantage should also be taken of recent studies by the CCIR;

d) that [with respect to space services] the World Administrative Radio Conference, Geneva, 1979 has allocated the band 12.3 - 12.7 GHz to the broadcasting-satellite service, and the band 12.1 - 12.3 GHz to the fixed-satellite service and broadcasting-satellite service in accordance with the terms of footnote 3787B of the Radio Regulations;

e) that the said Conference, has designated the band(s) [ ] [ ] GHz for use as up-link frequencies to broadcasting satellites;

f) that there are significant advantages to planning the up-links together with the down-links of 12 GHz broadcasting-satellite systems;

recognizing

a) that arc segmentation is no longer required in the band 11.7 - 12.1 GHz and will not be required in the band 12.1 - 12.3 GHz following the 1983 Regional Administrative Radio Conference;

b) that fixed-satellite systems in the 11.7 - 12.2 GHz band in accordance with the 1971 and 1977 Final Acts shall not impose a restriction to the elaboration of a Region 2 broadcasting-satellite Plan, but that such systems developed by the time of the 1983 Conference should be taken into account in the decisions of the Region 2 Conference;

resolves

1. that a Regional Administrative Radio Conference (RARC) be held no later than 1983 :

1.1 to divide the band 12.1 - 12.3 GHz in two sub-bands and to allocate the lower sub-band to the fixed-satellite service and the upper sub-band to the broadcasting-satellite, broadcasting, mobile (except aeronautical mobile), and fixed services, all services on a primary basis (see footnote 3787B of the Radio Regulations);

1.2 to draw up a detailed orbit and frequency plan for the broadcasting-satellite service for Region 2 in the bands 12.3 - 12.7 GHz and that portion of 12.1 - 12.3 GHz allocated by the 1983 Regional Administrative Radio Conference to the broadcasting-satellite service;

1.3 to plan the band(s) /¯ _/ /¯ _/ GHz, in a bandwidth equal to that of the down-link bandwidth, for use as up-links to broadcasting satellites operating in the 12 GHz band. However, Administrations may use broadcasting-satellite up-links in frequency bands other than those planned provided that such use does not necessitate any changes in the plan;

1.4 to establish procedures to govern the use of the bands specified in paragraph 1.2 of this Resolution by the broadcasting-satellite service, and, as necessary, procedures for the corresponding up-links;

2. that planning shall take into account the applicable parts of Annexes 6, 7 and 8 of the Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service, Geneva, 1977, considering the changes made by the present Conference, and the latest CCIR Recommendations and technological advances;

3. that the Plan shall provide for the detailed allotment of the orbital positions and frequencies available, ensuring that the broadcasting-satellite service requirements submitted by the various Administrations are met in an equitable manner satisfactory to all the countries concerned. It should be laid down as a matter of principle that each Administration in the Region should be guaranteed a minimum number of channels (4) for the operation of the broadcasting-satellite service. Above this minimum, the special characteristics of the countries (size, time zones, language differences, etc.) shall be taken into account;

4. that all Administrations in Region 2 shall submit their requirements to the IFRB not later than one year before the start of the said Regional Administrative Radio Conference. Requirements are understood to include the number and boundaries of service areas and the number of channels requested for each of them. Six months before the deadline for submitting requirements, the IFRB shall remind Administrations of the need to submit them by means of a circular-letter and/or telegram;

5. that planning shall be based on individual reception, but each country may use the reception system which best meets its requirements, namely individual or community reception, or both;

6. that, in planning, it shall be borne in mind that systems should be designed with a view to reducing, to a minimum, technical differences and incompatibilities with the systems of other Regions;

7. that the Plan be consistent with the inter-regional considerations specified in the Final Acts of the World Administrative Radio Conference for the Planning of the Broadcasting-Satellite Service, Geneva, 1977;

invites the Administrative Council

to make preparations for convening the said Regional Administrative Radio Conference using the provisions of this Resolution as a basis for the agenda of the Conference;

invites the CCIR

to carry out such additional studies as are necessary to ensure timely provision of the technical information likely to be required as a basis for the work of the Regional Conference;

invites the IFRB

1. to request all Administrations in Region 2 to submit their broadcasting-satellite service requirements in accordance with "resolves" 4 above;

2. to assemble the information submitted by Administrations in a form permitting a comparative study thereof and to communicate it to the Secretary-General for publication and despatch to Administrations not later than nine months prior to the said Regional Administrative Radio Conference.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 585-E
10 November 1979
Original : English

WORKING GROUP 4B

NOTE FROM THE CHAIRMAN OF WORKING GROUP 5D

TO THE CHAIRMAN OF WORKING GROUP 4B

1. In order to complete the work of Working Group 5D, Working Group 4B is requested to give urgent consideration and response to the following questions concerning sharing between space and terrestrial services :

1.1 Earth exploration-satellite (Passive)/space research (Passive) sharing with fixed and mobile (except aeronautical mobile) services in the band 10.6 - 10.7 GHz.

What are the minimum restrictions which would need to be placed on the fixed and mobile (except aeronautical mobile) in order to ensure successful operation of the passive service ?

What are the maximum restrictions that the fixed and mobile services can tolerate to still allow all services to operate ?

1.2 Earth exploration-satellite (Passive)/space research (Passive) sharing with fixed, mobile (except aeronautical mobile) and fixed-satellite services in the band 18.6 - 18.8 GHz.

What are the minimum restrictions which would need to be placed on the fixed, mobile (except aeronautical mobile) and fixed-satellite (Space-to-Earth) services in order to ensure successful operation of the passive service ?

What are the maximum restrictions that the fixed, mobile and fixed-satellite services can tolerate to still allow all services to operate ?

1.3 Fixed satellite sharing with the radionavigation service in the band 14 - 14.3 GHz.

What are the necessary criteria to enable sharing between the fixed-satellite (Earth-to-space) service and the radionavigation service on an equal primary basis in the above band ?

2. In view of the small amount of time now remaining for the work of Working Groups, the attention of Working Group 4B is drawn to paragraph 6 of Document No. 361(Rev.1) concerned the need for criteria for sharing between radionavgiation-satellite (Space-to-Earth) and radiolocation in the band 1 215 - 1 260 MHz.

Dr. B.S. RAO
Chairman of Working Group 5D

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 4

NOTE FROM THE VICE-CHAIRMAN OF COMMITTEE 7 TO THE CHAIRMAN OF COMMITTEE 4

The attention of Committee 4 is drawn to the additional terms and definitions in the provisions 3021A, 3021B, 3021C and 3021D which concern:

single-sideband transmission (3021A)
full carrier single-sideband transmission (3021B)
reduced carrier single-sideband transmission (3021C)
suppressed carrier single-sideband transmission (3021D)

and which were adopted unanimously by Committee 7.

The texts of the above-mentioned provisions can be found in document No. 528.

H.L. VENHAUS
Vice-Chairman of Committee 7

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 7

Democratic Republic of Afghanistan

REQUEST FOR ALLOCATION OF ADDITIONAL CALL SIGNS

YA series of call signs has been allocated to Afghanistan. In view of the large number of Administrations in Afghanistan using radio transmitters for national and international communications, the number of stations and circuits has already increased considerably and will increase even further in the future. This call sign series has been used up.

The Administration of the Democratic Republic of Afghanistan requests the allocation of at least two new call sign series.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 5

Norway

NOR/588/279 ADD

RESOLUTION No. /- -/

Relating to Automated VHF/UHF Communications Systems Including Public Correspondence in the Maritime Mobile Service

The World Administrative Radio Conference, Geneva, 1979,

conscious of

a) continued growth of world population and associated needs of safe and efficient transportation of foodstuffs and other essential goods;

b) the desire for the rapid improvement in the standard of living of developing countries and the need of rapid and efficient economic growth;

c) the fleets of developing countries are now actively engaged in maritime trade and these fleets are growing substantially;

d) the total number of vessels over 100 gross tons having increased from 29,240 in 1948 to 67,863 in 1977 - an increase of 130 %;

considering

a) that maritime mobile VHF band (Appendix 18) has become congested in many areas of the world;

b) that there is a growing need for additional channels designated for services concerned with the movement and safety of ships;

c) that the maritime mobile service is international in character;

d) that international standardization is of great importance in the maritime mobile service;

e) that the future requirement for additional VHF/UHF channels for automated ship operations, vessel traffic and public correspondence in the maritime mobile service is on the order of 200-240 duplex channels (with 25 kHz channel spacing), i.e. two 5 - 6 MHz bandwidths suitably separated;

f) that it is highly desirable for the VHF/UHF maritime mobile public correspondence system to become fully automated to ensure the efficient utilization of the channels and the economic operation of the service, to the benefit of the users;

g) that some Administrations may wish to use the channels designated in such an automated system, also for use with the land mobile service in an integrated system, primarily in areas for joint or combined communications such as in ports, waterways and adjacent piers. In addition, the channels could be used by the land mobile service in areas where there are no needs or limited need for service, i.e. inland areas;

noting

a) CCIR Report 587-1 on this subject in response to Question 23-2/8;

b) CCIR Decision 30 directing Interim Working Party 8/5 to further study this subject taking into account Question 23-2/8 and results of studies in Report 587-1;

c) IMCO COM Circular 73 stating short range telecommunications requirements of 10 MHz of bandwidth for automated international maritime services;

resolves

that the next competent Administrative Radio Conference :

- designate suitable bands with sufficient number of channels for a maritime mobile communication system including public correspondence from a VHF/UHF band presently allocated world-wide to the mobile service;

- give preference to bands in the vicinity of 900 MHz. An example is (896 - 902)/(941 - 947) MHz. This as well as other possible nearby bands should be given consideration;

- identify the means for establishing, as required, regional assignment plans which take into account the world-wide needs of the maritime mobile service and allow for compatibility with the land mobile service;

that Administrations should take into account equipment having characteristics similar to equipment in use or planned to be in use;

requests the CCIR

to study preferred bands around 900 MHz as a matter of urgency and to issue an initial Recommendation well in advance of the next competent Administrative Radio Conference;

requests the Secretary-General

to communicate this Resolution to the Intergovernmental Maritime Consultative Organization for consideration and comments.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 5

Botswana

PROPOSALS FOR THE WORK OF THE CONFERENCE

The Botswana delegation reserved its right to revert to the Question of the allocation of 7 300 - 7 400 to broadcasting.

We have been interested to learn from the WARC-79 deliberations that an HF broadcasting WARC will be held in the near future. We take the view that this forthcoming conference will not bear fruit unless the need for expansion of broadcasting below 11 MHz is met.

All the tropical bands used by Botswana are shared and have not changed so far. Our interest is purely in domestic coverage. Botswana is a large country; there is a power limitation on tropical bands and we are in favour of this limitation. What we are emphasizing here is the need to plan the HF bands which will be of some use to us. The out-of-band transmissions from Europe must cease to operate on frequencies genuinely assigned to broadcasting in other countries. Our request is not to justify already existing out-of-band transmissions.

My delegation does not see any reason why sharing is unsatisfactory. There are no technical grounds for confining the provisions contained in footnote 202 to frequencies below 5 MHz.

In our view, all the broadcasting bands above 9 MHz are of no help to a domestic service in the developing countries, since extensions of frequencies above 15 MHz to broadcasting will only result in more powerful transmissions to developing countries, which are not needed.

For a country the size of Botswana, the bands around 7 MHz and 9 MHz will propagate satisfactorily for our domestic coverage. At this point these bands are congested, and should therefore be planned.

It emerged from the deliberations of the Working Group that broadcasting was not favoured. The Botswana delegation would like a footnote covering broadcasting to be inserted.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

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COMMITTEE 5

NINTH REPORT OF WORKING GROUP 5D TO COMMITTEE 5

(ALLOCATIONS)

Subject : Frequency bands between 3 300 and 3 600 MHz in Region 1 and between 3 300 and 3 500 MHz in Regions 2 and 3.

1. All proposals relating to these bands were considered, and the Working Group decided by majority to recommend the adoption of the revised Table and the revised provisions as given in the Annex.

2. The delegations of Algeria, the Federal Republic of Germany, Australia, the United States of America, France, Greece, Switzerland and Yugoslavia reserved the right to come back in Committee 5 to footnote MOD 3735/372 and to the allocations in the band 3 400 - 3 500 MHz.

3. The delegations of Australia, the United States of America, Iran and Iraq reserved the right to come back to the allocations in the band 3 400 - 3 500 MHz in Regions 2 and 3 in Committee 5.

4. For the secondary allocation in the Table to the radiolocation service in the band 3 400 - 3 600 MHz, the discussions and the results thereof on including a suitable footnote provision (ADD 3736A) for Regions 2 and 3 is contained in the Twenty-eighth Report of Working Group 5D (DT/206).

5. The Working Group decided to suppress the footnote 3734/371.

Dr. B.S. RAO
Chairman of Working Group 5D

Annex : 1

A N N E X

MHz
3 300 - 3 600

Region 1	Region 2	Region 3
3 300 - 3 400 RADIOLOCATION 3733/370 3732A	3 300 - 3 400 RADIOLOCATION Amateur Fixed Mobile 3733/370 3732A	3 300 - 3 400 RADIOLOCATION Amateur 3732A 3739/376
3 400 - 3 600 FIXED FIXED-SATELLITE (Space-to-Earth) Mobile Radiolocation 3737A /3735/372/ 3736/373 3737/374 3738/375	3 400 - 3 500 FIXED FIXED-SATELLITE (Space-to-Earth) Amateur Mobile Radiolocation /3736A/ 3644/320A /3735/372/ 3739A	

SUP 3734/371

MOD 3733/370 Additional allocation : in Austria, Bulgaria, Cuba, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the band 3 300 - 3 400 MHz is also allocated to the radionavigation service on a primary basis.

ADD 3732A In making assignments to services, Administrations are urged to take all practicable steps to protect the spectral line observations of the radio astronomy service from harmful interference in the bands 3 260 - 3 267 MHz, 3 332 - 3 339 MHz and 3 345.8 - 3 352.5 MHz. Emissions from space or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 3280/116 and 3281/116A and Article N33A).

MOD 3739/376 Additional allocation : in Bahrain, China, the United Arab Emirates, India, Indonesia, Iran, Japan, Pakistan and Thailand the band 3 300 - 3 400 MHz is also allocated to the fixed and mobile services on a primary basis.

MOD 3644/320A In the bands /~435 - 438 MHz,~/ 1 260 - 1 270 MHz, 2 400 - 2 450 MHz, 3 400 - 3 410 MHz (in Regions 2 and 3 only), 5 650 - 5 670 MHz, /~and 240 - 250 GHz~/ the amateur-satellite service may operate subject to not causing harmful interference (see No. 3442/148).

Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. 6362/1567A. The service in the bands 1 260 - 1 270 MHz and 5 650 - 5 670 MHz shall be only in the Earth-to-space direction.

MOD 3736/373 In Denmark and Norway, the fixed, radiolocation and fixed-satellite services operate on a basis of equality of rights in the band 3 400 - 3 600 MHz.

MOD 3737/374 Alternative allocation : in the United Kingdom, the band 3 400 - 3 475 MHz is allocated to the radiolocation service on a primary basis and to the amateur service on a secondary basis.

MOD 3738/375 Additional allocation : in the Federal Republic of Germany, Israel and Nigeria the band 3 400 - 3 475 MHz is also allocated to the amateur service on a secondary basis.

MOD 3735/372 /~Different category of service : in Australia, Austria, Canada, the United States of America, Iran, Italy, New Zealand and Papua New Guinea the allocation of the band 3 400 - 3 500 MHz to the radiolocation service is on a primary basis (see No. 3432/141)~/.

ADD 3736A /~In Regions 2 and 3 in the band 3 400 - 3 600 MHz, the radiolocation service is allocated on a primary basis. However, all Administrations operating radiolocation systems in this band are urged to cease operations by 1985. After this date, Administrations shall take all practicable steps to protect the fixed-satellite service and coordination requirements shall not be imposed on the fixed-satellite service.~/

ADD 3739A Different category of service : in Indonesia, Japan, Pakistan and Thailand the allocation of the band 3 400 - 3 500 MHz to the mobile (except aeronautical mobile) service is on a primary basis (see No. 3432/141).

ADD 3737A Alternative allocation : in the United Kingdom the band 3 475 - 3 600 MHz is allocated to the radiolocation service on a primary basis.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

TENTH REPORT OF WORKING GROUP 5D TO COMMITTEE 5

(ALLOCATIONS)

Subject : Frequency bands between 8 025 and 9 000 MHz

1. All proposals relating to these bands were considered, and the Working Group decided by majority to recommend the adoption of the revised Table and the revised provisions as given in the Annex.

2. The delegations of France and Italy reserved the right to come back in Committee 5 to the inclusion of their footnotes F/57B/378 and I/135/181 which reads as follows :

/ F/57B/378 ADD 3771A /

/ In Regions 1 and 3, in the band 8 025 - 8 400 MHz, the Earth exploration-satellite service may be authorized for space-to-Earth transmissions, subject to prior coordination and agreement with the Administrations whose services operate in accordance with the Table, bearing in mind the future development of these services.

After coordination has been successfully effected for specified technical characteristics and sites for the Earth stations of the Earth exploration-satellite service, the Earth stations covered by an agreement following such coordination will be considered to belong to a service having the status of a primary service. /

/ I/135/181 ADD 3770A /

/ The band 8 025 - 8 400 MHz is also used for the down-links of the Earth exploration-satellite service, but in Regions 1 and 3 these links may be authorized subject to prior coordination and agreement with the Administrations whose services operate in accordance with the present Table, in view of the future development of these services.

After coordination of the technical characteristics of Earth stations and space stations has been successfully carried out, the stations subject of an agreement following coordination shall be considered as belonging to a service having the status of a primary service. /

3. The delegation of Japan reserved the right to come back in Committee 5 to the allocation of Earth exploration-satellite service in the band 8 025 - 8 400 MHz in Region 3.

4. The delegations of Argentina, Bulgaria, Poland, the German Democratic Republic, Czechoslovakia and the USSR reserved the right to come back in Committee 5 to the allocation of the maritime radionavigation service in the band 8 850 - 9 000 MHz.

5. The Working Group decided to suppress the footnotes 3768/394 and 3697/354.

Dr. B.S. RAO
Chairman of Working Group 5D

Annex : 1

A N N E X

MHz
8 025 - 8 400

Allocation to Services		
Region 1	Region 2	Region 3
8 025 - 8 175 FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)	8 025 - 8 175 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) MOBILE 3762B	8 025 - 8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)
8 175 - 8 215 FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)	8 175 - 8 215 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 3762B	8 175 - 8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)
8 215 - 8 400 FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)	8 215 - 8 400 EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE 3770/394B (Earth-to-space) MOBILE 3762B	8 215 - 8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration-Satellite (space-to-Earth)

MHz
8 400 - 8 900

Region 1	Region 2	Region 3
8 400 - 8 500	FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) 3771A 3771/394D 3769/394A	
8 500 - 8 750	RADIOLOCATION 3772/395 3675A 3772A	
8 750 - 8 850	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 3773/396 3774/397	
8 850 - 9 000	RADIOLOCATION MARITIME RADIONAVIGATION 3774A [3775/398]	

MOD 3770/394B — Different category of service : in Guyana and Israel, the allocation of the band 8 025 - 8 400 MHz to the fixed-satellite service is on a secondary basis. (See No. 3431/140)

ADD 3762B — In Region 2, aircraft stations are not permitted to transmit in the bands 8 025 - 8 400 MHz.

SUP 3768/394

NOC 3769/394A — Alternative allocation : in the United Kingdom, the band 8 400 - 8 500 MHz is allocated to the radiolocation and space research services on a primary basis.

ADD 3771A — In the space research service, the use of the band 8 400 - 8 450 MHz is limited to deep space only.

MOD 3771/394D — Different category of service : in Algeria, Belgium, France, Israel, Luxembourg, Malaysia and Singapore, the allocation of the band 8 400 - 8 500 MHz to the space research service is on a secondary basis. (See No. 3431/140.)

MOD 3772/395 — Additional allocation : in Bulgaria, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the band 8 500 - 8 750 MHz is also allocated to the land mobile and the radionavigation services on a primary basis.

ADD 3772A

Additional allocation : in Saudi Arabia, Cameroon, China, Congo, Gabon, Guyana, Iran, Jamaica, Mali, Morocco, Mauritania, Nepal, Nigeria, Qatar, Senegal, Somalia, Sudan, Thailand and Tunisia, the band 8 500 - 8 750 MHz is also allocated to the fixed and mobile services on a primary basis.

ADD 3675A

In the bands 1 215 - 1 300 MHz, 3 100 - 3 300 MHz, 5 250 - 5 350 MHz, 8 550 - 8 650 MHz, 9 500 - 9 800 MHz and 13.4 - 14.0 GHz, radiolocation stations installed on spacecraft may also be employed for the Earth exploration-satellite and space research services on a secondary basis.

SUP 3697/354

NOC 3773/396

The use of the band 8 750 - 8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.

MOD 3774/397

Additional allocation : in Algeria, the Federal Republic of Germany, Bahrain, Belgium, China, the United Arab Emirates, France, Greece, Iran, the Netherlands and Sudan the bands 8 825 - 8 850 MHz /¯ and 9 000 - 9 225 MHz ¯/ are also allocated to the maritime radionavigation service (shore-based radars only) on a primary basis.

MOD 3775/398

/¯ Additional allocation : in Austria, Bulgaria, Cuba, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the bands 8 850 - 9 000 MHz, 9 200 - 9 300 MHz and 9 500 - 9 800 MHz are also allocated to the radionavigation service on a primary basis ¯/.

ADD 3774A

In the bands 8 850 - 9 000 MHz and 9 200 - 9 225 MHz the maritime radionavigation service is limited to shore-based radars.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 5

Committee 4 has considered the proposed Resolution No. S/15/378 (attached) and considers that from a technical point of view the proposed Resolution would be useful; however Committee 5 should consider this Resolution from the allocations point of view.

N. MORISHIMA
Chairman of Committee 4

Annex : 1

ANNEX

S/15/378 ADD

RESOLUTION No. C

Relating to the Establishment of an International General Mobile Service

The World Administrative Radio Conference, Geneva 1979,

considering

a) that it is desirable to designate a frequency band for international integrated use in the aeronautical, maritime and land mobile services;

b) that it is necessary in an early stage to indicate a specific frequency band that can be reserved internationally;

c) that the efficiency in the use of frequencies is improved by increased re-use of the frequencies, and that this may be achieved in frequency bands where the propagation characteristics are such that the service range from a land station is comparatively short;

d) that an important part of the requirement for a frequency band for integrated use in the aeronautical, maritime and land mobile services is to be characterized as public correspondence;

resolves

1. that a band in the frequency range 862 - 960 MHz be designated for international integrated use in the aeronautical, maritime and land mobile services;

2. that in the integrated mobile service also satellites for the land mobile service could be included;

3. that the integrated mobile service shall be open for public correspondence; and

urges

the CCIR and the CCITT to study the technical and operational characteristics of such a service.

Reasons : To provide for international mobile radiocommunication networks.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

ELEVENTH REPORT OF WORKING GROUP 5D TO COMMITTEE 5

(ALLOCATIONS)

Subject : Frequency bands between 9 000 and 10 000 MHz

1. All proposals relating to these bands were considered, and the Working Group decided by majority to recommend the adoption of the revised Table and the revised provisions as given in the Annex.

2. The delegation of Argentina reserved the right to come back to the allocations in the band 9 200 - 9 300 MHz in Committee 5.

3. The delegation of USSR reserved the right to come back, in Committee 5, to footnote 3775/398 relating to the band 9 200 - 9 300 MHz.

4. The delegation of France reserved the right to come back, in Committee 5, to the allocation of radionavigation on a primary basis in the band 9 500 - 9 800 MHz.

5. The delegation of the Federal Republic of Germany reserved the right to come back to footnote 3730A in Committee 5.

6. The Working Group decided to form Drafting Group 5D5 (with the terms of reference) to take into account all the footnotes relating to radioastronomy and ISM. The terms of reference of this Group are :

Preparation of possible footnotes applicable to allocations in the frequency band 960 MHz - 40 GHz for radioastronomy service and ISM applications.

The Chairman of the Drafting Group is Dr. J.B. Whiteoak, Box 1158 (AUS).

7. The Working Group decided to suppress the footnote 3775/398 in the band 9 500 - 9 800 MHz.

Dr. B.S. RAO
Chairman of Working Group 5D

Annex : 1

A N N E X

MHz
9 000 - 10 000

Allocation to Services		
Region 1	Region 2	Region 3
9 000 - 9 200	AERONAUTICAL RADIONAVIGATION 3676/346 Radiolocation 3774/397	
9 200 - 9 300	RADIOLOCATION MARITIME RADIONAVIGATION 3774A 3775/398	
9 300 - 9 500	RADIONAVIGATION Radiolocation 3729/367A 3730/367B 3776/399	
9 500 - 9 800	RADIOLOCATION RADIONAVIGATION 3730A 3675A	
9 800 - 10 000	RADIOLOCATION Fixed 3777/400 3778/401 3779/401A	

MOD 3676/346 The use of the bands 1 300 - 1 350 MHz, 2 700 - 2 900 MHz and 9 000 - 9 200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.

MOD 3774/397 Additional allocation : in the Federal Republic of Germany, Belgium, China, France, Iran, the Netherlands and Sudan, the bands 8 825 - 8 850 MHz and 9 000 - 9 200 MHz are also allocated to the maritime radionavigation service (shore-based radars only) on a primary basis.

ADD 3774A In the bands 8 850 - 9 000 MHz and 9 200 - 9 225 MHz the maritime radionavigation service is limited to shore-based radars.

MOD 3775/398 Additional allocation : in Austria, Bulgaria, Cuba, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the bands 8 850 - 9 000 MHz and 9 200 - 9 300 MHz are also allocated to the radionavigation service on a primary basis.

MOD 3776/399 The use of the band 9 300 - 9 500 MHz by the aeronautical radionavigation service is limited to the airborne weather radars, and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300 - 9 320 MHz subject to the condition that harmful interference is not caused to the maritime radionavigation service. In the band 9 300 - 9 500 MHz, ground-based radars used for meteorological purposes have priority over other radiolocation devices.

NOC 3729/367A In the bands 2 900 - 2 920 MHz and 9 300 - 9 320 MHz in the maritime radionavigation service, the use of shipborne radars other than those existing on 1 January 1976 is not permitted.

NOC 3730/367B In the bands 2 920 - 3 100 MHz and 9 320 - 9 500 MHz in the maritime radionavigation service, the use of fixed-frequency radar beacons on land or at sea is not permitted.

ADD 3730A In the bands 2 900 - 3 100 MHz, 5 470 - 5 650 MHz and 9 500 - 9 800 MHz, the use of maritime transponder systems shall be confined to the sub-bands 2 930 - 2 950 MHz, 5 470 - 5 480 MHz and 9 500 - 9 520 MHz.

ADD 3675A In the bands 1 215 - 1 300 MHz, 3 100 - 3 300 MHz, 5 250 - 5 350 MHz, 8 550 - 8 650 MHz, 9 500 - 9 800 MHz, and 13.4 - 14.0 GHz, radiolocation stations installed on spacecraft may also be employed for the Earth exploration-satellite and space research services on a secondary basis.

MOD 3777/400 Additional allocation : in Bulgaria, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the band 9 800 - 10 000 MHz is also allocated to the radionavigation service on a primary basis.

MOD 3778/401 Different category of service : in Austria, Cameroon, Guyana, India, Indonesia, Jamaica, Japan, Sweden and Thailand, the allocation of the band 9 800 - 10 000 MHz to the fixed service is on a primary basis. (see No. 3432/141).

MOD 3779/401A The band 9 975 - 10 025 MHz is also allocated to the meteorological-satellite service for use by weather radars on a secondary basis.

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

Committee 4 has considered Document No. 576 and decided that it is more appropriate for Committee 6.

Committee 6 is requested to take further action on this Document.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

TWELFTH REPORT OF WORKING GROUP 5D TO COMMITTEE 5

(ALLOCATIONS)

Subject : Frequency bands between 23.6 and 24.25 GHz and between 31.5 and 33 GHz

1. Frequency bands between 23.6 and 24.25 GHz

All proposals relating to these bands were considered, and the Working Group decided unanimously to recommend the adoption of the revised Table and the revised provisions as given in Annex 1.

2. The Working Group decided unanimously to delete footnote 3792/407 and to suppress its reference in all bands indicated in the footnote.

3. Frequency bands between 31.5 and 33 GHz

All proposals relating to these bands were considered, and the Working Group decided by majority to recommend the adoption of the revised Table and the revised provisions as given in Annex 2.

4. In considering the proposals concerning the allocation of the band 31.8 - 32.3 GHz to space research service, the majority of the Working Group was of the view that the allocation should be on a secondary basis; however some Administrations expressed the view that the band should be allocated to the space research service (deep space), space-to-Earth direction on a primary basis.

5. In considering the sharing criteria between the inter-satellite and radionavigation services (32 - 33 GHz), the Working Group agreed to include the footnote 3807A (CAN/60B/514). However it was agreed that appropriate power flux-density limits on the satellite transmissions (in Article N26) would be more suitable. Committee 4 has been requested to provide the appropriate values.

6. The Working Group decided unanimously to suppress footnote 3790/405C.

Dr. B.S. RAO
Chairman of Working Group 5D

Annexes : 2

A N N E X 1

GHz
23.6 - 24.25

Allocation to Services		
Region 1	Region 2	Region 3
23.6 - 24	EARTH EXPLORATION /(Passive)/ RADIO ASTRONOMY SPACE RESEARCH /(Passive)/ 3531B 3803A	
24 - 24.05	AMATEUR AMATEUR-SATELLITE 3803A 3803/410C	
24.05 - 24.25	RADIOLOCATION Amateur Earth Exploration-Satellite /(Active)/ 3803/410C	

SUP 3792/407

ADD 3803A Additional allocation : in Bulgaria, Hungary, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the USSR, the band 23.6 - 24.05 GHz is also allocated to the fixed service and to the mobile (except aeronautical mobile) service on a primary basis.

ADD 3531B All emissions in the band 23.6 - 24 GHz are prohibited, except for those under the provisions of No. 3803A. The use of passive sensors by other services is also authorized.

MOD 3803/410C The band 24.000 GHz - 24.250 GHz is designated for industrial, scientific and medical (ISM) applications (centre frequency 24.125 GHz). Radio services operating within this band must accept harmful interference which may be caused by these applications. ISM equipment operating in this band is subject to the provisions of No. 5002A.

A N N E X 2

GHz
31.5 - 33

Region 1	Region 2	Region 3
31.5 - 31.8 EARTH EXPLORATION-SATELLITE /(Passive)/ RADIO ASTRONOMY SPACE RESEARCH /(Passive)/ Fixed Mobile except aeronautical mobile 3806A 3802A	31.5 - 31.8 EARTH EXPLORATION-SATELLITE /(Passive)/ RADIO ASTRONOMY SPACE RESEARCH /(Passive)/ 3806B 3802A	31.5 - 31.8 EARTH EXPLORATION-SATELLITE /(Passive)/ RADIO ASTRONOMY SPACE RESEARCH /(Passive)/ Fixed Mobile except aeronautical mobile 3802A
31.8 - 32	RADIONAVIGATION /Space research/ 3807/412B 3807D	
32 - 32.3	INTER-SATELLITE RADIONAVIGATION /Space research/ /3807A/ 3807/412B 3807D	
32.3 - 33	INTER-SATELLITE RADIONAVIGATION 3807B /3807A/ 3807D	

SUP 3790/405C

ADD 3802A In Regions 1 and 3, in making assignments to stations of other services to which the band 31.5 - 31.8 GHz is allocated, Administrations are urged to take all practical steps to protect the radio astronomy service from harmful interference. Emissions from space and airborne stations can be particularly serious sources of interference to the radio astronomy service. (See Nos. 3280/116 and 3281/116A and Article N33A).

In Region 2, all emissions in the band 31.5 - 31.8 GHz are prohibited, except for those under the provisions of No. ADD 3806/B. The use of passive sensors by other services is also authorized.

ADD 3806A Different category of service : in Bulgaria, Egypt, Hungary, Mongolia, Poland, the German Democratic Republic, Roumania, Czechoslovakia and the USSR, the allocation of the band 31.5 - 31.8 GHz to the fixed service and to the mobile (except aeronautical mobile) service is on a primary basis (see No. 3432/141).

ADD 3806B Additional allocation : in Cuba, the band 31.5 - 31.8 GHz is also allocated to the fixed service and to the mobile (except aeronautical mobile) service is on a primary basis.

MOD 3807/412B Different category of service : in Bulgaria, Cuba, Hungary, Poland, the German Democratic Republic, Czechoslovakia and the USSR, the allocation of the band 31.8 - 32.3 GHz to the space research service is on a primary basis (see No. 3432/141).

ADD 3807D Subject to agreement obtained under the procedure set forth in Article N13A, the band 31.8 - 33.8 GHz may also be used in Japan for space-to-Earth transmission in the fixed-satellite service, up to 31 December 1990.

ADD 3807B Additional allocation : in Bulgaria, Cuba, Hungary, Poland, the German Democratic Republic, Czechoslovakia and the USSR, the band 32.3 - 32.8 GHz is also allocated to the space research service on a primary basis.

ADD 3807A_/ /_ In the planning of systems for the inter-satellite and radionavigation services in the band 32 - 33 GHz Administrations shall take all measures to prevent harmful interference between these two services, which would otherwise result in restricting the operation of the radionavigation service._/

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Addendum No. 2 to
Document No. 596-E
12 November 1979
Original : English

WORKING GROUP 6A

ADDENDUM TO
REPORT BY WORKING GROUP 6A3 TO WORKING GROUP 6A

Appendix 1A

Add in Appendix 1A in :

Section B, Item 7

ADD d)[1] indicate for the carrier having the smaller bandwidth of assignment in the system, the class of emission, necessary bandwidth and a description of the transmission.

Section D, Item 8

ADD d)[1] indicate for the carrier having the smaller bandwidth of assignment in the system, the class of emission, necessary bandwidth and a description of the transmission.

A.M. CORRADO
Chairman of Working Group 6A3

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Addendum No. 1 to
Document No. 596-E
12 November 1979
Original : English

WORKING GROUP 6A

ADDENDUM TO

REPORT BY WORKING GROUP 6A3 TO WORKING GROUP 6A

Appendix 1A

Add in Appendix 1A in :

Section D, Item 10

ADD e) in the case of a space station aboard a geostationary satellite operating in a band allocated in the earth-to-space direction and in the space-to-earth direction, also indicate the gain of the space station (transmitting) antenna in the direction of those parts of the geostationary satellite orbit which are not obstructed by the earth by means of a diagram showing estimated antenna gain versus orbit longitude;

Section E, Item 9

ADD e) in the case of a space station aboard a geostationary satellite operating in a band allocated in the earth-to-space direction and in the space-to-earth direction, also indicate the gain of the space station (receiving) antenna in the direction of those parts of the geostationary satellite orbit which are not obstructed by the earth by means of a diagram showing estimated antenna gain versus orbit longitude;

A.M. CORRADO
Chairman of Working Group 6A3

UNION INTERNATIONALE DES TELECOMMUNICATIONS

CONFERENCE ADMINISTRATIVE MONDIALE DES RADIOCOMMUNICATIONS

(Genève, 1979)

Corrigendum N° 1 au
Document N° 596-F/E/S
13 novembre 1979

GROUPE DE TRAVAIL 6A
WORKING GROUP 6A
GRUPO DE TRABAJO 6A

RAPPORT DU GROUPE DE TRAVAIL 6A3 AU GROUPE DE TRAVAIL 6A
REPORT BY WORKING GROUP 6A3 TO WORKING GROUP 6A
INFORME DEL SUBGRUPO DE TRABAJO 6A3 AL GRUPO DE TRABAJO 6A

Appendice 1A
Appendix 1A
Apéndice 1A

Dans la version française:

Page 2, Section A, para. 4c), troisième ligne,

ajouter "y compris, dans le cas d'un satellite géostationnaire, sa position orbitale".

Page 3, Section B, point 4b), première ligne, après le mot "pays",

insérer "ou la zone géographique".

Page 10, Section D, point 6a), troisième ligne, après le mot "pays",

insérer "ou la zone géographique".

In the English version:

Pages 3, 6, 8, 12, 15, Sections B, C, D, E, F, item 1,

insert "in MHz" before "above /28,000/ kHz".

En la version española:

Página 3, Sección B, punto 4c), segunda línea, después de "minuto)"

añadase "de la ubicación del transmisor".

Página 7, Sección C, punto 4c), tercera línea, después de "minuto)"

añadase "de la ubicación del receptor".

Páginas 3, 6, 8, 12, 15, Secciones B, C, D, E, punto 1,

insértese "en MHz" antes de "por encima de /28,000/ kHz".

A.M. CORRADO
Chairman of Working Group 6A3

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

(Geneva, 1979)

Document No. 596-E
10 November 1979
Original : English

WORKING GROUP 6A

REPORT BY WORKING GROUP 6A3 TO WORKING GROUP 6A

Appendix 1A - Notices relating to Space Radiocommunications and Radio Astronomy Stations

1. Working Group 6A3 considered all proposals concerning the above subject and, with the exception mentioned in paragraph 3 below, unanimously agreed to submit the attached texts to Working Group 6A for consideration.

2. In reaching these results the Working Group held a joint meeting with Working Group 4B on Saturday 10 November 1979 to deal with the technical aspects of this Appendix.

3. Geographical Coordinates (Items 4c in Sections B and C)

A majority of delegations which expressed views agreed to the revised text as shown in the attached Annex, i.e.

"... in degrees, minutes and seconds with an accuracy of one tenth of a minute)...",

while five delegations expressed the preference for no change to the present provisions, i.e.

"... in degrees and minutes)...".

The delegation of Cuba reserved the right to revert to this question in Working Group 6A if it still so desired.

A.M. CORRADO
Chairman of Working Group 6A3

Annex : 1

APPENDIX 1A

Notices relating to Space Radiocommunications and Radio Astronomy Stations

MOD (See Articles N11/9A, 13/9A)

Section A. General Instructions

1. A separate notice shall be sent to the International Frequency Registration Board for notifying:

MOD
- — each new frequency assignment to an Earth station for transmitting or to be received or a space station for transmitting or to be received;
- — any change in the characteristics of a frequency assignment recorded in the Master International Frequency Register (hereinafter called the *Master Register*);
- — any total deletion of a frequency assignment recorded in the Master Register.

2. When submitting notices under No. [639BA] for earth and space transmitting assignments and under No. [639BB] for space and earth receiving assignments, separate notices shall be submitted to the Board for each

MOD assignment to an earth station. In each of these cases where the basic characteristics are identical, with the exception of the frequency, a single notice may be submitted covering all basic characteristics and listing the assigned frequencies. In the case of a passive satellite system, only earth transmitting and receiving assignments shall be notified.

(MOD) 3. In the case of a satellite system employing multiple space stations with the same general characteristics, a separate notice shall be submitted for each space station for transmitting or to be received:

- — when it is aboard a geostationary satellite; or
- — when it is aboard a non-geostationary satellite except when a number of satellites have the same radio frequency characteristics and orbital characteristics (excluding the ascending node position); in the latter case, one notice covering all such space stations may be submitted.

4. The following basic information shall be shown on the notice:

a) the serial number of the notice and the date on which the notice is sent to the Board;

b) the name of the notifying administration;

c) sufficient data to identify the particular satellite network in which the earth or space station will operate, including in the case of a geostationary satellite, its orbital position.

APlA Section A General (cont.)

d) whether the notice reflects:

1) the first use of a frequency by a station;

2) a change in the characteristics of a frequency assignment recorded in the Master Register (indicate whether the change is a replacement, addition or deletion of existing characteristics); or

3) a deletion of an assignment in all of its notified characteristics;

e) reference to the I.F.R.B. weekly circular providing the advance publication information required in accordance with No. [639AA];

f) basic characteristics as outlined in Section B, C, D, E, or F as appropriate;

g) any other information which the administration considers to be relevant, e.g., any factors taken into account when applying Appendix [28] for determination of the co-ordination area and also any indication that the assignment concerned would be operating in accordance with No. [115], information concerning the use of the notified frequency if such use is restricted, or, in the case of notices pertaining to space stations, if the transmissions of the station are to be permanently switched off after a certain period.

Section B. Basic Characteristics to be furnished in Notices relating to Frequencies used by Earth Stations for Transmitting

MOD *Item 1* Assigned frequency (ies)

MOD Indicate the assigned frequency(ies), as defined in Article 1, in kHz up to [28,000] kHz inclusive, above [28,000] kHz to /10,500/ MHz inclusive and in GHz above [10,500] MHz (see No. /857).

Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. [89]).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) of bringing the frequency assignment into use.

b) Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4 *a)*), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

Item 4 Identity and location of the transmitting earth station

a) Indicate the name by which the station is known or the name of the locality in which it is situated.

MOD b) Indicate the country or geographical area in which the station is located. Symbols from the Preface to the International Frequency List shall be used.

MOD *c)* Indicate the geographical co-ordinates (longitude and latitude in degrees, minutes and seconds with an accuracy of one-tenth of a minute) of the transmitter site.

AP1A Section B Earth transmitting (cont.)

Item 5 **Station(s) with which communication is to be established**

Identify the associated receiving space station(s) by reference to the notification thereof or in any other appropriate manner, or, in the case of a passive satellite, the identity of the satellite and the location of the associated receiving earth station(s).

ADD In the case of a geostationary satellite, indicate also its orbital position.

Item 6 **Class of station and nature of service**

Indicate the class of station and nature of service performed, using the symbols shown in Appendix [10.]

Item 7 **Class of emission, necessary bandwidth and description of transmission**

In accordance with Article [2] and Appendix [5:]

a) **indicate the class of emission;**

b) [1] **indicate the carrier frequency or frequencies of the emission(s);**

c) [1] **indicate for each carrier, the class of emission, necessary bandwidth and description of transmission.**

Item 8 **Power characteristics of the transmission**

MOD ***a)*** [1] **Indicate for each carrier, the peak power** (in dBW) supplied to the **input of the antenna.**

MOD ***b)*** **Indicate the total peak power** (in dBW) and the maximum power density per Hz (dBW/Hz)[2] **supplied to the input of the antenna averaged over the worst 4 kHz band for carriers below 15 GHz, or averaged over the worst 1 MHz band for carriers above 15 GHz.**

ADD c)[1] Indicate for each carrier the minimum value of the peak power supplied to the input of the antenna.

Item 9 **Transmitting antenna characteristics**

a) **Indicate the isotropic gain (dB) of the antenna in the direction of maximum radiation (see No. [100].)**

b) **Indicate the beamwidth in degrees between the half power points (describe in detail if not symmetrical).**

c) **Either attach the measured radiation diagram of the antenna (taking as a reference the direction of maximum radiation) or indicate the reference radiation diagram to be used for co-ordination.**

d) **Indicate graphically the horizon elevation angle for each azimuth around the earth station.**

---

[1] **This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.**

ADD 2 The most recent version of the relevant CCIR Report should be used to the extent applicable in calculating the maximum power density per Hz.

APlA Section B Earth transmitting (cont.)

e) Indicate in degrees from the horizontal plane the planned minimum operating angle of elevation of the antenna in the direction of maximum radiation.

f) Indicate in degrees, clockwise from true north, the planned range of operating azimuthal angles for the direction of maximum radiation.

g)[1] Indicate the type of polarization of the transmitted wave in the direction of maximum radiation; also indicate the sense in the case of circular polarization and the plane in the case of linear polarization. The most recent CCIR Recommendation should be used.

ADD

h) Indicate the altitude (metres) of the antenna above mean sea level.

Item 10[1] Modulation characteristics

For each carrier, according to the nature of the signal modulating the carrier and the type of modulation, indicate the following characteristics:

a) carrier frequency modulated by a frequency-division multichannel telephony baseband (FDM-FM) or by a signal that can be represented by a multichannel telephony baseband: indicate the lowest and highest frequencies of the baseband and the r.m.s. frequency deviation of the test tone as a function of baseband frequency;

b) carrier frequency modulated by a television signal: indicate the standard of the television signal (including, where appropriate, the standard used for colour), the frequency deviation for the reference frequency of the pre-emphasis characteristic and the pre-emphasis characteristic itself. Also indicate, where applicable, the characteristics of the multiplexing of the video signal with the sound signal(s) or other signals;

c) carrier phase-shift modulated by a pulse code modulation signal (PCM PSK): indicate the bit rate and the number of phases;

d) amplitude modulated carrier (including single sideband): indicate as precisely as possible the nature of the modulating signal and the kind of amplitude modulation used;

e) for all other types of modulation, provide such particulars as may be useful for an interference study;

f) for any type of modulation as applicable, indicate the characteristics of energy dispersal, such as the peak-to-peak frequency deviation (in MHz) and the sweep frequency (in kHz) of the energy dispersal wave form.

ADD

MOD Item 11 Regular hours of operation

Indicate in UTC the regular hours of operation on the frequency of each carrier.

---

[1] This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

APlA Section B Earth transmitting (cont.)

Item 12 Co-ordination

Give the name of any administration with which the use of this frequency has been successfully co-ordinated in accordance with Nos. [639AJ] and [639AN] and, if appropriate, the name of any administration with which co-ordination has been sought but not effected.

Item 13 Agreements

Give, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations, and the contents of such agreement.

Item 14 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic address of the administration to which communications should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of stations (see Article [15]).

Section C. Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Earth Stations

MOD *Item 1* Assigned frequency (ies)

Indicate the assigned frequency (ies) of the emission to be received as defined in Article 1, in kHz up to [28,000] kHz inclusive, above [28,000] kHz to /10,500/ MHz inclusive and in GHz above [10,500] MHz (see No. /85/.

Item 2 Assigned frequency band

Indicate the bandwidth of the assigned frequency band in kHz (see No. [89]).

Item 3 Date of bringing into use

a) In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) when reception of the assigned frequency begins.

b) Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4 *a)*), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).

Item 4 Identity and location of the receiving earth station

a) Indicate the name by which the receiving earth station is known or the name of the locality in which it is situated.

MOD b) Indicate the country or geographical area in which the station is located. Symbols from the Preface to the International Frequency List shall be used.

APlA Section C Earth, to be received (cont.)

MOD

c) **Indicate the geographical co-ordinates** (longitude and latitude in degrees, minutes and seconds with an accuracy of one-tenth of a minute) of the receiver site.

Item 5 **Station(s) with which communication is to be established**

Identify the associated transmitting space station(s) by reference to the notification thereof or in any other appropriate manner, or, in the case of a passive satellite, the identity of the satellite and

ADD **the associated transmitting earth station(s).** In the case of a geostationary satellite, indicate also its orbital position.

Item 6 **Class of station and nature of service**

Indicate the class of station and nature of service performed, using the symbols shown in Appendix [10.]

Item 7 **Class of emission, necessary bandwidth and description of the transmission to be received**

In accordance with Article [2] and Appendix [5:]

a) **indicate the class of emission of the transmission to be received;**

b) [1] **indicate the carrier frequency or frequencies of the transmission to be received;**

c) [1] **indicate, for each carrier to be received, the class of emission, necessary bandwidth and description of the transmission.**

Item 8 **Earth station receiving antenna characteristics**

a) **Indicate the isotropic gain (dB) of the antenna in the direction of maximum radiation (see No. [100].)**

b) **Indicate the beamwidth in degrees between the half power points (describe in detail if not symmetrical).**

c) **Either attach the measured radiation diagram of the antenna (taking as a reference the direction of maximum radiation) or indicate the reference radiation diagram to be used for co-ordination.**

d) **Indicate graphically the horizon elevation angle for each azimuth around the earth station.**

e) **Indicate in degrees from the horizontal plane the planned minimum operating angle of elevation of the antenna in the direction of maximum radiation.**

f) **Indicate in degrees, clockwise, from True North, the planned range of operating azimuthal angles for the direction of maximum radiation.**

g) **Indicate the altitude (metres) of the antenna above mean sea level.**

---

[1] **This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.**

APlA Section C Earth, to be received (cont.)

MOD Item 9 Noise temperature, link noise temperature and transmission gain

MOD a) Indicate the lowest total receiving system noise temperature referred to the output of the receiving antenna of the earth station in kelvins under "quiet sky conditions". This value shall be indicated for the nominal value of the angle of elevation when the associated transmitting station is aboard a geostationary satellite and, in other cases, for the minimum value of angle of elevation.

ADD b) When simple frequency changing transponders are used on the associated space station, indicate the lowest equivalent satellite link noise temperatures under the conditions of item 9 a) for each assignment (see No. /3154/103A/).

ADD c) Indicate the value of transmission gain associated with each equivalent satellite link noise temperature given in item 9 b). The transmission gain is evaluated from the output of the receiving antenna of the space station to the output of the receiving antenna of the earth station.

MOD Item 10 Regular hours of reception

Indicate in UTC the regular hours of reception of the frequency of each carrier.

Item 11 **Co-ordination**

Give the name of any administration with which the use of this frequency has been successfully co-ordinated in accordance with Nos. [639AJ] and [639AN] and, if appropriate, the name of any administration with which co-ordination has been sought but not effected.

Item 12 **Agreements**

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations, and the contents of such agreement.

Item 13 **Operating administration or company**

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article [15]).

Section D. Basic Characteristics to be furnished in Notices relating to Frequencies used by Space Stations for Transmitting

MOD ***Item 1*** **Assigned frequency** (ies)

MOD **Indicate the assigned frequency** (ies), as defined in Article 1, in kHz, up to [28,000] kHz inclusive, above [28,000] kHz to /10,500/ MHz
NOC inclusive and in GHz above [10,500] MHz (see No. /857/). At least one separate assignment notice should be made out for each antenna radiation beam.

APlA Section D Space transmitting (cont.)

Item 2 **Assigned frequency band**

Indicate the bandwidth of the assigned frequency band in kHz (see No. [89]).

Item 3 **Date of bringing into use**

a) **In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) of bringing the frequency assignment into use.**

b) **Whenever the assignment is changed in any of its basic characteristics as shown in this Section (except in the case of a change in Item 4), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).**

ADD /Item 3 bis Period of operation

/F/57A/658 (Corr.3)/

Indicate the proposed period of operation of the space station. This period shall be limited to the period for which the satellite network is designed. During that period, replacement satellites may be used, provided that the technical characteristics of the frequency assignment remain unchanged./

Item 4 **Identity of the space station(s)**

Indicate the identity of the space station(s).

Item 5 **Orbital information**

a) **In the case of a space station aboard a geostationary satellite indicate the nominal geographical longitude on the geostationary satellite orbit and the longitudinal** tolerance. Indicate also in the case where a geostationary satellite is intended to communicate with an earth station:

MOD

1) the arc of the geostationary satellite orbit over which the space station is visible, at a minimum angle of elevation of 10° at the Earth's surface, from its associated earth stations or service areas; and

2) the arc of the geostationary satellite orbit within which the space station could provide the required service to its associated earth stations or service areas; and

3) in the event that the arc defined in paragraph 2) above is less than the arc defined in paragraph 1) above, provide the reasons therefor.

***Note*: The arcs specified in 1) and 2) will be indicated by the geographical longitude of the extremes of these arcs on the geostationary satellite orbit.**

b) **In the case of space station(s) aboard non-geostationary satellite(s), indicate the angle of inclination of the orbit, the period, the altitudes in kilometres of the apogee and perigee of the space station(s) and the number of satellites used.**

AP1A Section D Space transmitting (cont.)

MOD Item 6 Service area or receiving station(s)

MOD a) In the case wherethe associated receiving stations are earth stations, indicate the service area or areas on the Earth or the name of the locality and country or geographical area in which each receiving station is located.

ADD b) In the case where the associated receiving stations are space stations, identify each station by reference to the notification thereof or in any other appropriate manner.

Item 7 **Class of station and nature of service**

Indicate the class of station and nature of service performed, using the symbols shown in Appendix [10]

Item 8 **Class of emission, necessary bandwidth and description of transmission**

In accordance with Article [2] and Appendix [5:]

a) **indicate the class of emission of the transmission;**

b) [1] **indicate the carrier frequency or frequencies of the transmission;**

c) [1] **indicate, for each carrier, the class of emission, necessary bandwidth and description of transmission.**

Item 9 **Power characteristics of the transmission**

MOD ***a)*** [1] **Indicate for each carrier the peak power** (in dBW) **supplied to the input of the antenna.**

MOD ***b)*** **Indicate the total peak power** (in dBW) and the maximum power density per Hz (in dBW/Hz)[2] **at the input of the antenna averaged over the worst 4 kHz band for carriers below 15 GHz or averaged over the worst 1 MHz band for carriers above 15 GHz.**

ADD c)[1] Indicate for each carrier the minimum value of the peak power supplied to the input of the antenna.

NOC Item 10 Space station transmitting antenna characteristics

MOD For each service area or antenna radiation beam:

MOD a) in the case of a space station aboard a geostationary satellite that is intended to communicate with an earth station, indicate the gain of the space station transmitting antenna by means of gain contours plotted on a map of the Earth's surface, preferably in a radial

[1] **This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.**

ADD 2 The most recent version of the relevant CCIR Report should be used to the extent applicable in calculating the maximum power density per Hz.

APlA Section D Space transmitting (cont.)

Item 10 a) (cont.) projection from the satellite on to a plane perpendicular to the axis from the centre of the Earth to the satellite. The isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB and at 10 dB intervals thereafter as necessary, below the maximum gain, shall be indicated. Whenever possible the gain contours of the space station transmitting antenna should also be provided in the form of a numerical equation or in tabular form;

MOD b) in the case of a space station aboard a geostationary satellite in which the antenna radiation beam is directed towards another satellite, or in the case of a space station aboard a non-geostationary satellite, indicate the isotropic gain of the space station transmitting antenna in the main direction of radiation and indicate the antenna radiation pattern, taking the gain in the main direction of radiation as a reference;

MOD c)[1] indicate the type of polarization of the antenna. In the case of circular polarization indicate the sense of polarization (see [N3153C] and [N3153D]). In the case of linear polarization, indicate the angle BT (in degrees) in a plane normal to the beam axis specified as the angle measured anticlockwise from a line parallel to the equatorial plane to the polarization vector of a wave as seen in the direction of maximum radiation.

d) for a geostationary satellite, indicate the pointing accuracy of the antenna.

***Item 11*[1] Modulation characteristics**

For each carrier, according to the nature of the signal modulating the carrier and the type of modulation, indicate the following characteristics:

a) carrier frequency modulated by a frequency-division multichannel telephony baseband (FDM-FM) or by a signal that can be represented by a multichannel telephony baseband: indicate the lowest and highest frequencies of the baseband and the r.m.s. frequency deviation of the test tone as a function of baseband frequency;

b) carrier frequency modulated by a television signal: indicate the standard of the television signal (including, where appropriate, the standard used for colour), the frequency deviation for the reference frequency of the pre-emphasis characteristic and the pre-emphasis characteristic itself. Also indicate, where applicable, the characteristics of the multiplexing of the video signal with the sound signal(s) or other signals;

[1] This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

APlA Section D Space transmitting (cont.)

c) carrier phase-shift-modulated by a pulse code modulation signal (PCM PSK): indicate the bit rate and the number of phases;

d) amplitude modulated carrier (including single sideband): indicate as precisely as possible the nature of the modulating signal and the kind of amplitude modulation used;

e) for all other types of modulation, provide such particulars as may be useful for an interference study;

f) for any type of modulation as applicable, indicate the characteristics of energy dispersal.

MOD Item 12 Regular hours of operation

Indicate in UTC the regular hours of operation on the frequency of each carrier.

Item 13 Co-ordination

Give the name of any administration or group of administrations with which the use of the satellite network to which the space station belongs has been successfully co-ordinated in accordance with No. [639AJ.]

Item 14 Agreements

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

Item 15 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference, quality of emissions and questions referring to the technical operation of stations (see Article [15]).

Section E. Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Space Stations

MOD *Item 1* Assigned frequency (ies)

MOD Indicate the assigned frequency (ies), as defined in Article 1, in kHz, up to [28,000] kHz inclusive, above [28,000] kHz to /10,500/ MHz inclusive and in GHz above [10,500] MHz (see

NOC No. /857/). At least one separate assignment notice should be made out for each antenna radiation beam.

AP1A Section E Space, to be received (cont.)

Item 2 **Assigned frequency band**

Indicate the bandwidth of the assigned frequency band in kHz (see No. [89]).

Item 3 **Date of bringing into use**

a) **In the case of a new assignment, indicate the date (actual or foreseen, as appropriate) when reception of the assigned frequency begins.**

b) **Whenever the assignment is changed in any of its basic characteristics, as shown in this Section (except in the case of a change in Item 4) the date to be given shall be that of the latest change (actual or foreseen, as appropriate).**

ADD /Item 3 bis Period of operation

/F/57A/658 (Corr.3)/

Indicate the proposed period of operation of the space station. This period shall be limited to the period for which the satellite network is designed. During that period, replacement satellites may be used, provided that the technical characteristics of the frequency assignment remain unchanged./

Item 4 **Identity of the receiving space station(s)**

Indicate the identity of the receiving space station(s).

Item 5 **Orbital information**

a) **In the case of a space station aboard a geostationary satellite, indicate the planned nominal geographical longitude on**

MOD **the geostationary satellite orbit and the planned longitudinal** tolerance. Indicate also in the case where a geostationary satellite is intended to communicate with an earth station:

1) the arc of the geostationary satellite orbit over which the space station is visible, at a minimum angle of elevation of 10° at the Earth's surface, from its associated earth stations or service areas; and

2) the arc of the geostationary satellite orbit within which the space station could provide the required service to its associated earth stations or service areas; and

3) in the event that the arc defined in paragraph 2) above is less than the arc defined in paragraph 1) above, provide the reasons therefor.

Note: **The arcs specified in 1) and 2) will be indicated by the geographical longitude of the extremes of these arcs on the geostationary satellite orbit.**

b) **In the case of space station(s) aboard non-geostationary satellite(s), indicate the angle of inclination of the orbit, the period, the altitudes in kilometres of the apogee and perigee of the space station(s) and the number of satellites used.**

AP1A Section E Space, to be received (cont.)

MOD *Item 6* **Associated transmitting earth station(s)** or space station(s)

Identify the associated transmitting earth station(s) or space station(s) by reference **to the notification thereof or in any other appropriate manner.**

Item 7 **Class of station and nature of service**

Indicate the class of station and nature of service performed, using the symbols shown in Appendix [10.]

Item 8 **Class of emission, necessary bandwidth and description of the transmission(s) to be received**

In accordance with Article [2] and Appendix [5:]

a) **indicate the class of emission of the transmission(s) to be received;**

b) [1] **indicate the carrier frequency or frequencies of the transmission(s) to be received;**

c) [1] **indicate, for each carrier to be received, the class of emission, necessary bandwidth and description of the transmission(s) to be received.**

Item 9 **Space station receiving antenna characteristics**

For each receiving beam:

MOD a) in the case of a space station aboard a geostationary satellite that is intended to communicate with an earth station, indicate the gain of the space station receiving antenna by means of gain contours plotted on a map of the Earth's surface, preferably in a radial projection from the satellite on to a plane perpendicular to the axis from the centre of the Earth to the satellite. The isotropic gain at each contour which corresponds to a gain of 2, 4, 6, 10 and 20 dB intervals thereafter as necessary, below the maximum gain, shall be indicated. Whe ever possible the gain contours of the space station receiving antenna should also be provided in the form of a numerical equation or in tabular form;

MOD b) in the case of a space station aboard a geostationary satellite in which the antenna radiation beam is directed towards another satellite, or in the case of a space station aboard a non-geostationary satellite, indicate the isotropic gain of the space station receiving antenna in the main direction of radiation and indicate the antenna radiation pattern, taking the gain in the main direction of radiation as a reference;

APlA Section E Space, to be received (cont.)

MOD

c)[1] indicate the type of polarization of the antenna. In the case of circular polarization indicate the sense of polarization (see [N3153C] and [N3153D]). In the case of linear polarization, indicate the angle BT (in degrees) in a plane normal to the beam axis specified as the angle measured anticlockwise from a line parallel to the equatorial plane to the polarization vector of a wave as seen in the direction of maximum radiation.

d) indicate, for a geostationary satellite, the pointing accuracy of the antenna.

Item 10 Noise temperature

Indicate the total receiving system noise temperature (in kelvins) referred to the output of the receiving antenna of the space station.

MOD

MOD Item 11 Regular hours of reception

Indicate in UTC the regular hours of reception of the frequency of each carrier.

Item 12 Co-ordination

Give the name of any administration or group of administrations with which the use of the satellite network to which the space station belongs has been successfully co-ordinated in accordance with No. [639AJ.]

Item 13 Agreements

Give also, if appropriate, the name of any administration with which agreement has been effected to exceed the limits prescribed in these Regulations and the contents of such agreement.

Item 14 Operating administration or company

Give the name of the operating administration or company and the postal and telegraphic addresses of the administration to which communications should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article [15].)

Section F. Basic Characteristics to be furnished in Notices relating to Frequencies to be received by Radio Astronomy Stations

Item 1 Observed frequency

MOD

Indicate the centre of the frequency band observed, in kHz up to [28,000] kHz inclusive, above [28,000] kHz to /10,500/ MHz inclusive and in GHz above [10,500] MHz.

[1] This information need only be furnished when such information has been used as a basis to effect co-ordination with another administration.

APlA Section F Radio Astronomy (cont.)

Item 2 **Date of bringing into use**

a) **Indicate the date (actual or foreseen, as appropriate) when reception of the frequency band begins.**

b) **Whenever there is a change in any of the basic characteristics, as shown in this Section (except in the case of a change in Item 3 *b)*), the date to be given shall be that of the latest change (actual or foreseen, as appropriate).**

Item 3 **Name and location of the station**

a) **Indicate the letters "RA".**

b) **Indicate the name by which the station is known or the name of the locality in which it is situated or both.**

MOD c) Indicate the country or geographical area in which the station is located. Symbols from the Preface to the International Frequency List shall be used.

MOD ***d)*** **Indicate the geographical co-ordinates** (longitude and latitude in degrees and minutes) of the station site.

Item 4 **Bandwidth**

Indicate the width of the frequency band (in kHz) observed by the station.

Item 5 **Antenna characteristics**

Indicate the antenna type and dimensions, effective area and angular coverage in azimuth and elevation.

Item 6 Regular **hours of reception**

Indicate in UTC the regular **hours of reception of the frequency.**

Item 7 **Noise temperature**

Indicate the over-all receiving system noise temperature (in kelvins) referred to the output of the receiving antenna.

Item 8 **Class of observations**

Indicate the class of observations to be taken on the frequency band shown in Item 4. Class A observations are those in which the sensitivity of the equipment is not a primary factor. Class B observations are those of such a nature that they can be made only with advanced low-noise receivers using the best techniques.

Item 9 **Operating administration or company**

Indicate the identity of the operating administration or company and the postal and telegraphic addresses of the administration to which communication should be sent on urgent matters regarding interference and questions referring to the technical operation of stations (see Article [15].]

Sections G and H - Forms of Notice - to follow

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

THIRTEENTH REPORT OF WORKING GROUP 5D TO COMMITTEE 5

(ALLOCATIONS)

Subject : Frequency bands 1 427 - 1 429 MHz, 1 525 - 1 530 MHz, 1 670 - 1 700 MHz

1. Frequency band between 1 427 and 1 429 MHz

All proposals relating to this band were considered, and the Working Group decided unanimously to recommend the adoption of the revised Table and the revised provisions as given in Annex 1.

2. Frequency band between 1 525 and 1 530 MHz

All proposals relating to this band were considered, and the Working Group decided by majority to recommend the adoption of the revised Table and the revised provisions as given in Annex 2.

3. The delegation of France reserved the right to come back to footnote 3680AA.

4. The delegation of USSR reserved the right to come back to footnote 3683/350C.

5. Frequency bands between 1 670 and 1 700 MHz

All proposals relating to these bands were considered, and the Working Group decided unanimously to recommend the adoption of the revised Table and the revised provisions as given in Annex 3.

6. The Working Group decided to form an ad hoc group 5D6 under the chairmanship of Mr. C. Dorian (USA, Box No. 870), with terms of reference : in the band 1 535 - 1 660 MHz to study the need for, and if required to reach the :

a) agreement on 1 MHz, both up-link and down-link for use as a common frequency band by the aeronautical and the maritime mobile-satellite services to be used for common purposes i.e. distress, search and rescue, emergency, safety, etc.;

b) agreement of central band of frequencies for :

1) aeronautical radionavigation
2) aeronautical mobile
3) aeronautical mobile-satellite
4) aeronautical radionavigation-satellite
5) radionavigation satellite;

c) agreement on bandwidth for :

1) aeronautical mobile-satellite
2) maritime mobile-satellite

(It will be necessary to determine if additional bandwidth may be obtained below 1 535 or above 1 660 MHz in order to accommodate the requirements of these two services.);

d) decision on what to do about the radio astronomy proposals in this band;

e) search for means for providing sufficient bandwidth for all the services involved without changing, if possible, the separation/translation frequency for the maritime mobile-satellite service.

7. After detailed discussions on the subject of satellite sound broadcasting in the band 1 429 - 1 525 MHz, the Working Group decided to :

- form a joint ad hoc group with 5C to consider the possibility of recommending a suitable band in the range 0.5 - 2.0 GHz for satellite sound broadcasting taking into account all technical considerations. For this purpose the delegations of United States of America and USSR have promised to put in a document on technical feasibility and economic considerations;

- draw the attention of Committees 4 and 6 to consider the technical, coordination and regulatory aspects of the sound broadcasting-satellite service with respect to other services.

8. The Working Group decided to suppress footnotes 3681/350A, 3682/350B, 3684/350D, 3649/324A.

Dr. B.S. RAO
Chairman of Working Group 5D

Annexes : 3

A N N E X 1

MHz
1 427 - 1 429

Allocation to Services		
Region 1	Region 2	Region 3
1 427 - 1 429	SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile 3679A	

ADD 3679A In the bands 1 400 - 1 727 MHz, /~ 101 - 120 GHz and 197 - 220 GHz ~/, observations are being conducted by some countries in a programme for the search for intentional emissions of extra-terrestrial origin.

A N N E X 2

MHz
1 525 - 1 530

Allocation to Services		
Region 1	Region 2	Region 3
1 525 - 1 530 SPACE OPERATION (space-to-Earth) FIXED Earth Exploration-Satellite Mobile except aeronautical mobile / 3683/350C / 3679A	1 525 - 1 530 SPACE OPERATION (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 3680C 3679A	1 525 - 1 530 SPACE OPERATION (space-to-Earth) FIXED Earth Exploration-Satellite Mobile 3680C / 3683/350C / 3679A

ADD 3679A (See Annex 1)

ADD 3680C In Region 2, in Australia and in Papua New Guinea, the use of the bands 1 435 - 1 525 MHz and 1 525 - 1 535 MHz by the aeronautical mobile service for telemetering purposes has priority over other uses by the mobile service.

SUP 3681/350A

SUP 3682/350B

SUP 3684/350D

/ MOD 3683/350C /

Israel, / Different category of service : in Algeria, Saudi Arabia, Australia, Bahrain, Bulgaria, Cameroon, Egypt, the United Arab Emirates, France, Hungary, Iran, Iraq, Jordan, Kuwait, Lebanon, Mongolia, Morocco, Oman, Poland, Qatar, Syria, the German Democratic Republic, Roumania, Sudan, Czechoslovakia, the USSR, the PDR of Yemen and Yugoslavia, the allocation of the band 1 525 - 1 535 MHz to the mobile, except aeronautical mobile, service is on a primary basis. (See No. 3432/141.) /

ANNEX 3

MHz
1 670 - 1 700

Allocation to Services		
Region 1	Region 2	Region 3
1 670 - 1 690	METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 3679A	
1 690 - 1 700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 3679A 3650/324B 3698/354A	1 690 - 1 700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) 3650/324B 3698/354A 3700/354C 3679A 3698A	

ADD 3679A (See Annex 1).

MOD 3698/354A Different category of service : in Algeria, Saudi Arabia, Austria, Bulgaria, Egypt, Ethiopia, Hungary, Iraq, Israel, Jordan, Kenya, Kuwait, Mauritania, Lebanon, Mongolia, Uganda, Poland, the German Democratic Republic, Roumania, Syria, Tanzania, Chad, Czechoslovakia, the USSR, Yemen AR, the PDR of Yemen and Yugoslavia, the allocation of the bands 1 690 - 1 700 MHz to the fixed service and the mobile (except aeronautical mobile) service is on a primary basis (See No. 3432/141).

ADD 3698A Additional allocation : in India, Iran, Malaysia, Pakistan, Singapore and Thailand, the bands 1 660 - 1 670 MHz and 1 690 - 1 700 MHz are also allocated to the fixed service and the mobile (except aeronautical mobile) service on a primary basis.

SUP 3649/324A

SUP 3697/354

MOD 3700/354C Additional allocation : in Australia and Indonesia, the band 1 690 - 1 700 MHz is also allocated to the fixed and mobile except aeronautical mobile services on a secondary basis.

MOD 3650/324B Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands /460 - 470 MHz and/ 1 690 - 1 710 MHz for space-to-Earth transmissions on condition that no harmful interference is caused to stations operating in accordance with the Table.

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COMMITTEE 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 6

In the proposed revision of Appendix 28 (Document No. 476) paragraphs on pages 2, 3, 6 and 28 have been marked by a vertical line in the left hand margin.

The purpose of this is to draw the particular attention of your Committee to these paragraphs in connection with the consideration of Article N11.

With respect to the paragraphs on pages 2, 3 and 6, the proposed revision of Appendix 28 allows for Administrations to depart from the procedure contained therein. These paragraphs are technically desirable, but they may require changes to the procedures in Article N11.

With respect to the paragraph on page 28, the attention of your Committee is drawn to the draft Resolution in Document No. 475 relating to up-dating of the propagation information used in the determination of coordination area.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

WORLD ADMINISTRATIVE RADIO CONFERENCE

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COMMITTEE 5

NOTE FROM THE CHAIRMAN OF COMMITTEE 4

TO THE CHAIRMAN OF COMMITTEE 5

In response to the Question raised in Document No. 379, Committee 4 offers the following clarification. A definitive statement is not possible at present but the results of CCIR studies offer some guidance.

The SPM Report, in paragraph 5.3.2.6.1, refers to CCIR Report 791 which concludes that frequency sharing between the inter-satellite service and the fixed and mobile service is feasible in frequency bands near the atmospheric and water vapour absorption lines. No exception is made with regard to "aeronautical mobile".

CCIR Report 791 also adds that in the case of an aeronautical mobile system, when an aircraft system antenna has a gain of 0 dB or less in the direction of the inter-satellite link, such sharing is feasible.

The SPM Report, in paragraph 6.5.2.6.1, describes frequency sharing between inter-satellite links and ground based radars in the radiolocation service at frequencies near 60 GHz. No mention is made about airborne radars.

In view of the fact that airborne radars cannot make full use of the absorption due to Earth's atmosphere, interference from such radars would be expected to be stronger than ground based radars.

Further study is obviously required on this subject.

N. MORISHIMA
Chairman of Committee 4

INTERNATIONAL TELECOMMUNICATION UNION

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COMMITTEES 5 AND 6

NOTE FROM THE CHAIRMAN OF COMMITTEE 4 TO THE
CHAIRMAN OF COMMITTEE 5 AND THE CHAIRMAN OF COMMITTEE 6

In response to the verbal request delivered at the seventh meeting of Committee 4 on 7 November 1979 concerning coordination between the mobile-satellite service and the aeronautical mobile service Committee 4 offers the following advice. Document No. 459 refers.

The SPM report addressed the subject of sharing between the mobile-satellite service and terrestrial service in Section 5.3.2.8. This is supplemented in Annex 5.3.2.8.1 which gives examples calculating coordination distances for Earth stations in the mobile-satellite service.

The general conclusion of the SPM was that the calculation of coordination contours around the area in which a mobile Earth station can operate could be extremely complex and further study in CCIR is required.

In Section 7 of the proposed revision of Appendix 28 (Document No. 476) some general guidance concerning this subject is also given. It must be emphasized, however, that the procedures therein contained are specifically concerned with coordination between Earth stations in the mobile-satellite service and stations in the fixed and mobile services located on the surface of the Earth. Extension of these methods to include coordination with airborne stations in the aeronautical mobile service would therefore need further study.

N. MORISHIMA
Chairman of Committee 4