- Sharing between the radionavigation-satellite service and the mobile-satellite service in the bands 149.9 - 150.5 MHz and 399.9 - 400.5 MHz, in accordance with Resolution [COM5-9].
- Flexible and efficient use of the radio spectrum by the fixed and some mobile services in the MF and HF bands using block allocations for adaptive systems, in accordance with Recommendation [GT PLEN-B].
- Simplification of Article **17** of the Radio Regulations, in accordance with Resolution [COM4-2].
- Further studies concerning application of Article **S19** (Identification of Stations), in accordance with Resolution [COM4-3].
- References to ITU-R Recommendations in the Radio Regulations, in accordance with Resolution [COM4-4].
- Consideration of certain operational matters concerning the Radio Regulations in the aeronautical mobile and maritime mobile services, in accordance with Resolution [COM4-8].
- Principles for the allocation of frequency bands, in accordance with Recommendation [COM4-A].
- Coordination process between mobile-satellite systems, in accordance with Resolution [GT PLEN-6].
- Use of the frequency bands near 2 GHz by the fixed- and mobile-satellite services and associated transition arrangements, in accordance with Resolution [COM5-10].

RESOLUTION GT PLEN-5

PRELIMINARY AGENDA FOR THE 1999 WORLD RADIOCOMMUNICATION CONFERENCE

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that in accordance with Nos. 118 and 126 of the Convention of the International Telecommunication Union (Geneva, 1992), the general scope of the agenda for the 1999 World Radiocommunication Conference (WRC-99) should be established four years in advance;

b) Article 13 of the Constitution of the International Telecommunication Union (Geneva, 1992) regarding the competence and scheduling of world radiocommunication conferences and Article 7 of the Convention (Geneva, 1992) regarding their agendas;

c) the relevant resolutions and recommendations of previous world administrative radio conferences and world radiocommunication conferences,

resolves to give the view

that the following items should be included in the preliminary agenda of WRC-99, to be held in late 1999:

1 to take appropriate action in respect of those urgent issues that were specifically requested by the 1997 World Radiocommunication Conference (WRC-97);

2 on the basis of proposals from administrations and the Report of the Conference Preparatory Meeting, and taking account of the results of WRC-97, to consider and take appropriate action in respect of the following topics:

2.1 requests from administrations to delete their country footnotes or to have their country's name deleted from footnotes, if no longer required, taking into account Resolution [COM4-1];

2.2 consideration of Article **S25** concerning the amateur and amateur-satellite services;

2.3 examination of the adequacy of the frequency allocations for HF broadcasting from about 4 MHz to 10 MHz taking into account the planning procedures, if any, adopted by WRC-97 and the needs of other existing services;

2.4 review of the channel arrangements in HF bands for the maritime mobile service, taking into account the use of new digital technology;

2.5 definition of a new category of orbit, namely the quasi-geostationary orbit, to be considered as falling under the regulations applicable to the geostationary orbit or non-geostationary orbits;

3 to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations which have been communicated by the associated radiocommunication assembly in accordance with Resolution [COM4-5] and decide whether or not to update the corresponding references in the Radio Regulations, in accordance with principles contained in Annex to Resolution [COM4-4];

4 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the Conference;

5 in accordance with Resolution **94 (WARC-92)**, to review those resolutions and recommendations of world administrative radio conferences and world radiocommunication conferences which are relevant to agenda items 1 and 2 above, with a view to their possible revision, replacement or abrogation;

6 to review, and take appropriate action on, the report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention (Geneva, 1992);

7 to identify those items requiring urgent action by the radiocommunication study groups;

8 in accordance with Article 7 of the Convention (Geneva, 1992):

8.1 to consider and approve the report of the Director of the Radiocommunication Bureau on the activities of the Radiocommunication Sector since the last conference;

8.2 to recommend to the Council items for inclusion in the agenda for the 2001 World Radiocommunication Conference, and to give its views on the preliminary agenda for the 2003 Conference and on possible agenda items for future conferences,

invites the Council

to consider the views given in this Resolution,

instructs the Director of the Radiocommunication Bureau

to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC-99,

instructs the Secretary-General

to communicate this Resolution to concerned international and regional organizations.

RESOLUTION GT PLEN-6

COORDINATION PROCESS AMONG NON-GEOSTATIONARY MOBILE-SATELLITE SYSTEMS

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that space-to-Earth transmissions of non-geostationary (non-GSO) mobile-satellite systems are constrained to limit their power flux-density over areas where the frequency band is shared with terrestrial systems;

b) that a number of proposed non-GSO mobile-satellite systems can provide a good service to users within the power flux-density limits given in [Table **AR28bis**];

c) that when maximum communication capacity is achieved by non-GSO systems in the mobile-satellite service a major portion of the interference into each of these systems will come from the other mobile-satellite systems sharing the frequency band, and, consequently, if one system starts to transmit at higher power, all others need to do the same in order to overcome mutual interference;

d) that the ITU-R is studying the efficient use of the radio spectrum and frequency sharing within the mobile-satellite service, that Recommendations ITU-R M.1186 and M.1187 are a basis for further study, and that additional preliminary texts are available or can be provided by administrations on this matter,

recognizing

that, as a means to ensure that the frequency bands allocated to the mobile-satellite service can be used in an efficient manner, there is an urgent demand for:

1 criteria to be established by the ITU-R to be used in determining the need to coordinate between mobile-satellite systems; and

2 detailed methods of interference calculation to be used by administrations in the coordination process,

resolves to invite ITU-R

to continue its studies on this subject and develop, as a matter of urgency, criteria for determining the need to coordinate and calculation methods for determining levels of interference, as well as the required protection ratios between networks in the mobile-satellite service,

invites the Council

to include this Resolution in the agenda of WRC-97 in order that that Conference consider the results of these studies and take such action as may be appropriate with a view to achieving an efficient use of the spectrum.

RESOLUTION COM4-1

FOOTNOTES TO THE TABLE OF FREQUENCY ALLOCATIONS

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that footnotes to the Table of Frequency Allocations should be clear, concise and easy to understand;

b) that footnotes should relate directly to matters of frequency allocation;

c) that there is a need to review footnotes regularly in order to ensure that any which are no longer required are deleted;

d) that, in order to ensure that footnotes allow modification of the Table of Frequency Allocations without introducing unnecessary complications, principles relating to the use of footnotes are needed,

resolves

1 that, wherever possible, footnotes to the Table of Frequency Allocations should be confined to altering, limiting, or otherwise changing the relevant allocations rather than dealing with the operation of stations, assignment of frequencies or other matters;

2 that the Table of Frequency Allocations should include only those footnotes which have international implications for the use of the radio-frequency spectrum;

3 that new footnotes to the Table of Frequency Allocations should only be adopted in order to:

a) achieve flexibility in the Table of Frequency Allocations;

b) protect the relevant allocations in the body of the Table and in other footnotes in accordance with Section II of Article S5 of the Radio Regulations;

c) introduce either transitional or permanent restrictions on a new service to achieve compatibility; or

d) meet the specific requirements of a country or area when it is impracticable to satisfy such needs otherwise within the Table of Frequency Allocations;

4 that footnotes serving a common purpose should be in a common format, and, where possible, be grouped into a single footnote with appropriate references to the relevant frequency bands;

5 that recommended agendas for future world radiocommunication conferences should include an agenda item which would enable country footnotes, or country names in footnotes, to be deleted, if no longer required,

urges administrations

that, in making proposals to world radiocommunication conferences, account should be taken of *resolves* 1 to 5,

instructs the Director of the Radiocommunication Bureau

to review footnotes periodically, in consultation with concerned administrations, and communicate the results to future world radiocommunication conferences, in order to enable administrations to propose the deletion of their country footnotes, or their own country names from footnotes, as appropriate.

RESOLUTION COM4-2

SIMPLIFICATION OF ARTICLE 17 OF THE RADIO REGULATIONS

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that the World Administrative Radio Conference (Geneva, 1979) (WARC-79) allocated new HF bands to the broadcasting service and that the use of this additional spectrum was subject to provisions to be established by a future world administrative radio conference for the planning of HF bands allocated to the broadcasting service;

b) that the World Administrative Radio Conference (Malaga-Torremolinos, 1992) (WARC-92) allocated further additional HF bands to the broadcasting service and that the use of this additional spectrum was subject to the planning to be drawn up by a competent world administrative radio conference;

c) that efforts to develop a HF broadcasting planning system have not been successful;

d) that the Voluntary Group of Experts (VGE) has made proposals to this Conference to simplify the existing Article **17** procedures;

e) that the agenda of this Conference invites administrations, when preparing and submitting their proposals, to base them as far as practicable on the recommended texts in the final report of the VGE,

recognizing

a) that the preliminary agenda for the 1997 World Radiocommunication Conference (WRC-97) includes examination of, and taking necessary decisions on, the question of the HF bands allocated to the broadcasting service in the light of developments to date and the results of the studies carried out by the Radiocommunication Sector;

b) that in response to Resolution **523** (WARC-92) and ITU-R Question 212/10, ITU-R is studying alternative planning procedures and the associated technical parameters for HF broadcasting,

resolves

that consideration of the simplification of Article **17** as proposed in Article **S12** of the VGE Report and annexed to this Resolution be deferred to WRC-97 and hence Article **17** shall continue to be applied as at present.

ANNEX TO RESOLUTION COM4-2

PROPOSED ARTICLE S12 OF VGE[1]

Planning and Procedure for the Bands Allocated Exclusively to the Broadcasting Service Between 5 950 kHz and 26 100 kHz

Section I. Introduction

S12.1 When applying the procedure of this Article administrations are urged to comply to the maximum possible extent with the principles contained in Section II of this Article.[VGE Note 12]

Section II. Planning Principles

S12.2 (1) The planning of the high frequency bands allocated to the broadcasting service shall be based on the principle of equal rights of all countries, large or small, to equitable access to these bands. In planning, an attempt shall also be made to achieve efficient use of these frequency bands, account being taken of the technical and economic constraints that may exist in certain cases. On the basis of the foregoing, the following planning principles shall be applied.

VGE Note 12 The VGE has noted Resolution 9 of the APP-92 requesting the Radiocommunication Assembly (WRC-93), inter alia, "to establish the work programme and the Study Groups of the Radiocommunication Sector, including any future work on HF Broadcasting, taking account of any IFRB report on the application of Resolution 523 of the WARC-92." Upon the assumption that this will lead to longer term action by the Union, the scope for action by the VGE to simplify the present Article 17 of the Radio Regulations relating to HFBC is necessarily limited.

The VGE has therefore limited its action to the "Consultation Procedure" in Sections IV to VIII of Article 17, leaving it to the WRC-95 to decide upon Sections I to III, which contain principles and other material relating to the planning of HFBC. Within these limitations the VGE proposes only that the number of seasons each year be reduced from four to two; that the prior coordination of schedules be encouraged but without disadvantage to uncoordinated schedules; that as a result of the reduced number of incompatibilities the technical work of the Bureau can be reduced; and that as an economy measure the publication of the "Final Schedule" can be abandoned, using the Weekly Circular to update the "Tentative Schedule". The results of this work are condensed in the draft of Article S12.

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[1] This text, including VGE Note 12, is taken from the VGE Report.

S12.3 (2) All the broadcasting requirements, current or future, formulated by the administrations, shall be taken into account and be treated on an equitable basis, so as to guarantee the equality of rights referred to in No. **S12.2**, and to enable each administration to provide a satisfactory service.

S12.4 (3) All broadcasting requirements, national[1] and international, shall be treated on an equal basis, with due consideration of the differences between these two kinds of broadcasting requirements.

S12.4.1 [1] An HF broadcasting use is considered as being for the purposes of national coverage when the transmitting station and its associated required service area are both located within the territory of the same country.

S12.5 (4) In the planning procedure, an attempt shall be made to ensure, as far as practicable, continuity of use of a frequency or of a frequency band. However, such continuity should not prevent equal and technically optimum treatment of all broadcasting requirements.

S12.6 (5) The periodical planning procedure shall be based solely on the broadcasting requirements expected to become operational during the planning period. It shall furthermore be flexible in order to take into account new broadcasting requirements and modifications to the existing broadcasting requirements.

S12.7 (6) The planning procedure shall be based on double-sideband emissions. Single-sideband emissions which administrations might wish to make may, however, be permitted in place of planned double-sideband emissions, provided that the level of interference caused to double-sideband emissions is not increased.

S12.8 (7) For efficient spectrum use, only one frequency should be used, whenever possible, to meet a given broadcasting requirement in a given required service area; in any case the number of frequencies used will be the minimum necessary to provide a specified quality of reception.

S12.9 (8) Those broadcasting requirements for which the agreed minimum usable field strength is not ensured at any point of the required service area, through lack of the requisite technical facilities, can obtain proportionally reduced protection against interference.

S12.10 (9) In the first stage of the equitable application of a new planning procedure, an attempt will be made to include the maximum number of submitted requirements achieving the desired quality level. The remaining requirements will be processed on the understanding that lower quality levels would be acceptable.

S12.11 (10) The planning method shall satisfy, on an equal basis, a minimum of the broadcasting requirements submitted by administrations with the desired performance. Special consideration shall be given to the requirements of administrations which, in the first instance, are unable to achieve this performance.

Section III. Planning System

S12.12 The Planning System developed in accordance with the principles set out in Section **II** of this Article and the decisions of the World Administrative Radio Conference for the Planning of the HF Bands Allocated to the Broadcasting Service (Geneva, 1987), shall be improved and tested in accordance with the instructions contained in Resolution **511** (HFBC-87) for adoption, if acceptable to a competent world administrative radio conference.

Section IV. Consultation Procedure

S12.13 Twice yearly administrations shall submit their projected seasonal broadcasting schedules in the relevant frequency bands to the Bureau. Those schedules shall cover the following seasons and shall be implemented at 0100 UTC on the first Sunday of each period concerned:

S12.14 a) March schedule - March to August inclusive;

S12.15 b) September schedule - September to February inclusive.

S12.16 Administrations may, if they wish, maintain four periods for their annual patterns of broadcasting, but are urged to do so within the periods indicated below, provided that this is made clear in their projected schedules at the time of their submission to the Bureau. These schedules shall be implemented at 0001 UTC on the first Sunday of each period concerned:

S12.17 a) March Schedule - March and April

S12.18 b) May Schedule - May, June, July and August

S12.19 c) September Schedule - September and October

S12.20 d) November Schedule - November, December, January and February.

S12.21 Administrations may include in their schedules assignments up to one year in advance of their use provided that the characteristics are not expected to change during that period.

S12.22 The frequencies in the schedules should be those that will be used during the season concerned, and they should be the minimum number required to provide satisfactory reception of the programmes in each of the areas and for each of the periods intended. To the maximum possible extent in each schedule the frequencies to be used in each reception area should be repeated from season to season.

S12.23 Administrations are encouraged to coordinate their schedules with other administrations as far as possible prior to submission. An administration may submit on behalf of a group of administrations their coordinated schedules the frequencies of which shall however have no priority for use over those submitted by other administrations.

S12.24 The closing dates for receipt by the Bureau of the schedules relating to the two seasons mentioned in No. **S12.13** and the four seasons mentioned in No. **S12.16** shall be established and published by the Bureau.

S12.25 The schedules shall be submitted with the relevant data contained in Appendix **S4** in accordance with the practices recommended in the Rules of Procedure.

S12.26 Upon receipt of the schedules the Bureau shall, in accordance with the Rules of Procedure, consolidate them, validate the data where necessary, identify such incompatibilities as it may be able, and prepare the High Frequency Broadcasting Schedule (the Schedule). This Schedule shall include all assignments where administrations gave no alternatives, the selections made by the Bureau from any alternatives given, and the frequencies selected by the Bureau in cases where the need for its assistance was indicated by their intentional omission from the individual schedules.

S12.27 The Schedule shall be published at least two months before the start of each of the two seasons in No. **S12.13**.

S12.28 Administrations should consider the Schedule and, before or during the season, they should, as quickly as possible, inform the Bureau of any changes they intend to make from their original submissions and the reasons for those changes. The Bureau shall publish this information regularly and update the Schedule as appropriate.

S12.29 After each season the Bureau shall consult the administrations concerned, the actual frequencies used and shall periodically publish its results to administrations.

S12.30 In a case of harmful interference, involving the application of the provisions of Article **S15**, administrations are urged to exercise the utmost goodwill and mutual cooperation taking into account all the relevant technical and operational factors of the case.

RESOLUTION COM4-3

FURTHER STUDIES CONCERNING APPLICATION OF ARTICLE S19 (IDENTIFICATION OF STATIONS)

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that application of Article **S19** has given rise *inter alia* to legal and political questions, arising from uncertainty as to which entities can be allocated call sign series and blocks of identities, and from ambiguity in the use of the terms "country", "member" and "administration" relative to the provisions of that Article;

b) that this matter is of considerable importance to many administrations and to some international organizations;

c) that a proposal was made to consider the possibility of extending present allocations of international call sign series by lifting the limitation on use of the letter "Q" and the digits "Ø" and "1";

d) that the Voluntary Group of Experts on simplification of the Radio Regulations (VGE) concluded that much more detailed study is required before any further changes to Article **S19** are considered,

resolves to instruct the Secretary-General and the Director of the Radiocommunication Bureau

to arrange for the appropriate studies relating to *considering* a) within the Radiocommunication Sector in consultation with the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) and submit a report to WRC-97.

RESOLUTION COM4-4

REFERENCES TO ITU-R RECOMMENDATIONS IN THE RADIO REGULATIONS

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that principles of incorporation by reference have been adopted by this Conference (see Annex hereto);

b) that there are provisions of the Radio Regulations which employ mandatory incorporation by reference but fail to make explicit reference to the ITU-R Recommendations incorporated;

c) that, by Resolution ITU-R 38, the 1995 Radiocommunication Assembly established a special committee to address the review of regulatory/procedural matters,

resolves

that, in view of *considering* b), the provisions of the Radio Regulations which use mandatory incorporation by reference should be studied in order to determine whether they require modification pursuant to the principles adopted by this Conference,

urges administrations

to review the ITU-R Recommendations and the provisions of the Radio Regulations employing incorporation by reference in light of *resolves* above,

instructs the Director of the Radiocommunication Bureau

to arrange for appropriate studies to be conducted by the new special committee established by the 1995 Radiocommunication Assembly to address the review of regulatory/procedural matters and for the committee to report the results of those studies to the 1997 Conference Preparatory Meeting.

ANNEX TO RESOLUTION COM4-4

Principles of Incorporation by Reference

1 No restrictions are necessary on the inclusion of references where these are non-mandatory. In such cases, reference could be made to "the latest version" of a Recommendation.

2 Mandatory references to resolutions or recommendations of a world radiocommunication conference (WRC) are acceptable without restriction, since such texts will have been agreed by a WRC.

3 Where mandatory references are suggested, and the relevant texts are brief, the referenced material should be incorporated in the body of the Radio Regulations.

4 If, on a case-by-case basis, it is decided to incorporate material by reference on a mandatory basis, then the following provisions shall apply:

4.1 the referenced text shall have the same treaty status as the Regulations themselves;

4.2 the reference must be explicit, specifying the specific part of the text (if appropriate) and the version or issue number;

4.3 the referenced text must be adopted by the Plenary of a competent WRC, but should not be part of the Final Acts;

4.4 all texts incorporated by reference must be readily available, by being published in a separate volume;

4.5 if, between WRCs, a referenced text (e.g. an ITU-R Recommendation) is updated, the reference in the Radio Regulations shall continue to apply to the original version until such time as a competent WRC agrees to incorporate the new version of the reference. The mechanism for considering such a step is given in Resolution COM4-5.

RESOLUTION COM4-5

REVISION OF REFERENCES TO ITU-R RECOMMENDATIONS INCORPORATED BY REFERENCE IN THE RADIO REGULATIONS

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that the Voluntary Group of Experts on simplification of the Radio Regulations (VGE) proposed the transfer of certain texts of the Radio Regulations to other documents, especially to ITU-R Recommendations, using the incorporation by reference procedure;

b) that, in some cases, the provisions of the Radio Regulations imply an obligation on Members to conform to the criteria or specifications incorporated by reference;

c) that references to incorporated texts shall be explicit and shall refer to a precisely identified provision;

d) that, taking into account the rapid evolution of technology, ITU-R may revise the Recommendations incorporated by reference at short intervals;

e) that revised and approved Recommendations will not have the same legal force as the initial Recommendations, incorporated by reference until a competent world radiocommunication conference has so decided;

f) that it would be desirable to ensure, in the cases provided for in the Radio Regulations, that the provisions reflect the most recent technical developments,

resolves

1 that each radiocommunication assembly shall communicate to the following world radiocommunication conference a list of the ITU-R Recommendations incorporated by reference in the Radio Regulations which have been revised and approved during the elapsed study period;

2 that, on this basis, the WRC shall examine those revised Recommendations, and decide whether or not to update the corresponding references in the Radio Regulations;

3 that, if the WRC decides not to update the corresponding references, ITU-R shall continue publishing the ITU-R Recommendations currently referenced in the Radio Regulations;

4 that WRCs shall place the examination of Recommendations in conformity with *resolves* 1 and *resolves* 2 of this Resolution on the agenda of future WRCs,

urges administrations

to participate actively in the work of the ITU-R study groups and the radiocommunication assembly in the revision of those Recommendations to which mandatory references are made in the Radio Regulations.

RESOLUTION COM4-6

CONDITIONS FOR RECOMMENCING THE PROCEDURES FOR THE ADVANCE PUBLICATION OF INFORMATION

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that No. **S9.2** of the simplified Radio Regulations requires that the advance publication procedure will need to be applied and in one case recommenced as a result of a change to either one or two parameters;

b) it may be appropriate for both non-geostationary-satellite-orbit (non-GSO) and geostationary-satellite-orbit (GSO) systems to have a very limited extension of this set of parameters;

c) that this possible list of parameters requires more study,

resolves to invite the Radiocommunication Bureau

1 in cooperation with the relevant ITU-R study groups and Special Committee on regulatory/procedural matters, to investigate:

– what parameters might require a new advance publication;

– what significant changes to these parameters would require a new advance publication;

2 to present the results of its investigations to the Conference Preparatory Meeting for WRC-97.

RESOLUTION COM4-7

COORDINATION OF NAVTEX SERVICES

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that the Voluntary Group of Experts (VGE) has suggested that, in the interests of simplification, this Conference may decide that it is no longer necessary for ITU to continue frequency coordination of NAVTEX services in addition to the operational coordination undertaken by the International Maritime Organization (IMO);

b) that the IMO has established a Coordinating Panel on NAVTEX to, *inter alia*, coordinate the operational aspects of NAVTEX services in the planning stages for transmissions on the frequencies 490 kHz, 518 kHz or 4 209.5 kHz;

c) that coordination in the frequencies 490 kHz, 518 kHz and 4 209.5 kHz is essentially operational;

d) that consideration should be given to an effective means of publishing and recording information on frequency assignments for NAVTEX services, if ITU no longer undertakes coordination of NAVTEX services,

resolves

1 to abrogate the current Article **14A** of the Radio Regulations with immediate effect and to replace the related procedures with those contained in the Annex to this Resolution;

2 that the procedures in the Annex to this Resolution may also be applied for coordinating the use of the frequency 4 209.5 kHz for NAVTEX-type transmissions as well as for the use of the frequency 490 kHz, when it becomes available for NAVTEX-type transmissions,

instructs the Secretary-General

to arrange for the necessary consultations with IMO on the need for ITU to continue frequency coordination for NAVTEX services and report the results to WRC-97 to enable it to decide on this item.

ANNEX TO RESOLUTION COM4-7

MOD

Procedure to be applied by Administrations and the Radiocommunication Bureau to coordinate the planned use of the frequency 518 kHz for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships by means of automatic narrow-band direct-printing telegraphy (International NAVTEX System)

§ 1. (1) Before an administration notifies to the Bureau a frequency assignment to a coast station for the transmission of navigational and meteorological warnings and urgent information to ships by means of automatic narrow-band direct-printing telegraphy, it shall coordinate the assignment with any other administration with an assignment in the same frequency band which might be affected.

(2) To this effect, the administration shall communicate to the Bureau, not earlier than one year before the proposed date of bringing the assignment into use, the information listed in Section A of Appendix 1 or Appendix **S4**, as appropriate, together with the following additional characteristics:

a) the B1 character (transmitter coverage area identifier) to be used by the coast station;

b) the regular transmission schedule assigned to the station;

c) the duration of transmissions;

d) the ground-wave coverage area of the transmission.

(3) The administration shall also indicate the results of any coordination[1] already effected in relation with the projected use.

[1] Administrations are strongly recommended to coordinate the above characteristics in accordance with the procedures of the International Maritime Organization (IMO).

(4) In order to enable the procedure to be completed in good time before notification under No. **1214** or **S11.2**, as appropriate, the administrations should communicate the above information not later than six months before the proposed date of bringing the assignment into use.

§ 2. In cases where the Bureau finds that a basic characteristic or any of the additional characteristics is missing, it shall return the request by airmail, stating the reason, unless the information not provided is immediately forthcoming in response to an enquiry of the Bureau.

§ 3. The Bureau shall examine the proposed use with respect to assignments to stations of other services to which the band 517.5 - 518.5 kHz is allocated, notified under No. **1214** or **S11.2**, as appropriate, at an earlier date, and shall identify the administrations whose assignments are likely to be affected.

§ 4. The Bureau shall, within 45 days of the receipt of the complete information, publish it in a special section of its weekly circular indicating any coordination already effected and the names of administrations identified in application of § 3 above. The Bureau shall communicate a copy of this publication to the International Maritime Organization (IMO), the International Hydrographic Organization (IHO), and the World Meteorological Organization (WMO), requesting them to communicate to the administrations concerned, with a copy to the Bureau, any information which may assist in reaching agreement on coordination.

§ 5. On expiry of a period of four months from the date of publication of the information in the special section, the administration responsible for the assignment should notify it to the Bureau in accordance with No. **1214** or **S11.2**, as appropriate, indicating the names of administrations with which agreement has been reached and those which have signified their disagreement.

§ 6. Upon receipt of the notice, the Bureau shall request those administrations named in the special section which have not communicated their agreement or disagreement with respect to the proposed use to signify within a period of 30 days their decision on the matter.

§ 7. An administration which does not reply to the Bureau's request made under § 6 above or fails to signify a decision on the matter shall be deemed to have undertaken:

a) that no complaint will be made in respect of any harmful interference which may be caused to its stations by the proposed use;

b) that its stations will not cause harmful interference to the proposed use.

§ 8. When examining the proposed use in accordance with Article **12** or Article **S11** as appropriate, the Bureau shall apply the provisions of No. **1245** as long as they are in force, except with respect to those assignments for which the administration responsible has signified its disagreement with respect to the proposed use.

§ 9. The Bureau shall examine the notified assignments in accordance with No. **1241**, as long as they are in force, on the basis of its technical standards and shall record them in accordance with the pertinent provisions of Article **12** or Article **S11**, as appropriate. The recording shall contain symbols reflecting the result of the application of this procedure.

§ 10. The Bureau shall, at appropriate intervals, update and publish the data referred to in § 5 above in a special list in an appropriate format.

RESOLUTION COM4-8

CONSIDERATION OF CERTAIN OPERATIONAL MATTERS CONCERNING THE RADIO REGULATIONS IN THE AERONAUTICAL MOBILE AND MARITIME MOBILE SERVICES*

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that its decision regarding the recommendations proposed by the Voluntary Group of Experts has resulted in a considerable simplification of the Radio Regulations;

b) that the Radio Regulations contain various provisions, in particular for the aeronautical mobile and maritime mobile services, which mainly relate to the operational aspects of these services;

c) that ICAO and IMO have already in place internationally recognized operational provisions pertaining to the aeronautical mobile and the maritime mobile services,

recognizing

that the relevant provisions in the Radio Regulations may be better defined in close collaboration with those organizations,

recognizing also

that the regulatory instruments of ICAO, IMO and ITU have different legal foundations and status in such areas as membership, legal status of regulatory instruments, scope of aeronautical mobile and maritime mobile services, and implications for administrations,

resolves to instruct the Secretary-General

1 to arrange for appropriate studies within ITU, in consultation with ICAO and IMO in order to identify the provisions in the Radio Regulations, particularly with respect to Chapters **SVIII** and **SIX**, which specify operational procedures affecting only the aeronautical mobile and maritime mobile services;

2 to investigate the legal issues raised by the differences between ICAO, IMO and ITU as mentioned in *recognizing also* above;

3 to report on the progress of this work to the 1997 World Radiocommunication Conference;

4 to bring this Resolution to the attention of ICAO and IMO.

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* This Resolution refers to the aeronautical mobile and the maritime mobile services as well as to the aeronautical mobile-satellite and the maritime mobile-satellite services.

RESOLUTION COM5-1

SHARING BETWEEN THE FIXED-SATELLITE SERVICE AND THE FIXED SERVICE IN THE 19.3 - 19.6 GHz BAND WHEN USED BY THE FIXED-SATELLITE SERVICE TO PROVIDE FEEDER LINKS FOR NON-GEOSTATIONARY SATELLITE SYSTEMS IN THE MOBILE-SATELLITE SERVICE

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that the 19.3 - 19.6 GHz band is currently allocated to the fixed-satellite service in the space-to-Earth direction on a primary basis and that this Conference has designated this band to provide feeder links for non-geostationary satellite systems in the mobile-satellite service;

b) that this Conference has also allocated the 19.3 - 19.6 GHz band in the Earth-to-space direction on a primary basis to the fixed-satellite service for use by feeder links for non-geostationary satellite systems in the mobile-satellite service;

c) that the 19.3 - 19.6 GHz band is also allocated on a primary basis to the fixed service;

d) that the coordination and notification procedures set forth in Resolution **46(Rev.WRC-95)** apply to services with equal rights in the 19.3 - 19.6 GHz band;

e) that this Conference has adopted the existing power flux-density limits for the 19.3 - 19.6 GHz band at the surface of the Earth for feeder links of non-geostationary satellite systems in the mobile-satellite service, and that these limits are to apply subject to review by ITU-R and until the results of that review are considered by the 1997 World Radiocommunication Conference (WRC-97);

f) that high rain attenuation occurs in this band in certain parts of the world, which could affect both the fixed service and the satellite link margins,

considering further

g) that Note 5 in Recommendation ITU-R SF.1005 states that the criteria of maximum permissible interference from earth stations operating bidirectionally to stations in the fixed service are preliminary and require further study,

resolves to instruct ITU-R

1 to study, as a matter of urgency, the criteria of maximum permissible interference from earth stations operating bidirectionally in the 19.3 - 19.6 GHz band to stations in the fixed service;

2 to study possible modification of the power flux-density limits at the surface of the Earth in this band applicable to feeder links of non-geostationary satellite networks in the mobile-satellite service, keeping in view the different rain characteristics in many parts of the world,

urges administrations

to participate actively in the aforementioned studies by submitting contributions to ITU-R,

instructs the Director of the Radiocommunication Bureau

to report on the results of these studies to WRC-97.

RESOLUTION COM5-2

CALCULATION OF THE POWER FLUX-DENSITY AT THE GEOSTATIONARY-SATELLITE ORBIT IN THE BAND 6 700 - 7 075 MHz USED FOR FEEDER LINKS OF NON-GEOSTATIONARY-SATELLITE SYSTEMS IN THE MOBILE-SATELLITE SERVICE IN THE SPACE-TO-EARTH DIRECTION

The World Radiocommunication Conference (Geneva, 1995),

considering

a) that this Conference has allocated the band 6 700 - 7 075 MHz to the fixed-satellite service, in the space-to-Earth direction, on a primary basis, for use by feeder links of non-geostationary satellite networks in the mobile-satellite service;

b) that the band 6 725 - 7 025 MHz is also allocated to the fixed-satellite service in the Earth-to-space direction, on a primary basis, subject to the Allotment Plan of Appendix **30B** of the Radio Regulations for geostationary-satellite networks;

c) that, under No. **2631A [S22.5A]** of the Radio Regulations, this Conference has specified a limit on the maximum aggregate power flux-density produced within ±5 degrees of the geostationary-satellite orbit by a non-geostationary-satellite system,

considering also

d) that ITU-R has not identified a methodology for calculating the aggregate level of power flux-density produced at the geostationary-satellite orbit by a non-geostationary-satellite network, which is needed in order to apply No. **2631A [S22.5A]** of the Radio Regulations,

resolves

1 that, as an interim measure, the aggregate level of power flux-density at the geostationary-satellite orbit shall be calculated as the sum of the levels of power flux-density (in $W/m^2/4$ kHz) generated concurrently at a given geostationary-satellite location by all visible satellites in the non-geostationary network;

2 that the peak value of the sums for all locations within ±5 degrees inclination of the geostationary-satellite orbit shall be compared with the limiting value;

3 that, as an item of supplementary information, administrations proposing to operate feeder links of non-geostationary-satellite systems in the mobile-satellite service in the frequency band 6 700 - 7 075 MHz shall include the calculated peak value of power flux-density produced within ±5 degrees inclination of the geostationary-satellite orbit;

4 that the power flux-density shall be determined by simulation of the complete orbital constellation of the non-geostationary-satellite network,

invites ITU-R

to develop a methodology for calculating the aggregate level of power flux-density produced at the geostationary-satellite orbit by a non-geostationary satellite network,

urges administrations

to participate actively in the aforementioned studies by submitting contributions to ITU-R,

instructs the Director of the Radiocommunication Bureau

to report on the progress of these studies to the 1997 World Radiocommunication Conference (WRC-97).

RESOLUTION COM5-3

USE OF THE BAND 5 091 - 5 150 MHz BY THE FIXED-SATELLITE SERVICE (EARTH-TO-SPACE) (LIMITED TO FEEDER LINKS OF THE NON-GEOSTATIONARY MOBILE-SATELLITE SERVICE)

The World Radiocommunication Conference (Geneva, 1995),

considering

a) the current allocation of the frequency band 5 000 - 5 250 MHz to the aeronautical radionavigation service;

b) the requirements of both the aeronautical radionavigation and the fixed-satellite (Earth-to-space) (limited to feeder links of non-geostationary mobile-satellite systems) services in the above-mentioned band,

recognizing

a) that precedence must be given to the microwave landing system (MLS) in accordance with No. **S5.444** of the Radio Regulations and to other international standard systems of the aeronautical radionavigation service in the frequency band 5 000 - 5 150 MHz;

b) that, in accordance with Annex 10 of the Convention of the International Civil Aviation Organization (ICAO), it may be necessary to use the frequency band 5 091 - 5 150 MHz for the MLS if its requirements cannot be satisfied in the frequency band 5 030 - 5 091 MHz;

c) that the fixed-satellite service providing feeder links for non-geostationary-satellite mobile-satellite services will need access to the frequency band 5 091 - 5 150 MHz in the short term, in order to accommodate already identified requirements,

noting

a) the necessary evolution of the current MLS and of other international standard systems in the aeronautical radionavigation service implementation plans;

b) the small number of fixed-satellite service stations to be considered,

resolves

1 that the provisions of this Resolution and of Nos. **S5.444** and **S5.444A** of the Radio Regulations shall enter into force on 18 November 1995;

2 that administrations authorizing stations providing feeder links for non-geostationary-satellite mobile-satellite systems in the frequency band 5 091 - 5 150 MHz shall ensure that they do not cause harmful interference to stations of the aeronautical radionavigation service;

3 that the allocation to the aeronautical radionavigation service and the fixed-satellite service in the frequency band 5 091 - 5 150 MHz should be reviewed at the 2001 World Radiocommunication Conference (WRC-2001),